Final Analysis

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train <- read.csv("train\_cleaned1.csv")  
test <- read.csv("test\_cleaned1.csv")

train <- subset(train, select = -c(1,2,3,4))  
test <- subset(test, select = -c(1,2,3,4))

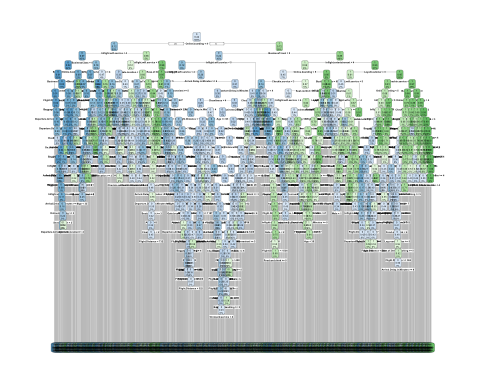
train <- train[train$Inflight.wifi.service !=0 & train$Ease.of.Online.booking !=0 & train$Gate.location !=0 & train$Food.and.drink !=0 & train$Online.boarding !=0 & train$Seat.comfort !=0 & train$Inflight.entertainment !=0 & train$On.board.service !=0 & train$Leg.room.service !=0 & train$Checkin.service !=0 & train$Inflight.service != 0 & train$Cleanliness !=0, ]  
  
test <- test[test$Inflight.wifi.service !=0 & test$Ease.of.Online.booking !=0 & test$Gate.location !=0 & test$Food.and.drink !=0 & test$Online.boarding !=0 & test$Seat.comfort !=0 & test$Inflight.entertainment !=0 & test$On.board.service !=0 & test$Leg.room.service !=0 & test$Checkin.service !=0 & test$Inflight.service != 0 & test$Cleanliness !=0, ]

#Classification Tree

library(rpart)  
library(rpart.plot)  
set.seed(1)  
  
ct\_model<-rpart(Satisfied~ .,   
 data= train,   
 method="class",  
 control = rpart.control(cp=0))

rpart.plot(ct\_model)

## Warning: labs do not fit even at cex 0.15, there may be some overplotting



summary(ct\_model)

## Call:  
## rpart(formula = Satisfied ~ ., data = train, method = "class",   
## control = rpart.control(cp = 0))  
## n= 98860   
##   
## CP nsplit rel error xerror xstd  
## 1 5.217256e-01 0 1.00000000 1.0000000 0.003725263  
## 2 1.382231e-01 1 0.47827443 0.4782744 0.003026772  
## 3 3.315819e-02 2 0.34005134 0.3400513 0.002643697  
## 4 2.665611e-02 3 0.30689316 0.3068932 0.002531909  
## 5 9.397218e-03 4 0.28023705 0.2802370 0.002435018  
## 6 8.853379e-03 7 0.25204539 0.2428801 0.002287070  
## 7 8.109600e-03 8 0.24319202 0.2306677 0.002235213  
## 8 7.197869e-03 11 0.21161736 0.2116174 0.002150426  
## 9 5.770292e-03 13 0.19722162 0.2035078 0.002112773  
## 10 3.478970e-03 15 0.18568104 0.1841935 0.002018948  
## 11 2.759183e-03 16 0.18220207 0.1808585 0.002002111  
## 12 2.711197e-03 19 0.17392452 0.1786511 0.001990858  
## 13 2.375297e-03 21 0.16850212 0.1716692 0.001954671  
## 14 1.775474e-03 23 0.16375153 0.1650711 0.001919611  
## 15 1.391588e-03 24 0.16197606 0.1627438 0.001907036  
## 16 1.247631e-03 25 0.16058447 0.1599367 0.001891718  
## 17 1.055688e-03 26 0.15933684 0.1582092 0.001882208  
## 18 1.007702e-03 30 0.15449027 0.1556899 0.001868225  
## 19 9.597159e-04 31 0.15348257 0.1535306 0.001856127  
## 20 9.357230e-04 34 0.15026752 0.1523549 0.001849497  
## 21 8.637443e-04 35 0.14933180 0.1514432 0.001844333  
## 22 7.277846e-04 36 0.14846805 0.1482521 0.001826110  
## 23 6.334125e-04 39 0.14628470 0.1450371 0.001807506  
## 24 5.758296e-04 47 0.13877492 0.1407903 0.001782544  
## 25 5.518367e-04 48 0.13819909 0.1381991 0.001767089  
## 26 5.158473e-04 49 0.13764726 0.1357518 0.001752332  
## 27 4.918544e-04 51 0.13661556 0.1322249 0.001730782  
## 28 4.878556e-04 53 0.13563185 0.1319849 0.001729304  
## 29 4.858562e-04 58 0.13284868 0.1314811 0.001726194  
## 30 4.798580e-04 66 0.12764222 0.1292497 0.001712336  
## 31 4.678615e-04 67 0.12716236 0.1274743 0.001701207  
## 32 4.558651e-04 70 0.12536289 0.1263706 0.001694243  
## 33 4.438686e-04 74 0.12353943 0.1248350 0.001684494  
## 34 4.318722e-04 76 0.12265170 0.1244032 0.001681739  
## 35 4.078793e-04 77 0.12221982 0.1229396 0.001672362  
## 36 3.678911e-04 78 0.12181194 0.1220999 0.001666951  
## 37 3.478970e-04 82 0.12027640 0.1215000 0.001663073  
## 38 3.438982e-04 84 0.11958060 0.1204923 0.001656533  
## 39 3.359006e-04 87 0.11854891 0.1204923 0.001656533  
## 40 3.187628e-04 91 0.11720531 0.1197246 0.001651529  
## 41 3.119077e-04 99 0.11430217 0.1187888 0.001645404  
## 42 2.879148e-04 102 0.11336644 0.1176852 0.001638143  
## 43 2.639219e-04 107 0.11192687 0.1142542 0.001615315  
## 44 2.536392e-04 112 0.11060726 0.1126227 0.001604320  
## 45 2.399290e-04 121 0.10827995 0.1115190 0.001596830  
## 46 2.319313e-04 131 0.10568872 0.1094796 0.001582875  
## 47 2.159361e-04 134 0.10499292 0.1094796 0.001582875  
## 48 2.039396e-04 136 0.10456105 0.1086158 0.001576919  
## 49 1.919432e-04 138 0.10415317 0.1084479 0.001575758  
## 50 1.759479e-04 150 0.10168190 0.1071523 0.001566765  
## 51 1.679503e-04 153 0.10115406 0.1066964 0.001563586  
## 52 1.559538e-04 167 0.09863480 0.1064085 0.001561575  
## 53 1.439574e-04 177 0.09707527 0.1053288 0.001554002  
## 54 1.319609e-04 181 0.09649944 0.1042251 0.001546215  
## 55 1.199645e-04 183 0.09623551 0.1032174 0.001539064  
## 56 1.139663e-04 193 0.09503587 0.1024497 0.001533589  
## 57 1.109672e-04 200 0.09407615 0.1021138 0.001531186  
## 58 1.079680e-04 208 0.09318842 0.1020178 0.001530499  
## 59 1.039692e-04 212 0.09275654 0.1012500 0.001524986  
## 60 9.597159e-05 215 0.09244464 0.1012500 0.001524986  
## 61 8.797396e-05 236 0.09033326 0.1006742 0.001520837  
## 62 8.397514e-05 240 0.08997337 0.1004103 0.001518930  
## 63 7.197869e-05 242 0.08980542 0.1012980 0.001525332  
## 64 6.718011e-05 280 0.08699825 0.1014660 0.001526539  
## 65 6.398106e-05 291 0.08623048 0.1017539 0.001528607  
## 66 5.998225e-05 313 0.08479090 0.1017299 0.001528434  
## 67 5.598343e-05 323 0.08419108 0.1018499 0.001529295  
## 68 5.278438e-05 336 0.08337532 0.1023297 0.001532731  
## 69 4.798580e-05 344 0.08287147 0.1041532 0.001545706  
## 70 4.198757e-05 404 0.07977639 0.1054248 0.001554677  
## 71 3.998816e-05 412 0.07944049 0.1060006 0.001558719  
## 72 3.707993e-05 430 0.07840879 0.1076321 0.001570103  
## 73 3.598935e-05 449 0.07749706 0.1082560 0.001574430  
## 74 3.199053e-05 501 0.07485784 0.1086398 0.001577085  
## 75 2.999112e-05 523 0.07409007 0.1094076 0.001582380  
## 76 2.879148e-05 527 0.07397010 0.1094316 0.001582545  
## 77 2.742045e-05 560 0.07274647 0.1094316 0.001582545  
## 78 2.399290e-05 567 0.07255452 0.1118069 0.001598788  
## 79 2.056534e-05 651 0.07041916 0.1123827 0.001602695  
## 80 1.919432e-05 659 0.07025121 0.1128866 0.001606105  
## 81 1.599527e-05 675 0.06989131 0.1135584 0.001610637  
## 82 1.439574e-05 712 0.06907555 0.1142062 0.001614993  
## 83 1.199645e-05 723 0.06890760 0.1152619 0.001622061  
## 84 9.597159e-06 735 0.06876365 0.1154538 0.001623342  
## 85 7.997633e-06 745 0.06866767 0.1162696 0.001628772  
## 86 5.998225e-06 757 0.06857170 0.1162456 0.001628613  
## 87 3.998816e-06 761 0.06854771 0.1168934 0.001632910  
## 88 2.399290e-06 767 0.06852372 0.1172533 0.001635291  
## 89 0.000000e+00 777 0.06849972 0.1173973 0.001636243  
##   
## Variable importance  
## Online.boarding Inflight.wifi.service   
## 20 15   
## Seat.comfort Inflight.entertainment   
## 10 9   
## Ease.of.Online.booking BusinessTravel   
## 9 8   
## BusinessClass LoyalCustomer   
## 8 2   
## Cleanliness Age   
## 2 2   
## EcoClass Departure.Arrival.time.convenient   
## 2 2   
## Gate.location Inflight.service   
## 2 1   
## Baggage.handling Checkin.service   
## 1 1   
## On.board.service Flight.Distance   
## 1 1   
## Leg.room.service Food.and.drink   
## 1 1   
##   
## Node number 1: 98860 observations, complexity param=0.5217256  
## predicted class=0 expected loss=0.4215962 P(node) =1  
## class counts: 57181 41679  
## probabilities: 0.578 0.422   
## left son=2 (49085 obs) right son=3 (49775 obs)  
## Primary splits:  
## Online.boarding < 3.5 to the left, improve=17666.410, (0 missing)  
## BusinessClass < 0.5 to the left, improve=12549.600, (0 missing)  
## EcoClass < 0.5 to the right, improve=10042.100, (0 missing)  
## BusinessTravel < 0.5 to the left, improve= 9964.032, (0 missing)  
## Inflight.entertainment < 3.5 to the left, improve= 9456.229, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.731, adj=0.457, (0 split)  
## Inflight.wifi.service < 3.5 to the left, agree=0.718, adj=0.432, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.677, adj=0.349, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.668, adj=0.331, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.664, adj=0.323, (0 split)  
##   
## Node number 2: 49085 observations, complexity param=0.03315819  
## predicted class=0 expected loss=0.1205867 P(node) =0.4965102  
## class counts: 43166 5919  
## probabilities: 0.879 0.121   
## left son=4 (44573 obs) right son=5 (4512 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=2818.4720, (0 missing)  
## BusinessClass < 0.5 to the left, improve=1078.4390, (0 missing)  
## EcoClass < 0.5 to the right, improve= 781.8696, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve= 764.3441, (0 missing)  
## BusinessTravel < 0.5 to the left, improve= 733.4756, (0 missing)  
##   
## Node number 3: 49775 observations, complexity param=0.1382231  
## predicted class=1 expected loss=0.2815671 P(node) =0.5034898  
## class counts: 14015 35760  
## probabilities: 0.282 0.718   
## left son=6 (10161 obs) right son=7 (39614 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=6432.740, (0 missing)  
## BusinessClass < 0.5 to the left, improve=4567.822, (0 missing)  
## EcoClass < 0.5 to the right, improve=3924.528, (0 missing)  
## Inflight.entertainment < 3.5 to the left, improve=3265.164, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=3094.315, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.819, adj=0.112, (0 split)  
## Age < 60.5 to the right, agree=0.813, adj=0.082, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.809, adj=0.066, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.798, adj=0.012, (0 split)  
##   
## Node number 4: 44573 observations, complexity param=0.009397218  
## predicted class=0 expected loss=0.06667714 P(node) =0.4508699  
## class counts: 41601 2972  
## probabilities: 0.933 0.067   
## left son=8 (31906 obs) right son=9 (12667 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=551.6195, (0 missing)  
## EcoClass < 0.5 to the right, improve=380.3352, (0 missing)  
## BusinessTravel < 0.5 to the left, improve=300.8677, (0 missing)  
## Flight.Distance < 1597.5 to the left, improve=294.0080, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=174.7040, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.908, adj=0.675, (0 split)  
## Flight.Distance < 1754.5 to the left, agree=0.775, adj=0.210, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.719, adj=0.012, (0 split)  
## Age < 78.5 to the left, agree=0.716, adj=0.001, (0 split)  
## Departure.Delay.in.Minutes < 659 to the left, agree=0.716, adj=0.000, (0 split)  
##   
## Node number 5: 4512 observations, complexity param=0.005770292  
## predicted class=1 expected loss=0.3468528 P(node) =0.0456403  
## class counts: 1565 2947  
## probabilities: 0.347 0.653   
## left son=10 (3104 obs) right son=11 (1408 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=435.7102, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=226.6266, (0 missing)  
## Gate.location < 3.5 to the left, improve=218.3535, (0 missing)  
## Inflight.service < 4.5 to the left, improve=183.3916, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=180.5527, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.816, adj=0.412, (0 split)  
## Gate.location < 4.5 to the left, agree=0.811, adj=0.396, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.772, adj=0.270, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.750, adj=0.198, (0 split)  
## On.board.service < 4.5 to the left, agree=0.725, adj=0.120, (0 split)  
##   
## Node number 6: 10161 observations, complexity param=0.02665611  
## predicted class=0 expected loss=0.2165141 P(node) =0.1027817  
## class counts: 7961 2200  
## probabilities: 0.783 0.217   
## left son=12 (9050 obs) right son=13 (1111 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=1531.4200, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve= 959.0970, (0 missing)  
## Age < 41.5 to the right, improve= 176.3901, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 150.0786, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 134.3976, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.948, adj=0.52, (0 split)  
##   
## Node number 7: 39614 observations, complexity param=0.0081096  
## predicted class=1 expected loss=0.1528248 P(node) =0.4007081  
## class counts: 6054 33560  
## probabilities: 0.153 0.847   
## left son=14 (9330 obs) right son=15 (30284 obs)  
## Primary splits:  
## Inflight.entertainment < 3.5 to the left, improve=1571.207, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1310.047, (0 missing)  
## On.board.service < 3.5 to the left, improve=1308.873, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1267.262, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1166.018, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.831, adj=0.282, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.823, adj=0.247, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.816, adj=0.221, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.808, adj=0.186, (0 split)  
## On.board.service < 3.5 to the left, agree=0.792, adj=0.117, (0 split)  
##   
## Node number 8: 31906 observations, complexity param=0.0004918544  
## predicted class=0 expected loss=0.01711277 P(node) =0.3227392  
## class counts: 31360 546  
## probabilities: 0.983 0.017   
## left son=16 (29528 obs) right son=17 (2378 obs)  
## Primary splits:  
## Ease.of.Online.booking < 3.5 to the left, improve=29.544460, (0 missing)  
## BusinessTravel < 0.5 to the left, improve=25.082640, (0 missing)  
## Age < 34.5 to the left, improve=15.028800, (0 missing)  
## Inflight.service < 2.5 to the right, improve= 8.164687, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 6.008215, (0 missing)  
##   
## Node number 9: 12667 observations, complexity param=0.009397218  
## predicted class=0 expected loss=0.1915213 P(node) =0.1281307  
## class counts: 10241 2426  
## probabilities: 0.808 0.192   
## left son=18 (8892 obs) right son=19 (3775 obs)  
## Primary splits:  
## Inflight.entertainment < 3.5 to the left, improve=822.6107, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=658.3729, (0 missing)  
## On.board.service < 3.5 to the left, improve=615.9408, (0 missing)  
## Inflight.service < 3.5 to the left, improve=391.0226, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=377.0039, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the left, agree=0.828, adj=0.422, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.790, adj=0.295, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.785, adj=0.279, (0 split)  
## On.board.service < 3.5 to the left, agree=0.747, adj=0.152, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.741, adj=0.130, (0 split)  
##   
## Node number 10: 3104 observations, complexity param=0.005770292  
## predicted class=1 expected loss=0.4948454 P(node) =0.03139794  
## class counts: 1536 1568  
## probabilities: 0.495 0.505   
## left son=20 (1451 obs) right son=21 (1653 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=159.16320, (0 missing)  
## BusinessTravel < 0.5 to the left, improve=120.51380, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 96.99011, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 96.09322, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 92.37049, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.807, adj=0.586, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.782, adj=0.533, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.654, adj=0.259, (0 split)  
## EcoClass < 0.5 to the right, agree=0.641, adj=0.232, (0 split)  
## BusinessTravel < 0.5 to the left, agree=0.616, adj=0.178, (0 split)  
##   
## Node number 11: 1408 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.02059659 P(node) =0.01424236  
## class counts: 29 1379  
## probabilities: 0.021 0.979   
## left son=22 (498 obs) right son=23 (910 obs)  
## Primary splits:  
## Ease.of.Online.booking < 4.5 to the left, improve=1.5400370, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.4922990, (0 missing)  
## Gate.location < 4.5 to the left, improve=1.0238910, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.9963347, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.8561026, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.802, adj=0.440, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.776, adj=0.367, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.776, adj=0.365, (0 split)  
## EcoClass < 0.5 to the right, agree=0.748, adj=0.287, (0 split)  
## Flight.Distance < 421.5 to the left, agree=0.671, adj=0.070, (0 split)  
##   
## Node number 12: 9050 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.1203315 P(node) =0.0915436  
## class counts: 7961 1089  
## probabilities: 0.880 0.120   
## left son=24 (4858 obs) right son=25 (4192 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=303.72000, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=198.16270, (0 missing)  
## Age < 41.5 to the right, improve= 55.88283, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 48.71302, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 43.94198, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=0.897, adj=0.778, (0 split)  
## Age < 41.5 to the right, agree=0.719, adj=0.393, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.714, adj=0.382, (0 split)  
## Male < 0.5 to the left, agree=0.683, adj=0.316, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.655, adj=0.255, (0 split)  
##   
## Node number 13: 1111 observations  
## predicted class=1 expected loss=0 P(node) =0.01123811  
## class counts: 0 1111  
## probabilities: 0.000 1.000   
##   
## Node number 14: 9330 observations, complexity param=0.0081096  
## predicted class=1 expected loss=0.406538 P(node) =0.09437589  
## class counts: 3793 5537  
## probabilities: 0.407 0.593   
## left son=28 (6622 obs) right son=29 (2708 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=952.8214, (0 missing)  
## Checkin.service < 2.5 to the left, improve=775.6634, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=661.5790, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=487.8741, (0 missing)  
## Cleanliness < 4.5 to the left, improve=309.1248, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.797, adj=0.302, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.752, adj=0.147, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.742, adj=0.112, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.734, adj=0.083, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.713, adj=0.010, (0 split)  
##   
## Node number 15: 30284 observations, complexity param=0.002759183  
## predicted class=1 expected loss=0.07465989 P(node) =0.3063322  
## class counts: 2261 28023  
## probabilities: 0.075 0.925   
## left son=30 (2322 obs) right son=31 (27962 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=508.9535, (0 missing)  
## BusinessClass < 0.5 to the left, improve=350.4038, (0 missing)  
## EcoClass < 0.5 to the right, improve=311.1742, (0 missing)  
## Checkin.service < 2.5 to the left, improve=274.5919, (0 missing)  
## On.board.service < 3.5 to the left, improve=258.8283, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.939, adj=0.208, (0 split)  
##   
## Node number 16: 29528 observations, complexity param=0.0004878556  
## predicted class=0 expected loss=0.0110065 P(node) =0.298685  
## class counts: 29203 325  
## probabilities: 0.989 0.011   
## left son=32 (18221 obs) right son=33 (11307 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=11.528890, (0 missing)  
## Age < 34.5 to the left, improve= 5.079636, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 3.988580, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 2.702587, (0 missing)  
## Inflight.service < 2.5 to the right, improve= 2.491552, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.887, adj=0.705, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.735, adj=0.309, (0 split)  
## On.board.service < 2.5 to the right, agree=0.634, adj=0.043, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.627, adj=0.025, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.624, adj=0.018, (0 split)  
##   
## Node number 17: 2378 observations, complexity param=0.0004918544  
## predicted class=0 expected loss=0.09293524 P(node) =0.02405422  
## class counts: 2157 221  
## probabilities: 0.907 0.093   
## left son=34 (2321 obs) right son=35 (57 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=68.66070, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=41.77463, (0 missing)  
## Inflight.service < 4.5 to the left, improve=25.69934, (0 missing)  
## Age < 34.5 to the left, improve=13.92375, (0 missing)  
## On.board.service < 4.5 to the left, improve=11.18752, (0 missing)  
##   
## Node number 18: 8892 observations, complexity param=0.0005758296  
## predicted class=0 expected loss=0.07411156 P(node) =0.08994538  
## class counts: 8233 659  
## probabilities: 0.926 0.074   
## left son=36 (8816 obs) right son=37 (76 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=52.24859, (0 missing)  
## Gate.location < 3.5 to the right, improve=45.12400, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=34.25322, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=32.88684, (0 missing)  
## Checkin.service < 4.5 to the left, improve=24.27648, (0 missing)  
##   
## Node number 19: 3775 observations, complexity param=0.009397218  
## predicted class=0 expected loss=0.4680795 P(node) =0.03818531  
## class counts: 2008 1767  
## probabilities: 0.532 0.468   
## left son=38 (1538 obs) right son=39 (2237 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=952.7344, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=581.5656, (0 missing)  
## Age < 32.5 to the left, improve=472.4279, (0 missing)  
## Flight.Distance < 1547.5 to the left, improve=461.1818, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=405.1012, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the right, agree=0.730, adj=0.337, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.716, adj=0.303, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.715, adj=0.300, (0 split)  
## On.board.service < 3.5 to the left, agree=0.715, adj=0.300, (0 split)  
## Flight.Distance < 1395 to the left, agree=0.708, adj=0.282, (0 split)  
##   
## Node number 20: 1451 observations, complexity param=0.0009597159  
## predicted class=0 expected loss=0.3342522 P(node) =0.01467732  
## class counts: 966 485  
## probabilities: 0.666 0.334   
## left son=40 (527 obs) right son=41 (924 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the right, improve=50.60743, (0 missing)  
## Flight.Distance < 1516 to the right, improve=47.90745, (0 missing)  
## EcoClass < 0.5 to the left, improve=36.02877, (0 missing)  
## Checkin.service < 4.5 to the left, improve=27.12326, (0 missing)  
## Cleanliness < 4.5 to the left, improve=23.09856, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.900, adj=0.725, (0 split)  
## Flight.Distance < 1285 to the right, agree=0.732, adj=0.262, (0 split)  
## Male < 0.5 to the right, agree=0.689, adj=0.144, (0 split)  
## Age < 70.5 to the right, agree=0.637, adj=0.002, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.637, adj=0.002, (0 split)  
##   
## Node number 21: 1653 observations, complexity param=0.00347897  
## predicted class=1 expected loss=0.3448276 P(node) =0.01672062  
## class counts: 570 1083  
## probabilities: 0.345 0.655   
## left son=42 (247 obs) right son=43 (1406 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=116.92740, (0 missing)  
## Gate.location < 4.5 to the right, improve= 91.41360, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve= 89.91643, (0 missing)  
## BusinessClass < 0.5 to the left, improve= 88.10555, (0 missing)  
## EcoClass < 0.5 to the right, improve= 61.97376, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.861, adj=0.069, (0 split)  
## Age < 14.5 to the left, agree=0.860, adj=0.065, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.855, adj=0.032, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.851, adj=0.004, (0 split)  
##   
## Node number 22: 498 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.05220884 P(node) =0.005037427  
## class counts: 26 472  
## probabilities: 0.052 0.948   
## left son=44 (139 obs) right son=45 (359 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=7.011759, (0 missing)  
## BusinessClass < 0.5 to the right, improve=5.595194, (0 missing)  
## Flight.Distance < 1896.5 to the right, improve=2.815294, (0 missing)  
## EcoClass < 0.5 to the left, improve=2.798633, (0 missing)  
## Online.boarding < 1.5 to the right, improve=1.115169, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the right, agree=0.847, adj=0.453, (0 split)  
## Male < 0.5 to the right, agree=0.833, adj=0.403, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.821, adj=0.360, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.819, adj=0.353, (0 split)  
## On.board.service < 4.5 to the left, agree=0.819, adj=0.353, (0 split)  
##   
## Node number 23: 910 observations  
## predicted class=1 expected loss=0.003296703 P(node) =0.009204936  
## class counts: 3 907  
## probabilities: 0.003 0.997   
##   
## Node number 24: 4858 observations  
## predicted class=0 expected loss=0 P(node) =0.0491402  
## class counts: 4858 0  
## probabilities: 1.000 0.000   
##   
## Node number 25: 4192 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.2597805 P(node) =0.0424034  
## class counts: 3103 1089  
## probabilities: 0.740 0.260   
## left son=50 (1213 obs) right son=51 (2979 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=55.106520, (0 missing)  
## Departure.Delay.in.Minutes < 17.5 to the right, improve=26.405510, (0 missing)  
## Flight.Distance < 2714 to the left, improve= 2.896887, (0 missing)  
## Cleanliness < 3.5 to the left, improve= 1.781211, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve= 1.326411, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 12.5 to the right, agree=0.874, adj=0.566, (0 split)  
##   
## Node number 28: 6622 observations, complexity param=0.0081096  
## predicted class=0 expected loss=0.448958 P(node) =0.06698361  
## class counts: 3649 2973  
## probabilities: 0.551 0.449   
## left son=56 (1826 obs) right son=57 (4796 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the left, improve=482.4191, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=413.8173, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=275.4426, (0 missing)  
## Cleanliness < 4.5 to the left, improve=271.7678, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=189.6377, (0 missing)  
## Surrogate splits:  
## Age < 68.5 to the right, agree=0.726, adj=0.005, (0 split)  
##   
## Node number 29: 2708 observations, complexity param=0.0007277846  
## predicted class=1 expected loss=0.05317578 P(node) =0.02739227  
## class counts: 144 2564  
## probabilities: 0.053 0.947   
## left son=58 (555 obs) right son=59 (2153 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=30.09699, (0 missing)  
## Arrival.Delay.in.Minutes < 149.5 to the right, improve=27.03702, (0 missing)  
## EcoClass < 0.5 to the right, improve=26.60615, (0 missing)  
## Departure.Delay.in.Minutes < 149.5 to the right, improve=24.93258, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=21.38553, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.982, adj=0.914, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.819, adj=0.119, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.809, adj=0.070, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.807, adj=0.059, (0 split)  
## Flight.Distance < 164.5 to the left, agree=0.804, adj=0.041, (0 split)  
##   
## Node number 30: 2322 observations, complexity param=0.002759183  
## predicted class=1 expected loss=0.3927649 P(node) =0.02348776  
## class counts: 912 1410  
## probabilities: 0.393 0.607   
## left son=60 (1652 obs) right son=61 (670 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=290.5509, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=221.7821, (0 missing)  
## Online.boarding < 4.5 to the left, improve=173.1842, (0 missing)  
## BusinessClass < 0.5 to the left, improve=116.1509, (0 missing)  
## On.board.service < 2.5 to the left, improve=101.8110, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.937, adj=0.781, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.920, adj=0.724, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.813, adj=0.351, (0 split)  
##   
## Node number 31: 27962 observations, complexity param=0.0006334125  
## predicted class=1 expected loss=0.04824405 P(node) =0.2828444  
## class counts: 1349 26613  
## probabilities: 0.048 0.952   
## left son=62 (3569 obs) right son=63 (24393 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the left, improve=174.2436, (0 missing)  
## BusinessClass < 0.5 to the left, improve=126.0400, (0 missing)  
## On.board.service < 3.5 to the left, improve=114.4141, (0 missing)  
## Online.boarding < 4.5 to the left, improve=113.1727, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=103.9911, (0 missing)  
##   
## Node number 32: 18221 observations  
## predicted class=0 expected loss=0 P(node) =0.1843111  
## class counts: 18221 0  
## probabilities: 1.000 0.000   
##   
## Node number 33: 11307 observations, complexity param=0.0004878556  
## predicted class=0 expected loss=0.02874326 P(node) =0.1143739  
## class counts: 10982 325  
## probabilities: 0.971 0.029   
## left son=66 (8075 obs) right son=67 (3232 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=30.333280, (0 missing)  
## Age < 34.5 to the left, improve=16.481940, (0 missing)  
## Checkin.service < 4.5 to the left, improve= 6.209268, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve= 5.039368, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 4.571589, (0 missing)  
## Surrogate splits:  
## Age < 39.5 to the left, agree=0.785, adj=0.249, (0 split)  
## EcoClass < 0.5 to the right, agree=0.741, adj=0.093, (0 split)  
## Gate.location < 1.5 to the right, agree=0.729, adj=0.054, (0 split)  
## Flight.Distance < 1619 to the left, agree=0.718, adj=0.014, (0 split)  
## Arrival.Delay.in.Minutes < 147.5 to the left, agree=0.715, adj=0.002, (0 split)  
##   
## Node number 34: 2321 observations, complexity param=0.0003359006  
## predicted class=0 expected loss=0.07410599 P(node) =0.02347765  
## class counts: 2149 172  
## probabilities: 0.926 0.074   
## left son=68 (2279 obs) right son=69 (42 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=30.038330, (0 missing)  
## Inflight.service < 4.5 to the left, improve=19.655920, (0 missing)  
## Age < 34.5 to the left, improve= 8.887551, (0 missing)  
## On.board.service < 4.5 to the left, improve= 8.068312, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve= 6.046985, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.983, adj=0.071, (0 split)  
##   
## Node number 35: 57 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.1403509 P(node) =0.0005765729  
## class counts: 8 49  
## probabilities: 0.140 0.860   
## left son=70 (9 obs) right son=71 (48 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the right, improve=5.921053, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=5.124599, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=4.371733, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=3.319603, (0 missing)  
## Departure.Delay.in.Minutes < 1 to the right, improve=2.677463, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.912, adj=0.444, (0 split)  
## Departure.Delay.in.Minutes < 61 to the right, agree=0.895, adj=0.333, (0 split)  
## Age < 27.5 to the left, agree=0.877, adj=0.222, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.877, adj=0.222, (0 split)  
## Arrival.Delay.in.Minutes < 30 to the right, agree=0.877, adj=0.222, (0 split)  
##   
## Node number 36: 8816 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.06907895 P(node) =0.08917661  
## class counts: 8207 609  
## probabilities: 0.931 0.069   
## left son=72 (3105 obs) right son=73 (5711 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=38.78096, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=29.49043, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=23.15572, (0 missing)  
## Checkin.service < 4.5 to the left, improve=22.37018, (0 missing)  
## On.board.service < 4.5 to the left, improve=18.56022, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.858, adj=0.597, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.841, adj=0.549, (0 split)  
## Arrival.Delay.in.Minutes < 300.5 to the right, agree=0.648, adj=0.002, (0 split)  
## Departure.Delay.in.Minutes < 276.5 to the right, agree=0.648, adj=0.002, (0 split)  
## Age < 82.5 to the right, agree=0.648, adj=0.001, (0 split)  
##   
## Node number 37: 76 observations, complexity param=0.000479858  
## predicted class=1 expected loss=0.3421053 P(node) =0.0007687639  
## class counts: 26 50  
## probabilities: 0.342 0.658   
## left son=74 (20 obs) right son=75 (56 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=23.496240, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=13.065170, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve= 8.837392, (0 missing)  
## Inflight.service < 1.5 to the left, improve= 8.837392, (0 missing)  
## Age < 59.5 to the right, improve= 8.269268, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.908, adj=0.65, (0 split)  
## On.board.service < 1.5 to the left, agree=0.842, adj=0.40, (0 split)  
## Age < 54.5 to the right, agree=0.803, adj=0.25, (0 split)  
## Gate.location < 3.5 to the right, agree=0.803, adj=0.25, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.803, adj=0.25, (0 split)  
##   
## Node number 38: 1538 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.0396619 P(node) =0.01555735  
## class counts: 1477 61  
## probabilities: 0.960 0.040   
## left son=76 (860 obs) right son=77 (678 obs)  
## Primary splits:  
## Age < 36.5 to the left, improve=6.137650, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.368104, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=1.332061, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=1.207297, (0 missing)  
## Online.boarding < 1.5 to the left, improve=1.192184, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 250.5 to the right, agree=0.581, adj=0.050, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.566, adj=0.015, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.564, adj=0.012, (0 split)  
## On.board.service < 1.5 to the right, agree=0.561, adj=0.004, (0 split)  
## Baggage.handling < 1.5 to the right, agree=0.561, adj=0.004, (0 split)  
##   
## Node number 39: 2237 observations, complexity param=0.008853379  
## predicted class=1 expected loss=0.2373715 P(node) =0.02262796  
## class counts: 531 1706  
## probabilities: 0.237 0.763   
## left son=78 (369 obs) right son=79 (1868 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=514.0100, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=385.0248, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=325.3193, (0 missing)  
## Age < 32.5 to the left, improve=305.2387, (0 missing)  
## Gate.location < 3.5 to the right, improve=245.6962, (0 missing)  
## Surrogate splits:  
## Age < 32.5 to the left, agree=0.910, adj=0.455, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.894, adj=0.355, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.890, adj=0.336, (0 split)  
## Gate.location < 3.5 to the right, agree=0.861, adj=0.160, (0 split)  
## On.board.service < 3.5 to the left, agree=0.852, adj=0.103, (0 split)  
##   
## Node number 40: 527 observations, complexity param=0.0008637443  
## predicted class=0 expected loss=0.1593928 P(node) =0.005330771  
## class counts: 443 84  
## probabilities: 0.841 0.159   
## left son=80 (435 obs) right son=81 (92 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the right, improve=64.10457, (0 missing)  
## Age < 30.5 to the right, improve=41.11054, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=28.83964, (0 missing)  
## Inflight.service < 4.5 to the left, improve=28.20987, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=27.68767, (0 missing)  
## Surrogate splits:  
## Inflight.service < 4.5 to the left, agree=0.890, adj=0.370, (0 split)  
## Age < 28.5 to the right, agree=0.882, adj=0.326, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.879, adj=0.304, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.871, adj=0.261, (0 split)  
## On.board.service < 4.5 to the left, agree=0.871, adj=0.261, (0 split)  
##   
## Node number 41: 924 observations, complexity param=0.0009597159  
## predicted class=0 expected loss=0.4339827 P(node) =0.009346551  
## class counts: 523 401  
## probabilities: 0.566 0.434   
## left son=82 (450 obs) right son=83 (474 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=44.03472, (0 missing)  
## Inflight.service < 3.5 to the left, improve=32.99913, (0 missing)  
## On.board.service < 3.5 to the left, improve=30.04052, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=29.57284, (0 missing)  
## Online.boarding < 2.5 to the right, improve=21.22619, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.756, adj=0.500, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.733, adj=0.451, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.695, adj=0.373, (0 split)  
## On.board.service < 3.5 to the left, agree=0.659, adj=0.300, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.650, adj=0.282, (0 split)  
##   
## Node number 42: 247 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2064777 P(node) =0.002498483  
## class counts: 196 51  
## probabilities: 0.794 0.206   
## left son=84 (67 obs) right son=85 (180 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 9.5 to the right, improve=4.807928, (0 missing)  
## Departure.Delay.in.Minutes < 7 to the right, improve=4.353306, (0 missing)  
## Flight.Distance < 1465.5 to the right, improve=1.363033, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.189406, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.164388, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 14.5 to the right, agree=0.907, adj=0.657, (0 split)  
##   
## Node number 43: 1406 observations, complexity param=0.002375297  
## predicted class=1 expected loss=0.2660028 P(node) =0.01422213  
## class counts: 374 1032  
## probabilities: 0.266 0.734   
## left son=86 (283 obs) right son=87 (1123 obs)  
## Primary splits:  
## Gate.location < 4.5 to the right, improve=118.48820, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=107.12000, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve= 69.05926, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 55.64795, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 54.12941, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.959, adj=0.795, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.935, adj=0.675, (0 split)  
## Age < 14.5 to the left, agree=0.799, adj=0.004, (0 split)  
##   
## Node number 44: 139 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.1870504 P(node) =0.001406029  
## class counts: 26 113  
## probabilities: 0.187 0.813   
## left son=88 (42 obs) right son=89 (97 obs)  
## Primary splits:  
## On.board.service < 4.5 to the right, improve=17.78443, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=16.90520, (0 missing)  
## Inflight.service < 4.5 to the right, improve=15.64942, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=14.36129, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=11.31407, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.899, adj=0.667, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.856, adj=0.524, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.827, adj=0.429, (0 split)  
## Gate.location < 2.5 to the left, agree=0.755, adj=0.190, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.741, adj=0.143, (0 split)  
##   
## Node number 45: 359 observations  
## predicted class=1 expected loss=0 P(node) =0.003631398  
## class counts: 0 359  
## probabilities: 0.000 1.000   
##   
## Node number 50: 1213 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1327288 P(node) =0.01226988  
## class counts: 1052 161  
## probabilities: 0.867 0.133   
## left son=100 (410 obs) right son=101 (803 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.3268400, (0 missing)  
## Age < 59.5 to the right, improve=1.1645850, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.7374064, (0 missing)  
## Arrival.Delay.in.Minutes < 131 to the left, improve=0.6854255, (0 missing)  
## Flight.Distance < 2073.5 to the left, improve=0.5787687, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2539.5 to the right, agree=0.663, adj=0.002, (0 split)  
##   
## Node number 51: 2979 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.3115139 P(node) =0.03013352  
## class counts: 2051 928  
## probabilities: 0.688 0.312   
## left son=102 (2780 obs) right son=103 (199 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 8.5 to the left, improve=4.311631, (0 missing)  
## Flight.Distance < 864 to the left, improve=3.345265, (0 missing)  
## Cleanliness < 3.5 to the left, improve=2.680760, (0 missing)  
## Gate.location < 4.5 to the right, improve=2.029130, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=2.026693, (0 missing)  
##   
## Node number 56: 1826 observations, complexity param=0.0004438686  
## predicted class=0 expected loss=0.1396495 P(node) =0.01847056  
## class counts: 1571 255  
## probabilities: 0.860 0.140   
## left son=112 (1540 obs) right son=113 (286 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=34.02680, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=31.83000, (0 missing)  
## Age < 31.5 to the right, improve=30.57714, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=27.88784, (0 missing)  
## Inflight.service < 4.5 to the left, improve=23.10944, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 147.5 to the left, agree=0.844, adj=0.007, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.844, adj=0.003, (0 split)  
## Departure.Delay.in.Minutes < 245 to the left, agree=0.844, adj=0.003, (0 split)  
##   
## Node number 57: 4796 observations, complexity param=0.007197869  
## predicted class=1 expected loss=0.4332777 P(node) =0.04851305  
## class counts: 2078 2718  
## probabilities: 0.433 0.567   
## left son=114 (4080 obs) right son=115 (716 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=257.8431, (0 missing)  
## Cleanliness < 2.5 to the left, improve=201.6544, (0 missing)  
## BusinessClass < 0.5 to the left, improve=187.4462, (0 missing)  
## Checkin.service < 4.5 to the left, improve=183.6759, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=162.9558, (0 missing)  
##   
## Node number 58: 555 observations, complexity param=0.0007277846  
## predicted class=1 expected loss=0.2 P(node) =0.005614  
## class counts: 111 444  
## probabilities: 0.200 0.800   
## left son=116 (199 obs) right son=117 (356 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=77.21366, (0 missing)  
## Arrival.Delay.in.Minutes < 126 to the right, improve=33.92177, (0 missing)  
## Cleanliness < 4.5 to the right, improve=33.41581, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=30.75052, (0 missing)  
## Departure.Delay.in.Minutes < 122 to the right, improve=30.35676, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.802, adj=0.447, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.732, adj=0.251, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.692, adj=0.141, (0 split)  
## Age < 27.5 to the right, agree=0.685, adj=0.121, (0 split)  
## Departure.Delay.in.Minutes < 122 to the right, agree=0.685, adj=0.121, (0 split)  
##   
## Node number 59: 2153 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.01532745 P(node) =0.02177827  
## class counts: 33 2120  
## probabilities: 0.015 0.985   
## left son=118 (665 obs) right son=119 (1488 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=2.2635760, (0 missing)  
## Departure.Delay.in.Minutes < 178.5 to the right, improve=1.0121610, (0 missing)  
## Age < 71 to the right, improve=0.8844256, (0 missing)  
## Arrival.Delay.in.Minutes < 167.5 to the right, improve=0.7749481, (0 missing)  
## Inflight.service < 1.5 to the left, improve=0.7147367, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.943, adj=0.815, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.937, adj=0.797, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.897, adj=0.668, (0 split)  
## Age < 30.5 to the left, agree=0.883, adj=0.623, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.876, adj=0.600, (0 split)  
##   
## Node number 60: 1652 observations, complexity param=0.002759183  
## predicted class=0 expected loss=0.4479419 P(node) =0.0167105  
## class counts: 912 740  
## probabilities: 0.552 0.448   
## left son=120 (897 obs) right son=121 (755 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=77.21269, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=70.73733, (0 missing)  
## On.board.service < 2.5 to the left, improve=61.14434, (0 missing)  
## Checkin.service < 2.5 to the left, improve=58.98148, (0 missing)  
## EcoClass < 0.5 to the right, improve=57.05011, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.969, adj=0.931, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.663, adj=0.264, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.657, adj=0.250, (0 split)  
## Age < 24.5 to the left, agree=0.643, adj=0.220, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.622, adj=0.172, (0 split)  
##   
## Node number 61: 670 observations  
## predicted class=1 expected loss=0 P(node) =0.006777261  
## class counts: 0 670  
## probabilities: 0.000 1.000   
##   
## Node number 62: 3569 observations, complexity param=0.0006334125  
## predicted class=1 expected loss=0.194172 P(node) =0.03610156  
## class counts: 693 2876  
## probabilities: 0.194 0.806   
## left son=124 (2155 obs) right son=125 (1414 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=176.58430, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=123.72470, (0 missing)  
## Cleanliness < 4.5 to the left, improve= 97.23388, (0 missing)  
## Seat.comfort < 4.5 to the left, improve= 95.44163, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve= 77.65042, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the left, agree=0.841, adj=0.598, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.830, adj=0.572, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.825, adj=0.558, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.814, adj=0.530, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.756, adj=0.383, (0 split)  
##   
## Node number 63: 24393 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.02689296 P(node) =0.2467429  
## class counts: 656 23737  
## probabilities: 0.027 0.973   
## left son=126 (2812 obs) right son=127 (21581 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=54.92158, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=46.57733, (0 missing)  
## Inflight.service < 3.5 to the left, improve=44.18584, (0 missing)  
## On.board.service < 2.5 to the left, improve=43.64439, (0 missing)  
## EcoClass < 0.5 to the right, improve=40.47160, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.972, adj=0.754, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.907, adj=0.193, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.906, adj=0.188, (0 split)  
## On.board.service < 2.5 to the left, agree=0.899, adj=0.121, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.895, adj=0.088, (0 split)  
##   
## Node number 66: 8075 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.005572755 P(node) =0.08168117  
## class counts: 8030 45  
## probabilities: 0.994 0.006   
## left son=132 (6326 obs) right son=133 (1749 obs)  
## Primary splits:  
## Flight.Distance < 984.5 to the left, improve=1.4257520, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=0.4458939, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.3019329, (0 missing)  
## Age < 24.5 to the right, improve=0.2507488, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.2166345, (0 missing)  
##   
## Node number 67: 3232 observations, complexity param=0.0004878556  
## predicted class=0 expected loss=0.08663366 P(node) =0.0326927  
## class counts: 2952 280  
## probabilities: 0.913 0.087   
## left son=134 (3169 obs) right son=135 (63 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=103.51000, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 65.86536, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 60.51273, (0 missing)  
## On.board.service < 4.5 to the left, improve= 29.75444, (0 missing)  
## Seat.comfort < 4.5 to the left, improve= 26.62737, (0 missing)  
##   
## Node number 68: 2279 observations, complexity param=0.0002639219  
## predicted class=0 expected loss=0.06318561 P(node) =0.0230528  
## class counts: 2135 144  
## probabilities: 0.937 0.063   
## left son=136 (2260 obs) right son=137 (19 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=20.213300, (0 missing)  
## On.board.service < 4.5 to the left, improve= 6.489766, (0 missing)  
## Age < 34.5 to the left, improve= 6.458906, (0 missing)  
## Cleanliness < 4.5 to the left, improve= 6.148988, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 4.445039, (0 missing)  
##   
## Node number 69: 42 observations, complexity param=0.0003119077  
## predicted class=1 expected loss=0.3333333 P(node) =0.0004248432  
## class counts: 14 28  
## probabilities: 0.333 0.667   
## left son=138 (13 obs) right son=139 (29 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=16.735630, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=10.181820, (0 missing)  
## Gate.location < 3.5 to the left, improve= 8.429167, (0 missing)  
## Age < 48.5 to the right, improve= 5.185185, (0 missing)  
## On.board.service < 4.5 to the right, improve= 5.185185, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.905, adj=0.692, (0 split)  
## Gate.location < 3.5 to the left, agree=0.881, adj=0.615, (0 split)  
## Age < 50.5 to the right, agree=0.810, adj=0.385, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.810, adj=0.385, (0 split)  
## On.board.service < 4.5 to the right, agree=0.810, adj=0.385, (0 split)  
##   
## Node number 70: 9 observations  
## predicted class=0 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 6 3  
## probabilities: 0.667 0.333   
##   
## Node number 71: 48 observations  
## predicted class=1 expected loss=0.04166667 P(node) =0.0004855351  
## class counts: 2 46  
## probabilities: 0.042 0.958   
##   
## Node number 72: 3105 observations  
## predicted class=0 expected loss=0.00547504 P(node) =0.03140805  
## class counts: 3088 17  
## probabilities: 0.995 0.005   
##   
## Node number 73: 5711 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.1036596 P(node) =0.05776856  
## class counts: 5119 592  
## probabilities: 0.896 0.104   
## left son=146 (1384 obs) right son=147 (4327 obs)  
## Primary splits:  
## Inflight.entertainment < 1.5 to the left, improve=26.31694, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=24.88117, (0 missing)  
## Checkin.service < 4.5 to the left, improve=24.78694, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=24.12274, (0 missing)  
## On.board.service < 2.5 to the left, improve=20.71546, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 1.5 to the left, agree=0.868, adj=0.457, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.864, adj=0.439, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.847, adj=0.370, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.827, adj=0.287, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.813, adj=0.229, (0 split)  
##   
## Node number 74: 20 observations  
## predicted class=0 expected loss=0 P(node) =0.0002023063  
## class counts: 20 0  
## probabilities: 1.000 0.000   
##   
## Node number 75: 56 observations  
## predicted class=1 expected loss=0.1071429 P(node) =0.0005664576  
## class counts: 6 50  
## probabilities: 0.107 0.893   
##   
## Node number 76: 860 observations  
## predicted class=0 expected loss=0 P(node) =0.008699171  
## class counts: 860 0  
## probabilities: 1.000 0.000   
##   
## Node number 77: 678 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.0899705 P(node) =0.006858183  
## class counts: 617 61  
## probabilities: 0.910 0.090   
## left son=154 (134 obs) right son=155 (544 obs)  
## Primary splits:  
## Inflight.wifi.service < 1.5 to the left, improve=2.703746, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=2.396058, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=2.396058, (0 missing)  
## Online.boarding < 1.5 to the left, improve=2.298082, (0 missing)  
## Flight.Distance < 1560 to the right, improve=1.144120, (0 missing)  
## Surrogate splits:  
## Online.boarding < 1.5 to the left, agree=0.972, adj=0.858, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.960, adj=0.799, (0 split)  
## Ease.of.Online.booking < 1.5 to the left, agree=0.960, adj=0.799, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.805, adj=0.015, (0 split)  
## Flight.Distance < 2432.5 to the right, agree=0.804, adj=0.007, (0 split)  
##   
## Node number 78: 369 observations  
## predicted class=0 expected loss=0 P(node) =0.003732551  
## class counts: 369 0  
## probabilities: 1.000 0.000   
##   
## Node number 79: 1868 observations, complexity param=0.001247631  
## predicted class=1 expected loss=0.08672377 P(node) =0.01889541  
## class counts: 162 1706  
## probabilities: 0.087 0.913   
## left son=158 (202 obs) right son=159 (1666 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=133.06520, (0 missing)  
## Gate.location < 3.5 to the right, improve=115.92370, (0 missing)  
## Inflight.service < 3.5 to the left, improve=100.33980, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 98.65657, (0 missing)  
## Arrival.Delay.in.Minutes < 125.5 to the right, improve= 78.01030, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.910, adj=0.163, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.901, adj=0.089, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.901, adj=0.084, (0 split)  
## Age < 28.5 to the left, agree=0.897, adj=0.045, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.893, adj=0.015, (0 split)  
##   
## Node number 80: 435 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.04597701 P(node) =0.004400162  
## class counts: 415 20  
## probabilities: 0.954 0.046   
## left son=160 (379 obs) right son=161 (56 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the right, improve=12.446630, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 7.867180, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 6.062285, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 4.772813, (0 missing)  
## Seat.comfort < 1.5 to the right, improve= 4.234893, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.936, adj=0.500, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.931, adj=0.464, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.906, adj=0.268, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.892, adj=0.161, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.890, adj=0.143, (0 split)  
##   
## Node number 81: 92 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.3043478 P(node) =0.0009306089  
## class counts: 28 64  
## probabilities: 0.304 0.696   
## left son=162 (65 obs) right son=163 (27 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=7.079599, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=3.455626, (0 missing)  
## Male < 0.5 to the right, improve=1.428744, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.263387, (0 missing)  
## Cleanliness < 2.5 to the left, improve=1.091385, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.848, adj=0.481, (0 split)  
## Departure.Delay.in.Minutes < 284.5 to the left, agree=0.717, adj=0.037, (0 split)  
## Arrival.Delay.in.Minutes < 197 to the left, agree=0.717, adj=0.037, (0 split)  
##   
## Node number 82: 450 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.2755556 P(node) =0.004551892  
## class counts: 326 124  
## probabilities: 0.724 0.276   
## left son=164 (143 obs) right son=165 (307 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=11.229610, (0 missing)  
## Departure.Delay.in.Minutes < 9.5 to the right, improve= 3.580755, (0 missing)  
## On.board.service < 1.5 to the left, improve= 2.899532, (0 missing)  
## Inflight.service < 1.5 to the left, improve= 2.899532, (0 missing)  
## Age < 64.5 to the left, improve= 2.544699, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 10.5 to the right, agree=0.889, adj=0.650, (0 split)  
## Flight.Distance < 2690.5 to the right, agree=0.687, adj=0.014, (0 split)  
##   
## Node number 83: 474 observations, complexity param=0.0009597159  
## predicted class=1 expected loss=0.4156118 P(node) =0.004794659  
## class counts: 197 277  
## probabilities: 0.416 0.584   
## left son=166 (138 obs) right son=167 (336 obs)  
## Primary splits:  
## Age < 40.5 to the left, improve=30.53440, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=26.29196, (0 missing)  
## Online.boarding < 2.5 to the right, improve=25.08641, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=22.50085, (0 missing)  
## Inflight.service < 3.5 to the left, improve=22.45525, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 3.5 to the left, agree=0.876, adj=0.572, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.865, adj=0.536, (0 split)  
## Male < 0.5 to the right, agree=0.835, adj=0.435, (0 split)  
## On.board.service < 2.5 to the left, agree=0.814, adj=0.362, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.800, adj=0.312, (0 split)  
##   
## Node number 84: 67 observations  
## predicted class=0 expected loss=0.04477612 P(node) =0.0006777261  
## class counts: 64 3  
## probabilities: 0.955 0.045   
##   
## Node number 85: 180 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2666667 P(node) =0.001820757  
## class counts: 132 48  
## probabilities: 0.733 0.267   
## left son=170 (54 obs) right son=171 (126 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=2.1671960, (0 missing)  
## Departure.Delay.in.Minutes < 7 to the right, improve=1.6662720, (0 missing)  
## Flight.Distance < 1465.5 to the right, improve=1.4814810, (0 missing)  
## Age < 66.5 to the left, improve=1.1529410, (0 missing)  
## Cleanliness < 3.5 to the left, improve=0.9179997, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=0.783, adj=0.278, (0 split)  
## Age < 34.5 to the left, agree=0.761, adj=0.204, (0 split)  
## Male < 0.5 to the right, agree=0.744, adj=0.148, (0 split)  
## Flight.Distance < 2690.5 to the right, agree=0.706, adj=0.019, (0 split)  
##   
## Node number 86: 283 observations, complexity param=0.0005158473  
## predicted class=0 expected loss=0.3250883 P(node) =0.002862634  
## class counts: 191 92  
## probabilities: 0.675 0.325   
## left son=172 (131 obs) right son=173 (152 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the right, improve=35.99763, (0 missing)  
## EcoClass < 0.5 to the left, improve=30.67624, (0 missing)  
## Flight.Distance < 1209.5 to the right, improve=22.96054, (0 missing)  
## Online.boarding < 2.5 to the right, improve=19.73311, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=14.74769, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.901, adj=0.786, (0 split)  
## Flight.Distance < 1310.5 to the right, agree=0.802, adj=0.573, (0 split)  
## Male < 0.5 to the right, agree=0.717, adj=0.389, (0 split)  
## Age < 42.5 to the left, agree=0.661, adj=0.267, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.604, adj=0.145, (0 split)  
##   
## Node number 87: 1123 observations, complexity param=0.000347897  
## predicted class=1 expected loss=0.1629564 P(node) =0.0113595  
## class counts: 183 940  
## probabilities: 0.163 0.837   
## left son=174 (181 obs) right son=175 (942 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=28.48903, (0 missing)  
## EcoClass < 0.5 to the right, improve=24.55065, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=23.80768, (0 missing)  
## Inflight.service < 4.5 to the left, improve=23.80768, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=21.15932, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.968, adj=0.801, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.844, adj=0.033, (0 split)  
## Arrival.Delay.in.Minutes < 280 to the right, agree=0.841, adj=0.011, (0 split)  
## Flight.Distance < 79 to the left, agree=0.840, adj=0.006, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.840, adj=0.006, (0 split)  
##   
## Node number 88: 42 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.4285714 P(node) =0.0004248432  
## class counts: 24 18  
## probabilities: 0.571 0.429   
## left son=176 (32 obs) right son=177 (10 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the right, improve=8.571429, (0 missing)  
## EcoClass < 0.5 to the left, improve=6.882279, (0 missing)  
## BusinessClass < 0.5 to the right, improve=6.882279, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=6.566124, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=6.453782, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.976, adj=0.9, (0 split)  
## BusinessClass < 0.5 to the right, agree=0.976, adj=0.9, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.905, adj=0.6, (0 split)  
## Age < 19.5 to the right, agree=0.857, adj=0.4, (0 split)  
## Flight.Distance < 327.5 to the right, agree=0.857, adj=0.4, (0 split)  
##   
## Node number 89: 97 observations  
## predicted class=1 expected loss=0.02061856 P(node) =0.0009811855  
## class counts: 2 95  
## probabilities: 0.021 0.979   
##   
## Node number 100: 410 observations  
## predicted class=0 expected loss=0.1 P(node) =0.004147279  
## class counts: 369 41  
## probabilities: 0.900 0.100   
##   
## Node number 101: 803 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1494396 P(node) =0.008122598  
## class counts: 683 120  
## probabilities: 0.851 0.149   
## left son=202 (727 obs) right son=203 (76 obs)  
## Primary splits:  
## Flight.Distance < 226.5 to the right, improve=1.2825450, (0 missing)  
## Age < 47.5 to the right, improve=1.2802170, (0 missing)  
## Gate.location < 1.5 to the left, improve=0.8071272, (0 missing)  
## Departure.Delay.in.Minutes < 3.5 to the right, improve=0.5238597, (0 missing)  
## Baggage.handling < 2.5 to the left, improve=0.4262519, (0 missing)  
##   
## Node number 102: 2780 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.3043165 P(node) =0.02812057  
## class counts: 1934 846  
## probabilities: 0.696 0.304   
## left son=204 (1527 obs) right son=205 (1253 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the left, improve=2.392143, (0 missing)  
## Gate.location < 4.5 to the right, improve=2.262538, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=2.145426, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=2.138724, (0 missing)  
## Flight.Distance < 2585.5 to the left, improve=2.007879, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.907, adj=0.793, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.892, adj=0.761, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.843, adj=0.651, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.572, adj=0.050, (0 split)  
## Age < 38.5 to the left, agree=0.562, adj=0.028, (0 split)  
##   
## Node number 103: 199 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.4120603 P(node) =0.002012948  
## class counts: 117 82  
## probabilities: 0.588 0.412   
## left son=206 (152 obs) right son=207 (47 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=3.246019, (0 missing)  
## Online.boarding < 4.5 to the left, improve=2.480172, (0 missing)  
## Flight.Distance < 222 to the left, improve=2.401801, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.694753, (0 missing)  
## Age < 61.5 to the left, improve=1.570714, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2608.5 to the left, agree=0.774, adj=0.043, (0 split)  
##   
## Node number 112: 1540 observations, complexity param=0.0002039396  
## predicted class=0 expected loss=0.09805195 P(node) =0.01557758  
## class counts: 1389 151  
## probabilities: 0.902 0.098   
## left son=224 (1335 obs) right son=225 (205 obs)  
## Primary splits:  
## Age < 31.5 to the right, improve=22.68797, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=22.18080, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=20.17160, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=18.67863, (0 missing)  
## On.board.service < 3.5 to the left, improve=16.75740, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.905, adj=0.283, (0 split)  
## On.board.service < 3.5 to the left, agree=0.886, adj=0.141, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.877, adj=0.078, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.875, adj=0.063, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.870, adj=0.024, (0 split)  
##   
## Node number 113: 286 observations, complexity param=0.0004438686  
## predicted class=0 expected loss=0.3636364 P(node) =0.00289298  
## class counts: 182 104  
## probabilities: 0.636 0.364   
## left son=226 (193 obs) right son=227 (93 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=30.985510, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=15.667410, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=13.506490, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=11.407110, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve= 9.599641, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.878, adj=0.624, (0 split)  
## Inflight.wifi.service < 3.5 to the right, agree=0.797, adj=0.376, (0 split)  
## EcoClass < 0.5 to the right, agree=0.766, adj=0.280, (0 split)  
## Flight.Distance < 1331 to the left, agree=0.759, adj=0.258, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.752, adj=0.237, (0 split)  
##   
## Node number 114: 4080 observations, complexity param=0.007197869  
## predicted class=0 expected loss=0.4980392 P(node) =0.04127048  
## class counts: 2048 2032  
## probabilities: 0.502 0.498   
## left son=228 (1968 obs) right son=229 (2112 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=172.1745, (0 missing)  
## Checkin.service < 4.5 to the left, improve=169.7485, (0 missing)  
## Inflight.service < 3.5 to the left, improve=137.4948, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=131.9887, (0 missing)  
## On.board.service < 2.5 to the left, improve=119.7078, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.809, adj=0.605, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.803, adj=0.591, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.748, adj=0.478, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.740, adj=0.460, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.712, adj=0.403, (0 split)  
##   
## Node number 115: 716 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.04189944 P(node) =0.007242565  
## class counts: 30 686  
## probabilities: 0.042 0.958   
## left son=230 (64 obs) right son=231 (652 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=25.611030, (0 missing)  
## EcoClass < 0.5 to the right, improve=19.402210, (0 missing)  
## BusinessClass < 0.5 to the left, improve=18.833650, (0 missing)  
## Age < 32.5 to the left, improve=14.371890, (0 missing)  
## Inflight.service < 3.5 to the right, improve= 9.110454, (0 missing)  
## Surrogate splits:  
## Age < 30.5 to the left, agree=0.971, adj=0.672, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.969, adj=0.656, (0 split)  
## On.board.service < 3.5 to the right, agree=0.954, adj=0.484, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.954, adj=0.484, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.941, adj=0.344, (0 split)  
##   
## Node number 116: 199 observations, complexity param=0.0007277846  
## predicted class=0 expected loss=0.4472362 P(node) =0.002012948  
## class counts: 110 89  
## probabilities: 0.553 0.447   
## left son=232 (127 obs) right son=233 (72 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=65.52210, (0 missing)  
## Age < 42.5 to the left, improve=36.78248, (0 missing)  
## Arrival.Delay.in.Minutes < 125 to the right, improve=22.32925, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=20.27846, (0 missing)  
## Departure.Delay.in.Minutes < 147.5 to the right, improve=19.40446, (0 missing)  
## Surrogate splits:  
## Age < 38.5 to the left, agree=0.879, adj=0.667, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.769, adj=0.361, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.693, adj=0.153, (0 split)  
## Gate.location < 4.5 to the left, agree=0.678, adj=0.111, (0 split)  
## EcoClass < 0.5 to the right, agree=0.678, adj=0.111, (0 split)  
##   
## Node number 117: 356 observations  
## predicted class=1 expected loss=0.002808989 P(node) =0.003601052  
## class counts: 1 355  
## probabilities: 0.003 0.997   
##   
## Node number 118: 665 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.04962406 P(node) =0.006726684  
## class counts: 33 632  
## probabilities: 0.050 0.950   
## left son=236 (75 obs) right son=237 (590 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=25.764810, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=18.651080, (0 missing)  
## Cleanliness < 4.5 to the right, improve=14.347380, (0 missing)  
## Flight.Distance < 2436.5 to the right, improve= 7.701181, (0 missing)  
## Departure.Delay.in.Minutes < 111 to the right, improve= 6.947373, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the right, agree=0.907, adj=0.173, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.905, adj=0.160, (0 split)  
## Departure.Delay.in.Minutes < 141.5 to the right, agree=0.896, adj=0.080, (0 split)  
## Arrival.Delay.in.Minutes < 132 to the right, agree=0.896, adj=0.080, (0 split)  
## Age < 76 to the right, agree=0.892, adj=0.040, (0 split)  
##   
## Node number 119: 1488 observations  
## predicted class=1 expected loss=0 P(node) =0.01505159  
## class counts: 0 1488  
## probabilities: 0.000 1.000   
##   
## Node number 120: 897 observations, complexity param=0.0003438982  
## predicted class=0 expected loss=0.3076923 P(node) =0.009073437  
## class counts: 621 276  
## probabilities: 0.692 0.308   
## left son=240 (410 obs) right son=241 (487 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=31.43950, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=22.60189, (0 missing)  
## Gate.location < 2.5 to the right, improve=20.74441, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=19.49766, (0 missing)  
## Inflight.service < 4.5 to the left, improve=14.69577, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.631, adj=0.193, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.621, adj=0.171, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.613, adj=0.154, (0 split)  
## On.board.service < 2.5 to the left, agree=0.609, adj=0.144, (0 split)  
## EcoClass < 0.5 to the left, agree=0.590, adj=0.102, (0 split)  
##   
## Node number 121: 755 observations, complexity param=0.001391588  
## predicted class=1 expected loss=0.3854305 P(node) =0.007637063  
## class counts: 291 464  
## probabilities: 0.385 0.615   
## left son=242 (64 obs) right son=243 (691 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=45.07215, (0 missing)  
## Age < 24.5 to the right, improve=36.60188, (0 missing)  
## On.board.service < 2.5 to the left, improve=26.52035, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=26.03266, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=25.84846, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.960, adj=0.531, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.954, adj=0.453, (0 split)  
## Departure.Delay.in.Minutes < 142.5 to the right, agree=0.927, adj=0.141, (0 split)  
## Arrival.Delay.in.Minutes < 137.5 to the right, agree=0.927, adj=0.141, (0 split)  
## Flight.Distance < 2585.5 to the right, agree=0.926, adj=0.125, (0 split)  
##   
## Node number 124: 2155 observations, complexity param=0.0006334125  
## predicted class=1 expected loss=0.3215777 P(node) =0.0217985  
## class counts: 693 1462  
## probabilities: 0.322 0.678   
## left son=248 (1715 obs) right son=249 (440 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=91.39063, (0 missing)  
## On.board.service < 4.5 to the left, improve=91.08057, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=83.88507, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=59.04599, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the right, improve=35.72742, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.862, adj=0.323, (0 split)  
## On.board.service < 4.5 to the left, agree=0.848, adj=0.257, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.835, adj=0.191, (0 split)  
##   
## Node number 125: 1414 observations  
## predicted class=1 expected loss=0 P(node) =0.01430305  
## class counts: 0 1414  
## probabilities: 0.000 1.000   
##   
## Node number 126: 2812 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.1198435 P(node) =0.02844426  
## class counts: 337 2475  
## probabilities: 0.120 0.880   
## left son=252 (1571 obs) right son=253 (1241 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=63.80726, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=47.84540, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=42.18442, (0 missing)  
## Cleanliness < 4.5 to the left, improve=36.95178, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=36.46429, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.899, adj=0.772, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.873, adj=0.712, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.871, adj=0.707, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.866, adj=0.695, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.834, adj=0.623, (0 split)  
##   
## Node number 127: 21581 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.01478152 P(node) =0.2182986  
## class counts: 319 21262  
## probabilities: 0.015 0.985   
## left son=254 (906 obs) right son=255 (20675 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=21.06278, (0 missing)  
## Cleanliness < 2.5 to the left, improve=18.75348, (0 missing)  
## Inflight.service < 3.5 to the left, improve=18.08667, (0 missing)  
## On.board.service < 2.5 to the left, improve=17.96235, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=14.68080, (0 missing)  
## Surrogate splits:  
## Inflight.service < 2.5 to the left, agree=0.963, adj=0.116, (0 split)  
## On.board.service < 1.5 to the left, agree=0.961, adj=0.068, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.961, adj=0.061, (0 split)  
##   
## Node number 132: 6326 observations  
## predicted class=0 expected loss=0.0006323111 P(node) =0.06398948  
## class counts: 6322 4  
## probabilities: 0.999 0.001   
##   
## Node number 133: 1749 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.02344197 P(node) =0.01769169  
## class counts: 1708 41  
## probabilities: 0.977 0.023   
## left son=266 (1537 obs) right son=267 (212 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=1.3061260, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.1185730, (0 missing)  
## Age < 24.5 to the right, improve=0.8114890, (0 missing)  
## On.board.service < 4.5 to the left, improve=0.7834167, (0 missing)  
## Checkin.service < 4.5 to the left, improve=0.7318468, (0 missing)  
##   
## Node number 134: 3169 observations, complexity param=0.0004878556  
## predicted class=0 expected loss=0.06879142 P(node) =0.03205543  
## class counts: 2951 218  
## probabilities: 0.931 0.069   
## left son=268 (3135 obs) right son=269 (34 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=59.60567, (0 missing)  
## Inflight.service < 4.5 to the left, improve=48.83309, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=24.35047, (0 missing)  
## On.board.service < 4.5 to the left, improve=18.89648, (0 missing)  
## Cleanliness < 4.5 to the left, improve=15.65314, (0 missing)  
##   
## Node number 135: 63 observations  
## predicted class=1 expected loss=0.01587302 P(node) =0.0006372648  
## class counts: 1 62  
## probabilities: 0.016 0.984   
##   
## Node number 136: 2260 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.05707965 P(node) =0.02286061  
## class counts: 2131 129  
## probabilities: 0.943 0.057   
## left son=272 (1679 obs) right son=273 (581 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=8.502451, (0 missing)  
## Cleanliness < 4.5 to the left, improve=6.322471, (0 missing)  
## Age < 34.5 to the left, improve=5.274653, (0 missing)  
## On.board.service < 4.5 to the left, improve=5.272843, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=3.610641, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the right, agree=0.878, adj=0.525, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.752, adj=0.034, (0 split)  
## On.board.service < 4.5 to the left, agree=0.746, adj=0.012, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.746, adj=0.012, (0 split)  
## Arrival.Delay.in.Minutes < 221.5 to the left, agree=0.745, adj=0.007, (0 split)  
##   
## Node number 137: 19 observations  
## predicted class=1 expected loss=0.2105263 P(node) =0.000192191  
## class counts: 4 15  
## probabilities: 0.211 0.789   
##   
## Node number 138: 13 observations  
## predicted class=0 expected loss=0 P(node) =0.0001314991  
## class counts: 13 0  
## probabilities: 1.000 0.000   
##   
## Node number 139: 29 observations  
## predicted class=1 expected loss=0.03448276 P(node) =0.0002933441  
## class counts: 1 28  
## probabilities: 0.034 0.966   
##   
## Node number 146: 1384 observations  
## predicted class=0 expected loss=0.01878613 P(node) =0.0139996  
## class counts: 1358 26  
## probabilities: 0.981 0.019   
##   
## Node number 147: 4327 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.1308066 P(node) =0.04376897  
## class counts: 3761 566  
## probabilities: 0.869 0.131   
## left son=294 (3776 obs) right son=295 (551 obs)  
## Primary splits:  
## Inflight.wifi.service < 1.5 to the right, improve=44.06360, (0 missing)  
## Checkin.service < 4.5 to the left, improve=34.50846, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=28.90199, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=23.78005, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=23.01016, (0 missing)  
## Surrogate splits:  
## Online.boarding < 1.5 to the right, agree=0.906, adj=0.265, (0 split)  
## Baggage.handling < 1.5 to the right, agree=0.875, adj=0.018, (0 split)  
##   
## Node number 154: 134 observations  
## predicted class=0 expected loss=0 P(node) =0.001355452  
## class counts: 134 0  
## probabilities: 1.000 0.000   
##   
## Node number 155: 544 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1121324 P(node) =0.005502731  
## class counts: 483 61  
## probabilities: 0.888 0.112   
## left son=310 (50 obs) right son=311 (494 obs)  
## Primary splits:  
## Flight.Distance < 1560 to the right, improve=1.384630, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.362331, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.315866, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.301184, (0 missing)  
## Age < 45.5 to the left, improve=1.114235, (0 missing)  
## Surrogate splits:  
## Cleanliness < 2.5 to the left, agree=0.912, adj=0.04, (0 split)  
##   
## Node number 158: 202 observations, complexity param=0.001007702  
## predicted class=0 expected loss=0.3712871 P(node) =0.002043294  
## class counts: 127 75  
## probabilities: 0.629 0.371   
## left son=316 (160 obs) right son=317 (42 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=41.91943, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=33.74416, (0 missing)  
## Inflight.service < 4.5 to the left, improve=32.54053, (0 missing)  
## Gate.location < 3.5 to the right, improve=18.32009, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=16.58015, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.936, adj=0.690, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.931, adj=0.667, (0 split)  
## On.board.service < 4.5 to the left, agree=0.847, adj=0.262, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.802, adj=0.048, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.797, adj=0.024, (0 split)  
##   
## Node number 159: 1666 observations, complexity param=0.0004078793  
## predicted class=1 expected loss=0.0210084 P(node) =0.01685211  
## class counts: 35 1631  
## probabilities: 0.021 0.979   
## left son=318 (17 obs) right son=319 (1649 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=32.92238, (0 missing)  
## Inflight.service < 3.5 to the left, improve=31.89376, (0 missing)  
## Arrival.Delay.in.Minutes < 131.5 to the right, improve=26.79620, (0 missing)  
## Departure.Delay.in.Minutes < 115.5 to the right, improve=23.66695, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=17.94530, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.99, adj=0.059, (0 split)  
##   
## Node number 160: 379 observations  
## predicted class=0 expected loss=0 P(node) =0.003833704  
## class counts: 379 0  
## probabilities: 1.000 0.000   
##   
## Node number 161: 56 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3571429 P(node) =0.0005664576  
## class counts: 36 20  
## probabilities: 0.643 0.357   
## left son=322 (30 obs) right son=323 (26 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=3.191209, (0 missing)  
## Inflight.service < 3.5 to the left, improve=3.191209, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=2.926407, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=2.880952, (0 missing)  
## Age < 30.5 to the right, improve=2.862112, (0 missing)  
## Surrogate splits:  
## On.board.service < 3.5 to the left, agree=0.821, adj=0.615, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.821, adj=0.615, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.804, adj=0.577, (0 split)  
## Flight.Distance < 1177 to the right, agree=0.696, adj=0.346, (0 split)  
## Departure.Delay.in.Minutes < 3.5 to the left, agree=0.696, adj=0.346, (0 split)  
##   
## Node number 162: 65 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.4307692 P(node) =0.0006574954  
## class counts: 28 37  
## probabilities: 0.431 0.569   
## left son=324 (30 obs) right son=325 (35 obs)  
## Primary splits:  
## Flight.Distance < 811.5 to the right, improve=2.057875, (0 missing)  
## Male < 0.5 to the right, improve=1.846923, (0 missing)  
## Age < 39.5 to the left, improve=1.705870, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.619240, (0 missing)  
## Checkin.service < 3.5 to the right, improve=1.272756, (0 missing)  
## Surrogate splits:  
## Age < 36.5 to the left, agree=0.677, adj=0.300, (0 split)  
## Seat.comfort < 2.5 to the left, agree=0.631, adj=0.200, (0 split)  
## Online.boarding < 2.5 to the left, agree=0.615, adj=0.167, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.615, adj=0.167, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.600, adj=0.133, (0 split)  
##   
## Node number 163: 27 observations  
## predicted class=1 expected loss=0 P(node) =0.0002731135  
## class counts: 0 27  
## probabilities: 0.000 1.000   
##   
## Node number 164: 143 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.1118881 P(node) =0.00144649  
## class counts: 127 16  
## probabilities: 0.888 0.112   
## left son=328 (131 obs) right son=329 (12 obs)  
## Primary splits:  
## Age < 65.5 to the left, improve=3.9462980, (0 missing)  
## Departure.Delay.in.Minutes < 25 to the left, improve=1.6317020, (0 missing)  
## Flight.Distance < 363 to the left, improve=0.7956488, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=0.7956488, (0 missing)  
## Online.boarding < 2.5 to the right, improve=0.7836830, (0 missing)  
##   
## Node number 165: 307 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3517915 P(node) =0.003105402  
## class counts: 199 108  
## probabilities: 0.648 0.352   
## left son=330 (190 obs) right son=331 (117 obs)  
## Primary splits:  
## Ease.of.Online.booking < 3.5 to the right, improve=3.872229, (0 missing)  
## Male < 0.5 to the left, improve=3.579119, (0 missing)  
## On.board.service < 1.5 to the left, improve=2.570172, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=2.570172, (0 missing)  
## Flight.Distance < 200.5 to the left, improve=2.051229, (0 missing)  
## Surrogate splits:  
## Age < 41.5 to the right, agree=0.850, adj=0.607, (0 split)  
## Male < 0.5 to the left, agree=0.827, adj=0.547, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.805, adj=0.487, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.691, adj=0.188, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.645, adj=0.068, (0 split)  
##   
## Node number 166: 138 observations, complexity param=0.0002879148  
## predicted class=0 expected loss=0.3043478 P(node) =0.001395913  
## class counts: 96 42  
## probabilities: 0.696 0.304   
## left son=332 (122 obs) right son=333 (16 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=11.787240, (0 missing)  
## Age < 24.5 to the right, improve=11.757440, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve= 7.892964, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 7.458294, (0 missing)  
## Checkin.service < 3.5 to the left, improve= 6.389761, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2504 to the left, agree=0.891, adj=0.062, (0 split)  
##   
## Node number 167: 336 observations, complexity param=0.0001139663  
## predicted class=1 expected loss=0.3005952 P(node) =0.003398746  
## class counts: 101 235  
## probabilities: 0.301 0.699   
## left son=334 (253 obs) right son=335 (83 obs)  
## Primary splits:  
## Online.boarding < 1.5 to the right, improve=14.044750, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=13.369800, (0 missing)  
## Cleanliness < 4.5 to the left, improve=10.238780, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve= 9.049948, (0 missing)  
## Checkin.service < 4.5 to the left, improve= 8.765873, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 148 to the right, agree=0.768, adj=0.06, (0 split)  
##   
## Node number 170: 54 observations  
## predicted class=0 expected loss=0.1481481 P(node) =0.000546227  
## class counts: 46 8  
## probabilities: 0.852 0.148   
##   
## Node number 171: 126 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3174603 P(node) =0.00127453  
## class counts: 86 40  
## probabilities: 0.683 0.317   
## left son=342 (118 obs) right son=343 (8 obs)  
## Primary splits:  
## Age < 66.5 to the left, improve=1.615886, (0 missing)  
## Flight.Distance < 549 to the left, improve=1.527243, (0 missing)  
## Departure.Delay.in.Minutes < 7 to the right, improve=1.493931, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the left, improve=1.098901, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.001776, (0 missing)  
##   
## Node number 172: 131 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.05343511 P(node) =0.001325106  
## class counts: 124 7  
## probabilities: 0.947 0.053   
## left son=344 (121 obs) right son=345 (10 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the right, improve=6.468437, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=3.864030, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=3.706454, (0 missing)  
## Age < 25.5 to the right, improve=2.654207, (0 missing)  
## Flight.Distance < 702 to the right, improve=2.314408, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.977, adj=0.7, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.954, adj=0.4, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.954, adj=0.4, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.954, adj=0.4, (0 split)  
## Arrival.Delay.in.Minutes < 129 to the left, agree=0.954, adj=0.4, (0 split)  
##   
## Node number 173: 152 observations, complexity param=0.0005158473  
## predicted class=1 expected loss=0.4407895 P(node) =0.001537528  
## class counts: 67 85  
## probabilities: 0.441 0.559   
## left son=346 (85 obs) right son=347 (67 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=16.409190, (0 missing)  
## Seat.comfort < 4.5 to the left, improve= 6.948916, (0 missing)  
## Cleanliness < 4.5 to the left, improve= 5.524139, (0 missing)  
## Checkin.service < 4.5 to the left, improve= 3.997391, (0 missing)  
## Age < 40.5 to the left, improve= 3.520661, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the right, agree=0.645, adj=0.194, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.632, adj=0.164, (0 split)  
## Age < 54.5 to the left, agree=0.579, adj=0.045, (0 split)  
## Flight.Distance < 532 to the left, agree=0.572, adj=0.030, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.572, adj=0.030, (0 split)  
##   
## Node number 174: 181 observations, complexity param=0.000347897  
## predicted class=1 expected loss=0.4198895 P(node) =0.001830872  
## class counts: 76 105  
## probabilities: 0.420 0.580   
## left son=348 (53 obs) right son=349 (128 obs)  
## Primary splits:  
## Age < 40.5 to the left, improve=18.75138, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=14.34137, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=12.53844, (0 missing)  
## Online.boarding < 2.5 to the right, improve=11.45680, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=10.30781, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.884, adj=0.604, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.867, adj=0.547, (0 split)  
## Male < 0.5 to the right, agree=0.856, adj=0.509, (0 split)  
## On.board.service < 3.5 to the left, agree=0.834, adj=0.434, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.834, adj=0.434, (0 split)  
##   
## Node number 175: 942 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.1135881 P(node) =0.009528626  
## class counts: 107 835  
## probabilities: 0.114 0.886   
## left son=350 (605 obs) right son=351 (337 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=13.540080, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=12.780610, (0 missing)  
## On.board.service < 4.5 to the left, improve=10.976570, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=10.526530, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve= 9.851162, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=0.919, adj=0.774, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.912, adj=0.754, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.850, adj=0.582, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.848, adj=0.576, (0 split)  
## Flight.Distance < 3982.5 to the left, agree=0.646, adj=0.012, (0 split)  
##   
## Node number 176: 32 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.25 P(node) =0.0003236901  
## class counts: 24 8  
## probabilities: 0.750 0.250   
## left son=352 (23 obs) right son=353 (9 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=6.975845, (0 missing)  
## Gate.location < 4.5 to the left, improve=6.975845, (0 missing)  
## Age < 40.5 to the right, improve=2.338164, (0 missing)  
## Online.boarding < 2.5 to the right, improve=1.402597, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.120000, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.844, adj=0.444, (0 split)  
## Age < 33 to the right, agree=0.812, adj=0.333, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.812, adj=0.333, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.812, adj=0.333, (0 split)  
##   
## Node number 177: 10 observations  
## predicted class=1 expected loss=0 P(node) =0.0001011531  
## class counts: 0 10  
## probabilities: 0.000 1.000   
##   
## Node number 202: 727 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1403026 P(node) =0.007353834  
## class counts: 625 102  
## probabilities: 0.860 0.140   
## left son=404 (231 obs) right son=405 (496 obs)  
## Primary splits:  
## Age < 47.5 to the right, improve=1.1236760, (0 missing)  
## Flight.Distance < 296.5 to the left, improve=0.9128102, (0 missing)  
## Gate.location < 1.5 to the left, improve=0.5430322, (0 missing)  
## Arrival.Delay.in.Minutes < 131 to the left, improve=0.5416337, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.5142803, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 2.5 to the left, agree=0.686, adj=0.013, (0 split)  
## Departure.Delay.in.Minutes < 226 to the right, agree=0.684, adj=0.004, (0 split)  
## Arrival.Delay.in.Minutes < 229 to the right, agree=0.684, adj=0.004, (0 split)  
##   
## Node number 203: 76 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2368421 P(node) =0.0007687639  
## class counts: 58 18  
## probabilities: 0.763 0.237   
## left son=406 (68 obs) right son=407 (8 obs)  
## Primary splits:  
## Flight.Distance < 220.5 to the left, improve=2.6942720, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.0030960, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.9216009, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the right, improve=0.8771930, (0 missing)  
## Arrival.Delay.in.Minutes < 103 to the right, improve=0.8649886, (0 missing)  
##   
## Node number 204: 1527 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.2855272 P(node) =0.01544609  
## class counts: 1091 436  
## probabilities: 0.714 0.286   
## left son=408 (1472 obs) right son=409 (55 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 3.5 to the left, improve=3.998859, (0 missing)  
## Flight.Distance < 743 to the left, improve=3.056503, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=2.392492, (0 missing)  
## Gate.location < 4.5 to the right, improve=1.814610, (0 missing)  
## Checkin.service < 4.5 to the right, improve=1.785742, (0 missing)  
##   
## Node number 205: 1253 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.3272147 P(node) =0.01267449  
## class counts: 843 410  
## probabilities: 0.673 0.327   
## left son=410 (1159 obs) right son=411 (94 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=2.906986, (0 missing)  
## Age < 67.5 to the right, improve=2.453995, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.974742, (0 missing)  
## Flight.Distance < 2584.5 to the left, improve=1.500210, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.441278, (0 missing)  
##   
## Node number 206: 152 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3618421 P(node) =0.001537528  
## class counts: 97 55  
## probabilities: 0.638 0.362   
## left son=412 (7 obs) right son=413 (145 obs)  
## Primary splits:  
## Flight.Distance < 2204.5 to the right, improve=1.921506, (0 missing)  
## Age < 46.5 to the left, improve=1.279084, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.278430, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.267544, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.042842, (0 missing)  
##   
## Node number 207: 47 observations, complexity param=6.718011e-05  
## predicted class=1 expected loss=0.4255319 P(node) =0.0004754198  
## class counts: 20 27  
## probabilities: 0.426 0.574   
## left son=414 (15 obs) right son=415 (32 obs)  
## Primary splits:  
## Age < 25.5 to the left, improve=4.174557, (0 missing)  
## Cleanliness < 4.5 to the left, improve=2.159676, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.705996, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.292237, (0 missing)  
## Online.boarding < 4.5 to the left, improve=1.292237, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the right, agree=0.723, adj=0.133, (0 split)  
##   
## Node number 224: 1335 observations, complexity param=0.0001759479  
## predicted class=0 expected loss=0.06441948 P(node) =0.01350394  
## class counts: 1249 86  
## probabilities: 0.936 0.064   
## left son=448 (1317 obs) right son=449 (18 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=13.235720, (0 missing)  
## Cleanliness < 4.5 to the left, improve=12.318950, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=11.457190, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 9.574983, (0 missing)  
## On.board.service < 3.5 to the left, improve= 7.894527, (0 missing)  
##   
## Node number 225: 205 observations, complexity param=0.0002039396  
## predicted class=0 expected loss=0.3170732 P(node) =0.002073639  
## class counts: 140 65  
## probabilities: 0.683 0.317   
## left son=450 (168 obs) right son=451 (37 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=15.376370, (0 missing)  
## EcoClass < 0.5 to the right, improve=10.304880, (0 missing)  
## BusinessClass < 0.5 to the left, improve= 8.590012, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 6.478052, (0 missing)  
## Cleanliness < 2.5 to the left, improve= 6.212354, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 3.5 to the right, agree=0.907, adj=0.486, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.902, adj=0.459, (0 split)  
## Flight.Distance < 1575 to the left, agree=0.863, adj=0.243, (0 split)  
## EcoClass < 0.5 to the right, agree=0.854, adj=0.189, (0 split)  
## Age < 30.5 to the left, agree=0.849, adj=0.162, (0 split)  
##   
## Node number 226: 193 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.2020725 P(node) =0.001952256  
## class counts: 154 39  
## probabilities: 0.798 0.202   
## left son=452 (121 obs) right son=453 (72 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=4.839123, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=4.532833, (0 missing)  
## On.board.service < 4.5 to the left, improve=4.431324, (0 missing)  
## Gate.location < 4.5 to the left, improve=4.400180, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=3.811307, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.642, adj=0.042, (0 split)  
## Flight.Distance < 98 to the right, agree=0.637, adj=0.028, (0 split)  
## Arrival.Delay.in.Minutes < 42.5 to the left, agree=0.637, adj=0.028, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.632, adj=0.014, (0 split)  
## Departure.Delay.in.Minutes < 63 to the left, agree=0.632, adj=0.014, (0 split)  
##   
## Node number 227: 93 observations, complexity param=0.0001039692  
## predicted class=1 expected loss=0.3010753 P(node) =0.0009407243  
## class counts: 28 65  
## probabilities: 0.301 0.699   
## left son=454 (39 obs) right son=455 (54 obs)  
## Primary splits:  
## Flight.Distance < 1104 to the right, improve=3.458873, (0 missing)  
## Inflight.service < 2.5 to the right, improve=2.545675, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=2.542577, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=2.409224, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=2.199850, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the right, agree=0.763, adj=0.436, (0 split)  
## EcoClass < 0.5 to the left, agree=0.677, adj=0.231, (0 split)  
## Departure.Delay.in.Minutes < 12.5 to the right, agree=0.634, adj=0.128, (0 split)  
## Age < 32 to the left, agree=0.624, adj=0.103, (0 split)  
## Inflight.wifi.service < 2.5 to the left, agree=0.613, adj=0.077, (0 split)  
##   
## Node number 228: 1968 observations, complexity param=0.002711197  
## predicted class=0 expected loss=0.347561 P(node) =0.01990694  
## class counts: 1284 684  
## probabilities: 0.652 0.348   
## left son=456 (640 obs) right son=457 (1328 obs)  
## Primary splits:  
## Cleanliness < 2.5 to the left, improve=176.8885, (0 missing)  
## Checkin.service < 4.5 to the left, improve=161.3635, (0 missing)  
## Gate.location < 3.5 to the right, improve=133.4064, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=113.4166, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=108.1214, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the left, agree=0.704, adj=0.091, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.683, adj=0.025, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.678, adj=0.011, (0 split)  
##   
## Node number 229: 2112 observations, complexity param=0.002375297  
## predicted class=1 expected loss=0.3617424 P(node) =0.02136354  
## class counts: 764 1348  
## probabilities: 0.362 0.638   
## left son=458 (779 obs) right son=459 (1333 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=100.52550, (0 missing)  
## EcoClass < 0.5 to the right, improve= 84.06757, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve= 80.33350, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve= 52.99249, (0 missing)  
## Gate.location < 3.5 to the left, improve= 33.83993, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.968, adj=0.913, (0 split)  
## Age < 24.5 to the left, agree=0.682, adj=0.137, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.670, adj=0.107, (0 split)  
## On.board.service < 1.5 to the left, agree=0.665, adj=0.091, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.651, adj=0.054, (0 split)  
##   
## Node number 230: 64 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.46875 P(node) =0.0006473801  
## class counts: 30 34  
## probabilities: 0.469 0.531   
## left son=460 (31 obs) right son=461 (33 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=6.979594, (0 missing)  
## EcoClass < 0.5 to the right, improve=6.910035, (0 missing)  
## BusinessClass < 0.5 to the left, improve=6.910035, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=5.151158, (0 missing)  
## Departure.Delay.in.Minutes < 3 to the right, improve=4.377024, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 3 to the right, agree=0.891, adj=0.774, (0 split)  
## Inflight.wifi.service < 3.5 to the left, agree=0.625, adj=0.226, (0 split)  
## On.board.service < 3.5 to the left, agree=0.625, adj=0.226, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.625, adj=0.226, (0 split)  
## Cleanliness < 4 to the right, agree=0.609, adj=0.194, (0 split)  
##   
## Node number 231: 652 observations  
## predicted class=1 expected loss=0 P(node) =0.006595185  
## class counts: 0 652  
## probabilities: 0.000 1.000   
##   
## Node number 232: 127 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.1417323 P(node) =0.001284645  
## class counts: 109 18  
## probabilities: 0.858 0.142   
## left son=464 (67 obs) right son=465 (60 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=5.697638, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=5.697638, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=4.866869, (0 missing)  
## Cleanliness < 4.5 to the right, improve=4.866869, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=3.333424, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.874, adj=0.733, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.874, adj=0.733, (0 split)  
## Checkin.service < 4.5 to the right, agree=0.787, adj=0.550, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.764, adj=0.500, (0 split)  
##   
## Node number 233: 72 observations  
## predicted class=1 expected loss=0.01388889 P(node) =0.0007283027  
## class counts: 1 71  
## probabilities: 0.014 0.986   
##   
## Node number 236: 75 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.44 P(node) =0.0007586486  
## class counts: 33 42  
## probabilities: 0.440 0.560   
## left son=472 (49 obs) right son=473 (26 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=12.832840, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve= 7.697288, (0 missing)  
## Seat.comfort < 3.5 to the right, improve= 7.697288, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve= 7.636692, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve= 7.339653, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.827, adj=0.500, (0 split)  
## Flight.Distance < 237.5 to the right, agree=0.667, adj=0.038, (0 split)  
## On.board.service < 4.5 to the left, agree=0.667, adj=0.038, (0 split)  
##   
## Node number 237: 590 observations  
## predicted class=1 expected loss=0 P(node) =0.005968036  
## class counts: 0 590  
## probabilities: 0.000 1.000   
##   
## Node number 240: 410 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.1634146 P(node) =0.004147279  
## class counts: 343 67  
## probabilities: 0.837 0.163   
## left son=480 (366 obs) right son=481 (44 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=8.355295, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=3.827367, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=3.512377, (0 missing)  
## Gate.location < 1.5 to the right, improve=2.674595, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.879923, (0 missing)  
##   
## Node number 241: 487 observations, complexity param=0.0003438982  
## predicted class=0 expected loss=0.4291581 P(node) =0.004926158  
## class counts: 278 209  
## probabilities: 0.571 0.429   
## left son=482 (50 obs) right son=483 (437 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=18.656490, (0 missing)  
## Gate.location < 2.5 to the right, improve=17.470370, (0 missing)  
## On.board.service < 2.5 to the left, improve=12.410090, (0 missing)  
## Baggage.handling < 3.5 to the left, improve= 8.555357, (0 missing)  
## Checkin.service < 2.5 to the left, improve= 8.306805, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.930, adj=0.32, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.918, adj=0.20, (0 split)  
## Flight.Distance < 2197 to the right, agree=0.908, adj=0.10, (0 split)  
## Departure.Delay.in.Minutes < 115.5 to the right, agree=0.903, adj=0.06, (0 split)  
## Arrival.Delay.in.Minutes < 111.5 to the right, agree=0.901, adj=0.04, (0 split)  
##   
## Node number 242: 64 observations  
## predicted class=0 expected loss=0.046875 P(node) =0.0006473801  
## class counts: 61 3  
## probabilities: 0.953 0.047   
##   
## Node number 243: 691 observations, complexity param=0.0004558651  
## predicted class=1 expected loss=0.3328509 P(node) =0.006989682  
## class counts: 230 461  
## probabilities: 0.333 0.667   
## left son=486 (516 obs) right son=487 (175 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=28.626660, (0 missing)  
## On.board.service < 2.5 to the left, improve=23.062860, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=20.473680, (0 missing)  
## Checkin.service < 2.5 to the left, improve=14.621040, (0 missing)  
## Flight.Distance < 1510 to the right, improve= 8.364335, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.851, adj=0.411, (0 split)  
##   
## Node number 248: 1715 observations, complexity param=0.0006334125  
## predicted class=1 expected loss=0.3953353 P(node) =0.01734776  
## class counts: 678 1037  
## probabilities: 0.395 0.605   
## left son=496 (1264 obs) right son=497 (451 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=82.78249, (0 missing)  
## On.board.service < 4.5 to the left, improve=56.30165, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=55.53926, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=54.21563, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=36.47329, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=0.741, adj=0.016, (0 split)  
## Flight.Distance < 70 to the right, agree=0.738, adj=0.004, (0 split)  
##   
## Node number 249: 440 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.03409091 P(node) =0.004450738  
## class counts: 15 425  
## probabilities: 0.034 0.966   
## left son=498 (8 obs) right son=499 (432 obs)  
## Primary splits:  
## Age < 69.5 to the right, improve=1.893939, (0 missing)  
## Flight.Distance < 3775.5 to the right, improve=1.284965, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.183155, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.065844, (0 missing)  
## Inflight.wifi.service < 4.5 to the right, improve=1.061508, (0 missing)  
##   
## Node number 252: 1571 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.214513 P(node) =0.01589116  
## class counts: 337 1234  
## probabilities: 0.215 0.785   
## left son=504 (1154 obs) right son=505 (417 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=52.24489, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=28.10157, (0 missing)  
## Inflight.service < 4.5 to the left, improve=27.83658, (0 missing)  
## On.board.service < 4.5 to the left, improve=27.45301, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=10.12542, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2733 to the left, agree=0.736, adj=0.005, (0 split)  
##   
## Node number 253: 1241 observations  
## predicted class=1 expected loss=0 P(node) =0.01255311  
## class counts: 0 1241  
## probabilities: 0.000 1.000   
##   
## Node number 254: 906 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.1203091 P(node) =0.009164475  
## class counts: 109 797  
## probabilities: 0.120 0.880   
## left son=508 (528 obs) right son=509 (378 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=17.959740, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=12.236850, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=10.028670, (0 missing)  
## Seat.comfort < 4.5 to the left, improve= 9.911325, (0 missing)  
## Checkin.service < 4.5 to the left, improve= 9.780379, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the left, agree=0.898, adj=0.757, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.886, adj=0.728, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.885, adj=0.725, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.877, adj=0.706, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.629, adj=0.111, (0 split)  
##   
## Node number 255: 20675 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.01015719 P(node) =0.2091341  
## class counts: 210 20465  
## probabilities: 0.010 0.990   
## left son=510 (388 obs) right son=511 (20287 obs)  
## Primary splits:  
## Cleanliness < 2.5 to the left, improve=15.925120, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=11.481660, (0 missing)  
## On.board.service < 2.5 to the left, improve= 8.822578, (0 missing)  
## Food.and.drink < 1.5 to the left, improve= 7.931619, (0 missing)  
## Inflight.service < 3.5 to the left, improve= 7.575148, (0 missing)  
##   
## Node number 266: 1537 observations  
## predicted class=0 expected loss=0.01626545 P(node) =0.01554724  
## class counts: 1512 25  
## probabilities: 0.984 0.016   
##   
## Node number 267: 212 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.0754717 P(node) =0.002144447  
## class counts: 196 16  
## probabilities: 0.925 0.075   
## left son=534 (51 obs) right son=535 (161 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.7650299, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=0.7260100, (0 missing)  
## Online.boarding < 1.5 to the left, improve=0.6692430, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=0.6507739, (0 missing)  
## Age < 23.5 to the right, improve=0.6268282, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 1.5 to the left, agree=0.991, adj=0.961, (0 split)  
## Inflight.wifi.service < 1.5 to the left, agree=0.962, adj=0.843, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.948, adj=0.784, (0 split)  
## Flight.Distance < 2486.5 to the right, agree=0.764, adj=0.020, (0 split)  
##   
## Node number 268: 3135 observations, complexity param=0.0004878556  
## predicted class=0 expected loss=0.05869219 P(node) =0.03171151  
## class counts: 2951 184  
## probabilities: 0.941 0.059   
## left son=536 (3112 obs) right son=537 (23 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=37.354560, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=24.955440, (0 missing)  
## Cleanliness < 4.5 to the left, improve=15.995010, (0 missing)  
## On.board.service < 4.5 to the left, improve=15.464470, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 7.448726, (0 missing)  
##   
## Node number 269: 34 observations  
## predicted class=1 expected loss=0 P(node) =0.0003439207  
## class counts: 0 34  
## probabilities: 0.000 1.000   
##   
## Node number 272: 1679 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.03156641 P(node) =0.01698361  
## class counts: 1626 53  
## probabilities: 0.968 0.032   
## left son=544 (1667 obs) right son=545 (12 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the right, improve=3.584875, (0 missing)  
## Age < 34.5 to the left, improve=1.530697, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.322768, (0 missing)  
## Flight.Distance < 402.5 to the right, improve=1.214587, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=0.784843, (0 missing)  
##   
## Node number 273: 581 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.130809 P(node) =0.005876998  
## class counts: 505 76  
## probabilities: 0.869 0.131   
## left son=546 (571 obs) right son=547 (10 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=6.593047, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=5.695341, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=5.506051, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=4.462392, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=4.040511, (0 missing)  
##   
## Node number 294: 3776 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.1035487 P(node) =0.03819543  
## class counts: 3385 391  
## probabilities: 0.896 0.104   
## left son=588 (3480 obs) right son=589 (296 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=24.11301, (0 missing)  
## Gate.location < 1.5 to the left, improve=23.36003, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=22.13974, (0 missing)  
## On.board.service < 4.5 to the left, improve=21.87686, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=21.18118, (0 missing)  
##   
## Node number 295: 551 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.3176044 P(node) =0.005573538  
## class counts: 376 175  
## probabilities: 0.682 0.318   
## left son=590 (282 obs) right son=591 (269 obs)  
## Primary splits:  
## Gate.location < 1.5 to the right, improve=116.53360, (0 missing)  
## Online.boarding < 1.5 to the left, improve= 75.95237, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve= 75.00869, (0 missing)  
## Flight.Distance < 1439 to the left, improve= 43.75143, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the right, improve= 34.64277, (0 missing)  
## Surrogate splits:  
## Online.boarding < 1.5 to the left, agree=0.717, adj=0.420, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.699, adj=0.383, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.677, adj=0.338, (0 split)  
## Flight.Distance < 1308 to the left, agree=0.659, adj=0.301, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.574, adj=0.126, (0 split)  
##   
## Node number 310: 50 observations  
## predicted class=0 expected loss=0 P(node) =0.0005057657  
## class counts: 50 0  
## probabilities: 1.000 0.000   
##   
## Node number 311: 494 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1234818 P(node) =0.004996965  
## class counts: 433 61  
## probabilities: 0.877 0.123   
## left son=622 (155 obs) right son=623 (339 obs)  
## Primary splits:  
## Leg.room.service < 2.5 to the left, improve=1.5706780, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.5439640, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.5065280, (0 missing)  
## Age < 45.5 to the left, improve=1.2794180, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.8608439, (0 missing)  
## Surrogate splits:  
## Checkin.service < 1.5 to the left, agree=0.700, adj=0.045, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.696, adj=0.032, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.688, adj=0.006, (0 split)  
##   
## Node number 316: 160 observations, complexity param=0.000239929  
## predicted class=0 expected loss=0.20625 P(node) =0.00161845  
## class counts: 127 33  
## probabilities: 0.794 0.206   
## left son=632 (150 obs) right son=633 (10 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=13.440830, (0 missing)  
## Cleanliness < 4.5 to the left, improve= 9.224101, (0 missing)  
## Gate.location < 3.5 to the right, improve= 6.187500, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve= 5.552796, (0 missing)  
## Baggage.handling < 2.5 to the left, improve= 5.045170, (0 missing)  
##   
## Node number 317: 42 observations  
## predicted class=1 expected loss=0 P(node) =0.0004248432  
## class counts: 0 42  
## probabilities: 0.000 1.000   
##   
## Node number 318: 17 observations  
## predicted class=0 expected loss=0 P(node) =0.0001719603  
## class counts: 17 0  
## probabilities: 1.000 0.000   
##   
## Node number 319: 1649 observations, complexity param=0.0001439574  
## predicted class=1 expected loss=0.01091571 P(node) =0.01668015  
## class counts: 18 1631  
## probabilities: 0.011 0.989   
## left son=638 (16 obs) right son=639 (1633 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the left, improve=14.792050, (0 missing)  
## Arrival.Delay.in.Minutes < 131.5 to the right, improve= 8.122205, (0 missing)  
## Departure.Delay.in.Minutes < 115.5 to the right, improve= 6.851783, (0 missing)  
## Age < 25 to the left, improve= 6.063007, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 5.400626, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 400 to the right, agree=0.992, adj=0.125, (0 split)  
## Arrival.Delay.in.Minutes < 397 to the right, agree=0.992, adj=0.125, (0 split)  
## Age < 27 to the left, agree=0.991, adj=0.062, (0 split)  
##   
## Node number 322: 30 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0003034594  
## class counts: 24 6  
## probabilities: 0.800 0.200   
##   
## Node number 323: 26 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4615385 P(node) =0.0002629982  
## class counts: 12 14  
## probabilities: 0.462 0.538   
## left son=646 (15 obs) right son=647 (11 obs)  
## Primary splits:  
## Flight.Distance < 700.5 to the left, improve=5.238228, (0 missing)  
## Age < 33 to the right, improve=2.617521, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=2.617521, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=2.617521, (0 missing)  
## Departure.Delay.in.Minutes < 21 to the right, improve=1.923077, (0 missing)  
## Surrogate splits:  
## Age < 33 to the right, agree=0.731, adj=0.364, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.692, adj=0.273, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.692, adj=0.273, (0 split)  
## Arrival.Delay.in.Minutes < 67.5 to the left, agree=0.692, adj=0.273, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.654, adj=0.182, (0 split)  
##   
## Node number 324: 30 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.4333333 P(node) =0.0003034594  
## class counts: 17 13  
## probabilities: 0.567 0.433   
## left son=648 (10 obs) right son=649 (20 obs)  
## Primary splits:  
## Age < 31.5 to the right, improve=3.3333330, (0 missing)  
## Flight.Distance < 1026.5 to the left, improve=2.6698410, (0 missing)  
## Male < 0.5 to the right, improve=1.0011900, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=0.8960128, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.6000000, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2464.5 to the right, agree=0.767, adj=0.3, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.767, adj=0.3, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.767, adj=0.3, (0 split)  
## Departure.Delay.in.Minutes < 90.5 to the right, agree=0.767, adj=0.3, (0 split)  
## Arrival.Delay.in.Minutes < 111 to the right, agree=0.767, adj=0.3, (0 split)  
##   
## Node number 325: 35 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3142857 P(node) =0.000354036  
## class counts: 11 24  
## probabilities: 0.314 0.686   
## left son=650 (15 obs) right son=651 (20 obs)  
## Primary splits:  
## Flight.Distance < 429 to the left, improve=2.5190480, (0 missing)  
## Male < 0.5 to the right, improve=1.6008660, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.4105010, (0 missing)  
## Checkin.service < 3.5 to the right, improve=1.2190480, (0 missing)  
## Cleanliness < 2.5 to the left, improve=0.8969031, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.657, adj=0.200, (0 split)  
## Departure.Delay.in.Minutes < 3.5 to the right, agree=0.657, adj=0.200, (0 split)  
## Arrival.Delay.in.Minutes < 2 to the right, agree=0.657, adj=0.200, (0 split)  
## Age < 57.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.629, adj=0.133, (0 split)  
##   
## Node number 328: 131 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.07633588 P(node) =0.001325106  
## class counts: 121 10  
## probabilities: 0.924 0.076   
## left son=656 (87 obs) right son=657 (44 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=0.9074517, (0 missing)  
## Arrival.Delay.in.Minutes < 113.5 to the left, improve=0.8725498, (0 missing)  
## Age < 49.5 to the left, improve=0.6555047, (0 missing)  
## Departure.Delay.in.Minutes < 87.5 to the left, improve=0.6349986, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.5312535, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.733, adj=0.205, (0 split)  
## Age < 26.5 to the right, agree=0.702, adj=0.114, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.679, adj=0.045, (0 split)  
## Departure.Delay.in.Minutes < 234.5 to the left, agree=0.679, adj=0.045, (0 split)  
## Arrival.Delay.in.Minutes < 245.5 to the left, agree=0.679, adj=0.045, (0 split)  
##   
## Node number 329: 12 observations  
## predicted class=0 expected loss=0.5 P(node) =0.0001213838  
## class counts: 6 6  
## probabilities: 0.500 0.500   
##   
## Node number 330: 190 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.2894737 P(node) =0.00192191  
## class counts: 135 55  
## probabilities: 0.711 0.289   
## left son=660 (147 obs) right son=661 (43 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 1.5 to the left, improve=2.581245, (0 missing)  
## Online.boarding < 2.5 to the right, improve=2.519979, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=2.002476, (0 missing)  
## On.board.service < 1.5 to the left, improve=2.002476, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=1.411863, (0 missing)  
##   
## Node number 331: 117 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.4529915 P(node) =0.001183492  
## class counts: 64 53  
## probabilities: 0.547 0.453   
## left son=662 (92 obs) right son=663 (25 obs)  
## Primary splits:  
## Flight.Distance < 1254.5 to the left, improve=3.276819, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.810000, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=1.743826, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.203858, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.170072, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the right, agree=0.803, adj=0.08, (0 split)  
## Departure.Delay.in.Minutes < 7.5 to the left, agree=0.803, adj=0.08, (0 split)  
##   
## Node number 332: 122 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.2295082 P(node) =0.001234068  
## class counts: 94 28  
## probabilities: 0.770 0.230   
## left son=664 (72 obs) right son=665 (50 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=4.925319, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=4.638176, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=4.333144, (0 missing)  
## Inflight.service < 4.5 to the left, improve=4.083862, (0 missing)  
## Checkin.service < 3.5 to the left, improve=3.945891, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the right, agree=0.656, adj=0.16, (0 split)  
## Inflight.entertainment < 3.5 to the right, agree=0.656, adj=0.16, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.648, adj=0.14, (0 split)  
## Departure.Delay.in.Minutes < 67 to the left, agree=0.648, adj=0.14, (0 split)  
## Arrival.Delay.in.Minutes < 77.5 to the left, agree=0.648, adj=0.14, (0 split)  
##   
## Node number 333: 16 observations  
## predicted class=1 expected loss=0.125 P(node) =0.000161845  
## class counts: 2 14  
## probabilities: 0.125 0.875   
##   
## Node number 334: 253 observations, complexity param=0.0001139663  
## predicted class=1 expected loss=0.3833992 P(node) =0.002559175  
## class counts: 97 156  
## probabilities: 0.383 0.617   
## left son=668 (208 obs) right son=669 (45 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=14.280380, (0 missing)  
## Checkin.service < 4.5 to the left, improve=10.616200, (0 missing)  
## Arrival.Delay.in.Minutes < 8.5 to the right, improve= 9.050577, (0 missing)  
## Seat.comfort < 3.5 to the left, improve= 7.359938, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve= 6.652233, (0 missing)  
##   
## Node number 335: 83 observations  
## predicted class=1 expected loss=0.04819277 P(node) =0.0008395711  
## class counts: 4 79  
## probabilities: 0.048 0.952   
##   
## Node number 342: 118 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2966102 P(node) =0.001193607  
## class counts: 83 35  
## probabilities: 0.703 0.297   
## left son=684 (7 obs) right son=685 (111 obs)  
## Primary splits:  
## Flight.Distance < 268 to the left, improve=1.309360, (0 missing)  
## Departure.Delay.in.Minutes < 7 to the right, improve=1.309360, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the left, improve=1.306605, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.133207, (0 missing)  
## Male < 0.5 to the left, improve=1.055963, (0 missing)  
##   
## Node number 343: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 344: 121 observations  
## predicted class=0 expected loss=0.008264463 P(node) =0.001223953  
## class counts: 120 1  
## probabilities: 0.992 0.008   
##   
## Node number 345: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 346: 85 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.3529412 P(node) =0.0008598017  
## class counts: 55 30  
## probabilities: 0.647 0.353   
## left son=692 (77 obs) right son=693 (8 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the right, improve=2.784568, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.992028, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.383529, (0 missing)  
## Flight.Distance < 348.5 to the right, improve=1.376595, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.307296, (0 missing)  
##   
## Node number 347: 67 observations  
## predicted class=1 expected loss=0.1791045 P(node) =0.0006777261  
## class counts: 12 55  
## probabilities: 0.179 0.821   
##   
## Node number 348: 53 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2264151 P(node) =0.0005361117  
## class counts: 41 12  
## probabilities: 0.774 0.226   
## left son=696 (44 obs) right son=697 (9 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=2.348866, (0 missing)  
## Arrival.Delay.in.Minutes < 153.5 to the left, improve=1.920075, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.439054, (0 missing)  
## Departure.Delay.in.Minutes < 156 to the left, improve=1.410482, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.030684, (0 missing)  
## Surrogate splits:  
## Age < 39.5 to the left, agree=0.887, adj=0.333, (0 split)  
## Flight.Distance < 136 to the right, agree=0.868, adj=0.222, (0 split)  
##   
## Node number 349: 128 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.2734375 P(node) =0.00129476  
## class counts: 35 93  
## probabilities: 0.273 0.727   
## left son=698 (47 obs) right son=699 (81 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=6.925569, (0 missing)  
## Flight.Distance < 1722 to the right, improve=5.045916, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=5.045916, (0 missing)  
## Online.boarding < 2.5 to the right, improve=3.752232, (0 missing)  
## Departure.Delay.in.Minutes < 43.5 to the right, improve=3.623977, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 7.5 to the right, agree=0.844, adj=0.574, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.656, adj=0.064, (0 split)  
## On.board.service < 3.5 to the left, agree=0.656, adj=0.064, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.656, adj=0.064, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.656, adj=0.064, (0 split)  
##   
## Node number 350: 605 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.1768595 P(node) =0.006119765  
## class counts: 107 498  
## probabilities: 0.177 0.823   
## left son=700 (328 obs) right son=701 (277 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=8.995951, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=6.415915, (0 missing)  
## Checkin.service < 4.5 to the left, improve=5.893888, (0 missing)  
## Cleanliness < 4.5 to the left, improve=5.809240, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=4.920428, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the right, agree=0.676, adj=0.292, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.638, adj=0.209, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.621, adj=0.173, (0 split)  
## Flight.Distance < 3006 to the left, agree=0.583, adj=0.090, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.579, adj=0.079, (0 split)  
##   
## Node number 351: 337 observations  
## predicted class=1 expected loss=0 P(node) =0.003408861  
## class counts: 0 337  
## probabilities: 0.000 1.000   
##   
## Node number 352: 23 observations  
## predicted class=0 expected loss=0.04347826 P(node) =0.0002326522  
## class counts: 22 1  
## probabilities: 0.957 0.043   
##   
## Node number 353: 9 observations  
## predicted class=1 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 2 7  
## probabilities: 0.222 0.778   
##   
## Node number 404: 231 observations  
## predicted class=0 expected loss=0.0995671 P(node) =0.002336638  
## class counts: 208 23  
## probabilities: 0.900 0.100   
##   
## Node number 405: 496 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1592742 P(node) =0.005017196  
## class counts: 417 79  
## probabilities: 0.841 0.159   
## left son=810 (152 obs) right son=811 (344 obs)  
## Primary splits:  
## Flight.Distance < 477.5 to the left, improve=1.2786800, (0 missing)  
## Age < 36.5 to the left, improve=1.2728090, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.0661840, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.8841124, (0 missing)  
## Departure.Delay.in.Minutes < 124.5 to the left, improve=0.5926368, (0 missing)  
##   
## Node number 406: 68 observations  
## predicted class=0 expected loss=0.1911765 P(node) =0.0006878414  
## class counts: 55 13  
## probabilities: 0.809 0.191   
##   
## Node number 407: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 408: 1472 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.2785326 P(node) =0.01488974  
## class counts: 1062 410  
## probabilities: 0.721 0.279   
## left son=816 (879 obs) right son=817 (593 obs)  
## Primary splits:  
## Flight.Distance < 743 to the left, improve=3.207364, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=2.496611, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.703101, (0 missing)  
## Checkin.service < 4.5 to the right, improve=1.660430, (0 missing)  
## Cleanliness < 1.5 to the right, improve=1.528994, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.600, adj=0.007, (0 split)  
## Age < 69.5 to the left, agree=0.598, adj=0.002, (0 split)  
##   
## Node number 409: 55 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.4727273 P(node) =0.0005563423  
## class counts: 29 26  
## probabilities: 0.527 0.473   
## left son=818 (38 obs) right son=819 (17 obs)  
## Primary splits:  
## Age < 47.5 to the left, improve=4.195272, (0 missing)  
## Gate.location < 2.5 to the left, improve=2.238695, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.745563, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the right, improve=1.579986, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.158566, (0 missing)  
## Surrogate splits:  
## Online.boarding < 4.5 to the left, agree=0.782, adj=0.294, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.745, adj=0.176, (0 split)  
## On.board.service < 4.5 to the left, agree=0.745, adj=0.176, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.727, adj=0.118, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.709, adj=0.059, (0 split)  
##   
## Node number 410: 1159 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3175151 P(node) =0.01172365  
## class counts: 791 368  
## probabilities: 0.682 0.318   
## left son=820 (56 obs) right son=821 (1103 obs)  
## Primary splits:  
## Age < 67.5 to the right, improve=2.271975, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.747649, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.692888, (0 missing)  
## Flight.Distance < 2584.5 to the left, improve=1.609844, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.538228, (0 missing)  
##   
## Node number 411: 94 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.4468085 P(node) =0.0009508396  
## class counts: 52 42  
## probabilities: 0.553 0.447   
## left son=822 (13 obs) right son=823 (81 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the right, improve=2.589643, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=2.579362, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=2.159142, (0 missing)  
## Age < 23.5 to the left, improve=2.105562, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.856932, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the right, agree=0.936, adj=0.538, (0 split)  
## Age < 9.5 to the left, agree=0.883, adj=0.154, (0 split)  
##   
## Node number 412: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 413: 145 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3793103 P(node) =0.001466721  
## class counts: 90 55  
## probabilities: 0.621 0.379   
## left son=826 (11 obs) right son=827 (134 obs)  
## Primary splits:  
## Flight.Distance < 222 to the left, improve=1.980068, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.742863, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.681057, (0 missing)  
## Departure.Delay.in.Minutes < 9.5 to the right, improve=1.276737, (0 missing)  
## Age < 61.5 to the left, improve=1.207064, (0 missing)  
##   
## Node number 414: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 415: 32 observations  
## predicted class=1 expected loss=0.28125 P(node) =0.0003236901  
## class counts: 9 23  
## probabilities: 0.281 0.719   
##   
## Node number 448: 1317 observations, complexity param=0.0001759479  
## predicted class=0 expected loss=0.05618831 P(node) =0.01332187  
## class counts: 1243 74  
## probabilities: 0.944 0.056   
## left son=896 (1229 obs) right son=897 (88 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=12.945760, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=12.526300, (0 missing)  
## On.board.service < 3.5 to the left, improve= 8.605647, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 8.521694, (0 missing)  
## Inflight.service < 3.5 to the left, improve= 6.515902, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.955, adj=0.330, (0 split)  
## On.board.service < 3.5 to the left, agree=0.939, adj=0.091, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.938, adj=0.080, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.938, adj=0.068, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.937, adj=0.057, (0 split)  
##   
## Node number 449: 18 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001820757  
## class counts: 6 12  
## probabilities: 0.333 0.667   
##   
## Node number 450: 168 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.2261905 P(node) =0.001699373  
## class counts: 130 38  
## probabilities: 0.774 0.226   
## left son=900 (150 obs) right son=901 (18 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=4.373968, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=3.296703, (0 missing)  
## On.board.service < 4.5 to the left, improve=3.022857, (0 missing)  
## Arrival.Delay.in.Minutes < 10 to the right, improve=1.849312, (0 missing)  
## Age < 24.5 to the right, improve=1.609524, (0 missing)  
##   
## Node number 451: 37 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.2702703 P(node) =0.0003742666  
## class counts: 10 27  
## probabilities: 0.270 0.730   
## left son=902 (8 obs) right son=903 (29 obs)  
## Primary splits:  
## Age < 18 to the left, improve=2.568733, (0 missing)  
## Flight.Distance < 2396.5 to the right, improve=2.568733, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=2.126758, (0 missing)  
## BusinessClass < 0.5 to the left, improve=1.775881, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.498441, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the left, agree=0.838, adj=0.250, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.838, adj=0.250, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.838, adj=0.250, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.811, adj=0.125, (0 split)  
##   
## Node number 452: 121 observations  
## predicted class=0 expected loss=0.1157025 P(node) =0.001223953  
## class counts: 107 14  
## probabilities: 0.884 0.116   
##   
## Node number 453: 72 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3472222 P(node) =0.0007283027  
## class counts: 47 25  
## probabilities: 0.653 0.347   
## left son=906 (64 obs) right son=907 (8 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=5.013889, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=3.750662, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=2.800179, (0 missing)  
## Departure.Delay.in.Minutes < 5.5 to the right, improve=2.268519, (0 missing)  
## Age < 12 to the left, improve=2.170139, (0 missing)  
##   
## Node number 454: 39 observations, complexity param=0.0001039692  
## predicted class=1 expected loss=0.4615385 P(node) =0.0003944973  
## class counts: 18 21  
## probabilities: 0.462 0.538   
## left son=908 (31 obs) right son=909 (8 obs)  
## Primary splits:  
## Inflight.wifi.service < 2.5 to the right, improve=4.287841, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=3.692308, (0 missing)  
## Age < 50 to the left, improve=1.732830, (0 missing)  
## Flight.Distance < 2699 to the left, improve=1.689428, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.089973, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 3670 to the left, agree=0.821, adj=0.125, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.821, adj=0.125, (0 split)  
##   
## Node number 455: 54 observations, complexity param=1.199645e-05  
## predicted class=1 expected loss=0.1851852 P(node) =0.000546227  
## class counts: 10 44  
## probabilities: 0.185 0.815   
## left son=910 (39 obs) right son=911 (15 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=1.4245010, (0 missing)  
## Departure.Delay.in.Minutes < 16.5 to the right, improve=1.1326600, (0 missing)  
## Flight.Distance < 196 to the left, improve=0.9528313, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=0.9528313, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=0.9474591, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the left, agree=0.815, adj=0.333, (0 split)  
## On.board.service < 1.5 to the right, agree=0.778, adj=0.200, (0 split)  
## Flight.Distance < 940.5 to the left, agree=0.741, adj=0.067, (0 split)  
##   
## Node number 456: 640 observations, complexity param=0.0001559538  
## predicted class=0 expected loss=0.0421875 P(node) =0.006473801  
## class counts: 613 27  
## probabilities: 0.958 0.042   
## left son=912 (613 obs) right son=913 (27 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=10.879870, (0 missing)  
## Seat.comfort < 2.5 to the right, improve= 6.425204, (0 missing)  
## Ease.of.Online.booking < 1.5 to the right, improve= 1.257741, (0 missing)  
## Flight.Distance < 163.5 to the right, improve= 1.028327, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 0.991875, (0 missing)  
##   
## Node number 457: 1328 observations, complexity param=0.002711197  
## predicted class=0 expected loss=0.4947289 P(node) =0.01343314  
## class counts: 671 657  
## probabilities: 0.505 0.495   
## left son=914 (284 obs) right son=915 (1044 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=125.79630, (0 missing)  
## Checkin.service < 4.5 to the left, improve=104.98900, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 91.90408, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 72.37786, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve= 71.35640, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.936, adj=0.701, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.900, adj=0.532, (0 split)  
## Age < 8.5 to the left, agree=0.787, adj=0.004, (0 split)  
##   
## Node number 458: 779 observations, complexity param=0.001775474  
## predicted class=0 expected loss=0.436457 P(node) =0.00787983  
## class counts: 439 340  
## probabilities: 0.564 0.436   
## left son=916 (601 obs) right son=917 (178 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=33.99060, (0 missing)  
## Inflight.service < 4.5 to the left, improve=28.33280, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=18.04570, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=13.03796, (0 missing)  
## Age < 24.5 to the right, improve=11.50643, (0 missing)  
##   
## Node number 459: 1333 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.243811 P(node) =0.01348371  
## class counts: 325 1008  
## probabilities: 0.244 0.756   
## left son=918 (1085 obs) right son=919 (248 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=36.22334, (0 missing)  
## Age < 24.5 to the right, improve=25.92431, (0 missing)  
## Gate.location < 3.5 to the left, improve=25.35289, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=13.32439, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=13.27172, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.923, adj=0.585, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.908, adj=0.504, (0 split)  
## Gate.location < 4.5 to the left, agree=0.882, adj=0.367, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.816, adj=0.012, (0 split)  
## Departure.Delay.in.Minutes < 396 to the left, agree=0.815, adj=0.008, (0 split)  
##   
## Node number 460: 31 observations  
## predicted class=0 expected loss=0.2903226 P(node) =0.0003135748  
## class counts: 22 9  
## probabilities: 0.710 0.290   
##   
## Node number 461: 33 observations  
## predicted class=1 expected loss=0.2424242 P(node) =0.0003338054  
## class counts: 8 25  
## probabilities: 0.242 0.758   
##   
## Node number 464: 67 observations  
## predicted class=0 expected loss=0 P(node) =0.0006777261  
## class counts: 67 0  
## probabilities: 1.000 0.000   
##   
## Node number 465: 60 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3 P(node) =0.0006069189  
## class counts: 42 18  
## probabilities: 0.700 0.300   
## left son=930 (40 obs) right son=931 (20 obs)  
## Primary splits:  
## Leg.room.service < 2.5 to the right, improve=3.750000, (0 missing)  
## On.board.service < 2.5 to the left, improve=3.385664, (0 missing)  
## Flight.Distance < 1094 to the left, improve=2.720216, (0 missing)  
## Checkin.service < 2.5 to the left, improve=2.400000, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=1.623006, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.717, adj=0.15, (0 split)  
## Flight.Distance < 105 to the right, agree=0.700, adj=0.10, (0 split)  
## Age < 17 to the right, agree=0.683, adj=0.05, (0 split)  
##   
## Node number 472: 49 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3469388 P(node) =0.0004956504  
## class counts: 32 17  
## probabilities: 0.653 0.347   
## left son=944 (15 obs) right son=945 (34 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the right, improve=3.396238, (0 missing)  
## Flight.Distance < 1369.5 to the right, improve=2.654082, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=2.580150, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=2.580150, (0 missing)  
## Age < 31 to the right, improve=2.299320, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4 to the right, agree=0.918, adj=0.733, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.898, adj=0.667, (0 split)  
## Inflight.wifi.service < 3.5 to the left, agree=0.837, adj=0.467, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.816, adj=0.400, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.816, adj=0.400, (0 split)  
##   
## Node number 473: 26 observations  
## predicted class=1 expected loss=0.03846154 P(node) =0.0002629982  
## class counts: 1 25  
## probabilities: 0.038 0.962   
##   
## Node number 480: 366 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.1284153 P(node) =0.003702205  
## class counts: 319 47  
## probabilities: 0.872 0.128   
## left son=960 (331 obs) right son=961 (35 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=4.570999, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=2.226696, (0 missing)  
## Gate.location < 4.5 to the left, improve=2.077517, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.896095, (0 missing)  
## Age < 40.5 to the left, improve=1.134656, (0 missing)  
##   
## Node number 481: 44 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.4545455 P(node) =0.0004450738  
## class counts: 24 20  
## probabilities: 0.545 0.455   
## left son=962 (34 obs) right son=963 (10 obs)  
## Primary splits:  
## Leg.room.service < 1.5 to the right, improve=5.1358290, (0 missing)  
## Flight.Distance < 770 to the left, improve=4.7348480, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.6174100, (0 missing)  
## Male < 0.5 to the left, improve=1.0350240, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=0.8181818, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 40.5 to the left, agree=0.818, adj=0.2, (0 split)  
## Arrival.Delay.in.Minutes < 60.5 to the left, agree=0.818, adj=0.2, (0 split)  
## Flight.Distance < 112 to the right, agree=0.795, adj=0.1, (0 split)  
##   
## Node number 482: 50 observations  
## predicted class=0 expected loss=0.02 P(node) =0.0005057657  
## class counts: 49 1  
## probabilities: 0.980 0.020   
##   
## Node number 483: 437 observations, complexity param=0.0003438982  
## predicted class=0 expected loss=0.4759725 P(node) =0.004420392  
## class counts: 229 208  
## probabilities: 0.524 0.476   
## left son=966 (294 obs) right son=967 (143 obs)  
## Primary splits:  
## Gate.location < 2.5 to the right, improve=12.926440, (0 missing)  
## On.board.service < 2.5 to the left, improve=11.269990, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=10.269850, (0 missing)  
## Checkin.service < 2.5 to the left, improve= 7.816189, (0 missing)  
## Inflight.service < 1.5 to the right, improve= 5.891932, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1609 to the left, agree=0.682, adj=0.028, (0 split)  
## Departure.Delay.in.Minutes < 85.5 to the left, agree=0.682, adj=0.028, (0 split)  
## Arrival.Delay.in.Minutes < 67 to the left, agree=0.677, adj=0.014, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.675, adj=0.007, (0 split)  
##   
## Node number 486: 516 observations, complexity param=0.0004558651  
## predicted class=1 expected loss=0.4166667 P(node) =0.005219502  
## class counts: 215 301  
## probabilities: 0.417 0.583   
## left son=972 (40 obs) right son=973 (476 obs)  
## Primary splits:  
## On.board.service < 2.5 to the left, improve=11.135430, (0 missing)  
## Checkin.service < 2.5 to the left, improve= 9.450975, (0 missing)  
## Age < 36.5 to the left, improve= 7.001916, (0 missing)  
## Flight.Distance < 1510 to the right, improve= 4.992260, (0 missing)  
## Leg.room.service < 1.5 to the left, improve= 3.669333, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.938, adj=0.200, (0 split)  
## Flight.Distance < 2574 to the right, agree=0.924, adj=0.025, (0 split)  
##   
## Node number 487: 175 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.08571429 P(node) =0.00177018  
## class counts: 15 160  
## probabilities: 0.086 0.914   
## left son=974 (16 obs) right son=975 (159 obs)  
## Primary splits:  
## On.board.service < 2.5 to the left, improve=15.541780, (0 missing)  
## Baggage.handling < 3.5 to the left, improve= 4.460829, (0 missing)  
## Checkin.service < 2.5 to the left, improve= 4.188946, (0 missing)  
## Leg.room.service < 1.5 to the left, improve= 3.640693, (0 missing)  
## Inflight.service < 3.5 to the left, improve= 3.241071, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.920, adj=0.125, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.914, adj=0.062, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.914, adj=0.062, (0 split)  
##   
## Node number 496: 1264 observations, complexity param=0.0006334125  
## predicted class=1 expected loss=0.4881329 P(node) =0.01278576  
## class counts: 617 647  
## probabilities: 0.488 0.512   
## left son=992 (1026 obs) right son=993 (238 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=63.26967, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=42.33323, (0 missing)  
## On.board.service < 4.5 to the left, improve=39.61532, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=32.27450, (0 missing)  
## Departure.Delay.in.Minutes < 16.5 to the right, improve=19.57753, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 3601.5 to the left, agree=0.816, adj=0.021, (0 split)  
## Departure.Delay.in.Minutes < 133 to the left, agree=0.813, adj=0.008, (0 split)  
## Arrival.Delay.in.Minutes < 133 to the left, agree=0.813, adj=0.008, (0 split)  
##   
## Node number 497: 451 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.135255 P(node) =0.004562007  
## class counts: 61 390  
## probabilities: 0.135 0.865   
## left son=994 (8 obs) right son=995 (443 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the left, improve=12.180610, (0 missing)  
## Baggage.handling < 3.5 to the left, improve= 8.726010, (0 missing)  
## Inflight.service < 1.5 to the right, improve= 7.045224, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve= 4.395610, (0 missing)  
## On.board.service < 4.5 to the left, improve= 3.832225, (0 missing)  
##   
## Node number 498: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 499: 432 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.02777778 P(node) =0.004369816  
## class counts: 12 420  
## probabilities: 0.028 0.972   
## left son=998 (137 obs) right son=999 (295 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the left, improve=1.1065360, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.7661692, (0 missing)  
## Flight.Distance < 3775.5 to the right, improve=0.6072670, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=0.5964912, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.5768320, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.789, adj=0.336, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.773, adj=0.285, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.736, adj=0.168, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.715, adj=0.102, (0 split)  
## Inflight.wifi.service < 4.5 to the right, agree=0.711, adj=0.088, (0 split)  
##   
## Node number 504: 1154 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.2920277 P(node) =0.01167307  
## class counts: 337 817  
## probabilities: 0.292 0.708   
## left son=1008 (974 obs) right son=1009 (180 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=33.659230, (0 missing)  
## On.board.service < 4.5 to the left, improve=32.454860, (0 missing)  
## Inflight.service < 4.5 to the left, improve=32.016700, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve= 8.601910, (0 missing)  
## Flight.Distance < 1509 to the right, improve= 8.536766, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.848, adj=0.028, (0 split)  
##   
## Node number 505: 417 observations  
## predicted class=1 expected loss=0 P(node) =0.004218086  
## class counts: 0 417  
## probabilities: 0.000 1.000   
##   
## Node number 508: 528 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.2045455 P(node) =0.005340886  
## class counts: 108 420  
## probabilities: 0.205 0.795   
## left son=1016 (249 obs) right son=1017 (279 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=17.642430, (0 missing)  
## Checkin.service < 4.5 to the left, improve=11.361040, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=11.188770, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 9.621663, (0 missing)  
## On.board.service < 4.5 to the left, improve= 7.619240, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.911, adj=0.811, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.883, adj=0.751, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.850, adj=0.683, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.578, adj=0.104, (0 split)  
## Age < 29.5 to the right, agree=0.559, adj=0.064, (0 split)  
##   
## Node number 509: 378 observations  
## predicted class=1 expected loss=0.002645503 P(node) =0.003823589  
## class counts: 1 377  
## probabilities: 0.003 0.997   
##   
## Node number 510: 388 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.1520619 P(node) =0.003924742  
## class counts: 59 329  
## probabilities: 0.152 0.848   
## left son=1020 (193 obs) right son=1021 (195 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=18.129240, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=12.998920, (0 missing)  
## Online.boarding < 4.5 to the left, improve=10.706910, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve= 9.024143, (0 missing)  
## On.board.service < 4.5 to the left, improve= 9.024143, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.910, adj=0.819, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.881, adj=0.762, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.866, adj=0.731, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.572, adj=0.140, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.564, adj=0.124, (0 split)  
##   
## Node number 511: 20287 observations, complexity param=0.0002319313  
## predicted class=1 expected loss=0.00744319 P(node) =0.2052094  
## class counts: 151 20136  
## probabilities: 0.007 0.993   
## left son=1022 (327 obs) right son=1023 (19960 obs)  
## Primary splits:  
## On.board.service < 2.5 to the left, improve=9.245927, (0 missing)  
## Inflight.service < 3.5 to the left, improve=8.044376, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=5.578345, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=4.583716, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=3.303897, (0 missing)  
##   
## Node number 534: 51 observations  
## predicted class=0 expected loss=0 P(node) =0.000515881  
## class counts: 51 0  
## probabilities: 1.000 0.000   
##   
## Node number 535: 161 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.09937888 P(node) =0.001628566  
## class counts: 145 16  
## probabilities: 0.901 0.099   
## left son=1070 (126 obs) right son=1071 (35 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 6.5 to the left, improve=0.9055901, (0 missing)  
## Age < 23.5 to the right, improve=0.7754313, (0 missing)  
## Online.boarding < 2.5 to the right, improve=0.5709079, (0 missing)  
## Flight.Distance < 1746.5 to the left, improve=0.5081875, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=0.4770186, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 35 to the left, agree=0.857, adj=0.343, (0 split)  
##   
## Node number 536: 3112 observations, complexity param=0.0003359006  
## predicted class=0 expected loss=0.05205656 P(node) =0.03147886  
## class counts: 2950 162  
## probabilities: 0.948 0.052   
## left son=1072 (3094 obs) right son=1073 (18 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=25.357050, (0 missing)  
## Cleanliness < 4.5 to the left, improve=16.221660, (0 missing)  
## On.board.service < 4.5 to the left, improve=13.911350, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 6.663862, (0 missing)  
## Inflight.service < 2.5 to the right, improve= 6.065249, (0 missing)  
##   
## Node number 537: 23 observations  
## predicted class=1 expected loss=0.04347826 P(node) =0.0002326522  
## class counts: 1 22  
## probabilities: 0.043 0.957   
##   
## Node number 544: 1667 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.02879424 P(node) =0.01686223  
## class counts: 1619 48  
## probabilities: 0.971 0.029   
## left son=1088 (1649 obs) right son=1089 (18 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=1.3616200, (0 missing)  
## Age < 34.5 to the left, improve=1.2743160, (0 missing)  
## Flight.Distance < 402.5 to the right, improve=1.0069070, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.6719945, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=0.6490862, (0 missing)  
##   
## Node number 545: 12 observations  
## predicted class=0 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 7 5  
## probabilities: 0.583 0.417   
##   
## Node number 546: 571 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.1208406 P(node) =0.005775845  
## class counts: 502 69  
## probabilities: 0.879 0.121   
## left son=1092 (525 obs) right son=1093 (46 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=6.190163, (0 missing)  
## Male < 0.5 to the left, improve=4.816772, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=4.721746, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=4.615178, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=3.898605, (0 missing)  
##   
## Node number 547: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 588: 3480 observations, complexity param=0.0004678615  
## predicted class=0 expected loss=0.08706897 P(node) =0.03520129  
## class counts: 3177 303  
## probabilities: 0.913 0.087   
## left son=1176 (3157 obs) right son=1177 (323 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=22.08011, (0 missing)  
## Inflight.service < 4.5 to the left, improve=21.57107, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=19.78995, (0 missing)  
## On.board.service < 4.5 to the left, improve=15.86231, (0 missing)  
## Gate.location < 1.5 to the left, improve=15.25618, (0 missing)  
##   
## Node number 589: 296 observations, complexity param=0.0004858562  
## predicted class=0 expected loss=0.2972973 P(node) =0.002994133  
## class counts: 208 88  
## probabilities: 0.703 0.297   
## left son=1178 (187 obs) right son=1179 (109 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=74.34673, (0 missing)  
## Flight.Distance < 1599.5 to the left, improve=41.42667, (0 missing)  
## Inflight.service < 3.5 to the right, improve=21.13049, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=20.42061, (0 missing)  
## Gate.location < 1.5 to the left, improve=10.78639, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1599.5 to the left, agree=0.767, adj=0.367, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.760, adj=0.349, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.757, adj=0.339, (0 split)  
## Age < 24.5 to the right, agree=0.720, adj=0.239, (0 split)  
## BusinessTravel < 0.5 to the right, agree=0.720, adj=0.239, (0 split)  
##   
## Node number 590: 282 observations  
## predicted class=0 expected loss=0 P(node) =0.002852519  
## class counts: 282 0  
## probabilities: 1.000 0.000   
##   
## Node number 591: 269 observations, complexity param=0.0004858562  
## predicted class=1 expected loss=0.3494424 P(node) =0.00272102  
## class counts: 94 175  
## probabilities: 0.349 0.651   
## left son=1182 (53 obs) right son=1183 (216 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=55.86965, (0 missing)  
## Online.boarding < 1.5 to the left, improve=36.61141, (0 missing)  
## Flight.Distance < 362.5 to the left, improve=25.72715, (0 missing)  
## BusinessTravel < 0.5 to the left, improve=12.50091, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the right, improve=11.01282, (0 missing)  
## Surrogate splits:  
## Online.boarding < 1.5 to the left, agree=0.829, adj=0.132, (0 split)  
## Flight.Distance < 362.5 to the left, agree=0.818, adj=0.075, (0 split)  
##   
## Node number 622: 155 observations  
## predicted class=0 expected loss=0.06451613 P(node) =0.001567874  
## class counts: 145 10  
## probabilities: 0.935 0.065   
##   
## Node number 623: 339 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1504425 P(node) =0.003429092  
## class counts: 288 51  
## probabilities: 0.850 0.150   
## left son=1246 (140 obs) right son=1247 (199 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=1.2136610, (0 missing)  
## On.board.service < 1.5 to the left, improve=1.1168930, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.0553430, (0 missing)  
## Departure.Delay.in.Minutes < 79.5 to the right, improve=0.9111173, (0 missing)  
## Age < 49.5 to the left, improve=0.7600335, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 3.5 to the right, agree=0.847, adj=0.629, (0 split)  
## On.board.service < 1.5 to the left, agree=0.614, adj=0.064, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.614, adj=0.064, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.611, adj=0.057, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.611, adj=0.057, (0 split)  
##   
## Node number 632: 150 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.1533333 P(node) =0.001517297  
## class counts: 127 23  
## probabilities: 0.847 0.153   
## left son=1264 (50 obs) right son=1265 (100 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=3.526667, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=3.502889, (0 missing)  
## Flight.Distance < 215.5 to the right, improve=3.364781, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=2.478529, (0 missing)  
## Baggage.handling < 2.5 to the left, improve=2.327898, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.973, adj=0.92, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.933, adj=0.80, (0 split)  
## On.board.service < 1.5 to the left, agree=0.693, adj=0.08, (0 split)  
## Arrival.Delay.in.Minutes < 220 to the right, agree=0.673, adj=0.02, (0 split)  
##   
## Node number 633: 10 observations  
## predicted class=1 expected loss=0 P(node) =0.0001011531  
## class counts: 0 10  
## probabilities: 0.000 1.000   
##   
## Node number 638: 16 observations  
## predicted class=0 expected loss=0.3125 P(node) =0.000161845  
## class counts: 11 5  
## probabilities: 0.688 0.312   
##   
## Node number 639: 1633 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.004286589 P(node) =0.01651831  
## class counts: 7 1626  
## probabilities: 0.004 0.996   
## left son=1278 (25 obs) right son=1279 (1608 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=2.821232, (0 missing)  
## Age < 29.5 to the left, improve=1.596080, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.181958, (0 missing)  
## Departure.Delay.in.Minutes < 128.5 to the right, improve=1.181958, (0 missing)  
## Arrival.Delay.in.Minutes < 203.5 to the right, improve=0.970757, (0 missing)  
## Surrogate splits:  
## Age < 15.5 to the left, agree=0.986, adj=0.08, (0 split)  
##   
## Node number 646: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 647: 11 observations  
## predicted class=1 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 1 10  
## probabilities: 0.091 0.909   
##   
## Node number 648: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 649: 20 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.4 P(node) =0.0002023063  
## class counts: 8 12  
## probabilities: 0.400 0.600   
## left son=1298 (7 obs) right son=1299 (13 obs)  
## Primary splits:  
## Flight.Distance < 1124.5 to the left, improve=2.127473, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=2.127473, (0 missing)  
## Gate.location < 2.5 to the right, improve=2.016667, (0 missing)  
## Age < 27.5 to the left, improve=1.600000, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.034343, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 2.5 to the left, agree=0.7, adj=0.143, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.7, adj=0.143, (0 split)  
## On.board.service < 3.5 to the left, agree=0.7, adj=0.143, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.7, adj=0.143, (0 split)  
##   
## Node number 650: 15 observations  
## predicted class=0 expected loss=0.4666667 P(node) =0.0001517297  
## class counts: 8 7  
## probabilities: 0.533 0.467   
##   
## Node number 651: 20 observations  
## predicted class=1 expected loss=0.15 P(node) =0.0002023063  
## class counts: 3 17  
## probabilities: 0.150 0.850   
##   
## Node number 656: 87 observations  
## predicted class=0 expected loss=0.03448276 P(node) =0.0008800324  
## class counts: 84 3  
## probabilities: 0.966 0.034   
##   
## Node number 657: 44 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.1590909 P(node) =0.0004450738  
## class counts: 37 7  
## probabilities: 0.841 0.159   
## left son=1314 (37 obs) right son=1315 (7 obs)  
## Primary splits:  
## Age < 56 to the left, improve=2.8306420, (0 missing)  
## Online.boarding < 2.5 to the right, improve=1.0102000, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.9116162, (0 missing)  
## Arrival.Delay.in.Minutes < 107.5 to the left, improve=0.6870130, (0 missing)  
## Departure.Delay.in.Minutes < 26.5 to the left, improve=0.6060606, (0 missing)  
##   
## Node number 660: 147 observations, complexity param=4.198757e-05  
## predicted class=0 expected loss=0.244898 P(node) =0.001486951  
## class counts: 111 36  
## probabilities: 0.755 0.245   
## left son=1320 (22 obs) right son=1321 (125 obs)  
## Primary splits:  
## Inflight.entertainment < 1.5 to the left, improve=2.058256, (0 missing)  
## On.board.service < 1.5 to the left, improve=2.058256, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=1.758686, (0 missing)  
## Online.boarding < 2.5 to the right, improve=1.724490, (0 missing)  
## Flight.Distance < 2569.5 to the left, improve=1.567347, (0 missing)  
## Surrogate splits:  
## On.board.service < 1.5 to the left, agree=0.973, adj=0.818, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.959, adj=0.727, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.946, adj=0.636, (0 split)  
##   
## Node number 661: 43 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.4418605 P(node) =0.0004349585  
## class counts: 24 19  
## probabilities: 0.558 0.442   
## left son=1322 (28 obs) right son=1323 (15 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 4.5 to the right, improve=3.914064, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=3.643513, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=2.577268, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.773747, (0 missing)  
## Age < 46.5 to the left, improve=1.225431, (0 missing)  
## Surrogate splits:  
## Gate.location < 1.5 to the right, agree=0.698, adj=0.133, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.674, adj=0.067, (0 split)  
##   
## Node number 662: 92 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3913043 P(node) =0.0009306089  
## class counts: 56 36  
## probabilities: 0.609 0.391   
## left son=1324 (26 obs) right son=1325 (66 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the left, improve=1.868045, (0 missing)  
## Flight.Distance < 501.5 to the right, improve=1.529791, (0 missing)  
## Male < 0.5 to the left, improve=1.259671, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.179933, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.043478, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.924, adj=0.731, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.924, adj=0.731, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.913, adj=0.692, (0 split)  
## Departure.Delay.in.Minutes < 5.5 to the right, agree=0.739, adj=0.077, (0 split)  
##   
## Node number 663: 25 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.32 P(node) =0.0002528829  
## class counts: 8 17  
## probabilities: 0.320 0.680   
## left son=1326 (11 obs) right son=1327 (14 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the right, improve=1.9968830, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=1.0800000, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.0800000, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.7501299, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=0.7111688, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the right, agree=0.76, adj=0.455, (0 split)  
## Flight.Distance < 1308 to the left, agree=0.68, adj=0.273, (0 split)  
## Gate.location < 2.5 to the left, agree=0.68, adj=0.273, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the left, agree=0.68, adj=0.273, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.64, adj=0.182, (0 split)  
##   
## Node number 664: 72 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.1111111 P(node) =0.0007283027  
## class counts: 64 8  
## probabilities: 0.889 0.111   
## left son=1328 (65 obs) right son=1329 (7 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the right, improve=3.285958, (0 missing)  
## Inflight.service < 1.5 to the right, improve=1.253472, (0 missing)  
## Flight.Distance < 237.5 to the right, improve=1.226134, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.015873, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.015873, (0 missing)  
##   
## Node number 665: 50 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0005057657  
## class counts: 30 20  
## probabilities: 0.600 0.400   
## left son=1330 (39 obs) right son=1331 (11 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=3.020979, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=2.694639, (0 missing)  
## EcoClass < 0.5 to the left, improve=2.604651, (0 missing)  
## Flight.Distance < 1159 to the right, improve=1.831978, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.662338, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.8, adj=0.091, (0 split)  
##   
## Node number 668: 208 observations, complexity param=0.0001139663  
## predicted class=1 expected loss=0.4615385 P(node) =0.002103985  
## class counts: 96 112  
## probabilities: 0.462 0.538   
## left son=1336 (186 obs) right son=1337 (22 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=8.518535, (0 missing)  
## Arrival.Delay.in.Minutes < 11.5 to the right, improve=6.937410, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=6.268242, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=4.200536, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=4.102564, (0 missing)  
##   
## Node number 669: 45 observations  
## predicted class=1 expected loss=0.02222222 P(node) =0.0004551892  
## class counts: 1 44  
## probabilities: 0.022 0.978   
##   
## Node number 684: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 685: 111 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3153153 P(node) =0.0011228  
## class counts: 76 35  
## probabilities: 0.685 0.315   
## left son=1370 (7 obs) right son=1371 (104 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 7 to the right, improve=1.4856200, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.1498960, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the left, improve=1.1305420, (0 missing)  
## Flight.Distance < 310.5 to the right, improve=0.9801257, (0 missing)  
## Male < 0.5 to the left, improve=0.7614014, (0 missing)  
##   
## Node number 692: 77 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3116883 P(node) =0.0007788792  
## class counts: 53 24  
## probabilities: 0.688 0.312   
## left son=1384 (70 obs) right son=1385 (7 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=2.496104, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.910603, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.830359, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=1.402597, (0 missing)  
## Age < 25.5 to the right, improve=1.212164, (0 missing)  
##   
## Node number 693: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 696: 44 observations  
## predicted class=0 expected loss=0.1590909 P(node) =0.0004450738  
## class counts: 37 7  
## probabilities: 0.841 0.159   
##   
## Node number 697: 9 observations  
## predicted class=1 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 4 5  
## probabilities: 0.444 0.556   
##   
## Node number 698: 47 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.4893617 P(node) =0.0004754198  
## class counts: 23 24  
## probabilities: 0.489 0.511   
## left son=1396 (28 obs) right son=1397 (19 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the left, improve=3.263798, (0 missing)  
## Cleanliness < 3.5 to the right, improve=2.815154, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=2.559875, (0 missing)  
## Age < 58.5 to the right, improve=2.189362, (0 missing)  
## Online.boarding < 1.5 to the right, improve=1.347948, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 4.5 to the left, agree=0.660, adj=0.158, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.660, adj=0.158, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.638, adj=0.105, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.638, adj=0.105, (0 split)  
## Online.boarding < 1.5 to the right, agree=0.617, adj=0.053, (0 split)  
##   
## Node number 699: 81 observations  
## predicted class=1 expected loss=0.1481481 P(node) =0.0008193405  
## class counts: 12 69  
## probabilities: 0.148 0.852   
##   
## Node number 700: 328 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.2560976 P(node) =0.003317823  
## class counts: 84 244  
## probabilities: 0.256 0.744   
## left son=1400 (215 obs) right son=1401 (113 obs)  
## Primary splits:  
## Inflight.entertainment < 3.5 to the right, improve=6.859783, (0 missing)  
## Cleanliness < 2.5 to the left, improve=6.778824, (0 missing)  
## Checkin.service < 4.5 to the left, improve=6.576761, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=6.559643, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=5.031359, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the right, agree=0.854, adj=0.575, (0 split)  
## On.board.service < 3.5 to the right, agree=0.841, adj=0.540, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.805, adj=0.434, (0 split)  
## Leg.room.service < 2.5 to the right, agree=0.780, adj=0.363, (0 split)  
## Age < 33.5 to the right, agree=0.765, adj=0.319, (0 split)  
##   
## Node number 701: 277 observations, complexity param=5.998225e-06  
## predicted class=1 expected loss=0.08303249 P(node) =0.002801942  
## class counts: 23 254  
## probabilities: 0.083 0.917   
## left son=1402 (90 obs) right son=1403 (187 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the right, improve=1.0055800, (0 missing)  
## Departure.Delay.in.Minutes < 3.5 to the right, improve=0.9700599, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.9618824, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=0.9018705, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.8414961, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.697, adj=0.067, (0 split)  
## Age < 74 to the right, agree=0.682, adj=0.022, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.682, adj=0.022, (0 split)  
## Departure.Delay.in.Minutes < 124 to the right, agree=0.682, adj=0.022, (0 split)  
## Arrival.Delay.in.Minutes < 129.5 to the right, agree=0.682, adj=0.022, (0 split)  
##   
## Node number 810: 152 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.1052632 P(node) =0.001537528  
## class counts: 136 16  
## probabilities: 0.895 0.105   
## left son=1620 (124 obs) right son=1621 (28 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=1.4380310, (0 missing)  
## Gate.location < 4.5 to the left, improve=1.2288010, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=1.2288010, (0 missing)  
## Flight.Distance < 325.5 to the right, improve=0.7956030, (0 missing)  
## Age < 8.5 to the right, improve=0.6651057, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 102.5 to the left, agree=0.829, adj=0.071, (0 split)  
## Departure.Delay.in.Minutes < 131 to the left, agree=0.822, adj=0.036, (0 split)  
##   
## Node number 811: 344 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1831395 P(node) =0.003479668  
## class counts: 281 63  
## probabilities: 0.817 0.183   
## left son=1622 (229 obs) right son=1623 (115 obs)  
## Primary splits:  
## Age < 34.5 to the left, improve=1.2578910, (0 missing)  
## Gate.location < 1.5 to the left, improve=0.9275146, (0 missing)  
## Departure.Delay.in.Minutes < 29.5 to the left, improve=0.9172216, (0 missing)  
## Flight.Distance < 679.5 to the right, improve=0.9161946, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the left, improve=0.9062917, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.672, adj=0.017, (0 split)  
## Flight.Distance < 482 to the right, agree=0.669, adj=0.009, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.669, adj=0.009, (0 split)  
##   
## Node number 816: 879 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2514221 P(node) =0.008891362  
## class counts: 658 221  
## probabilities: 0.749 0.251   
## left son=1632 (22 obs) right son=1633 (857 obs)  
## Primary splits:  
## Flight.Distance < 717 to the right, improve=1.1627360, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.1496060, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.9940726, (0 missing)  
## Male < 0.5 to the right, improve=0.8210740, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=0.7988896, (0 missing)  
##   
## Node number 817: 593 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.3187184 P(node) =0.005998382  
## class counts: 404 189  
## probabilities: 0.681 0.319   
## left son=1634 (426 obs) right son=1635 (167 obs)  
## Primary splits:  
## Food.and.drink < 1.5 to the right, improve=1.935152, (0 missing)  
## Cleanliness < 1.5 to the right, improve=1.592597, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.589756, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=1.498195, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.385075, (0 missing)  
## Surrogate splits:  
## Cleanliness < 1.5 to the right, agree=0.970, adj=0.892, (0 split)  
## Inflight.entertainment < 1.5 to the right, agree=0.944, adj=0.802, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.927, adj=0.743, (0 split)  
## Flight.Distance < 2446.5 to the left, agree=0.723, adj=0.018, (0 split)  
## Departure.Delay.in.Minutes < 7.5 to the left, agree=0.720, adj=0.006, (0 split)  
##   
## Node number 818: 38 observations  
## predicted class=0 expected loss=0.3421053 P(node) =0.000384382  
## class counts: 25 13  
## probabilities: 0.658 0.342   
##   
## Node number 819: 17 observations  
## predicted class=1 expected loss=0.2352941 P(node) =0.0001719603  
## class counts: 4 13  
## probabilities: 0.235 0.765   
##   
## Node number 820: 56 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.1785714 P(node) =0.0005664576  
## class counts: 46 10  
## probabilities: 0.821 0.179   
## left son=1640 (23 obs) right son=1641 (33 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.4246190, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.4125290, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=1.0000000, (0 missing)  
## Online.boarding < 4.5 to the right, improve=0.9740260, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.7714286, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the right, agree=0.732, adj=0.348, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.696, adj=0.261, (0 split)  
## On.board.service < 4.5 to the right, agree=0.679, adj=0.217, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.607, adj=0.043, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.607, adj=0.043, (0 split)  
##   
## Node number 821: 1103 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3245694 P(node) =0.01115719  
## class counts: 745 358  
## probabilities: 0.675 0.325   
## left son=1642 (1094 obs) right son=1643 (9 obs)  
## Primary splits:  
## Flight.Distance < 2584.5 to the left, improve=2.123880, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.455978, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=1.401235, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.290633, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.267888, (0 missing)  
##   
## Node number 822: 13 observations  
## predicted class=0 expected loss=0.1538462 P(node) =0.0001314991  
## class counts: 11 2  
## probabilities: 0.846 0.154   
##   
## Node number 823: 81 observations, complexity param=6.718011e-05  
## predicted class=0 expected loss=0.4938272 P(node) =0.0008193405  
## class counts: 41 40  
## probabilities: 0.506 0.494   
## left son=1646 (50 obs) right son=1647 (31 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the right, improve=2.3002790, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.9698830, (0 missing)  
## Age < 42.5 to the left, improve=1.4271600, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.8572074, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.7518229, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.728, adj=0.290, (0 split)  
## Age < 35.5 to the left, agree=0.679, adj=0.161, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.642, adj=0.065, (0 split)  
## Flight.Distance < 501.5 to the right, agree=0.630, adj=0.032, (0 split)  
##   
## Node number 826: 11 observations  
## predicted class=0 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 10 1  
## probabilities: 0.909 0.091   
##   
## Node number 827: 134 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.4029851 P(node) =0.001355452  
## class counts: 80 54  
## probabilities: 0.597 0.403   
## left son=1654 (119 obs) right son=1655 (15 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 9.5 to the right, improve=2.348760, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the left, improve=1.906644, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.801367, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.777342, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.247154, (0 missing)  
##   
## Node number 896: 1229 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.0374288 P(node) =0.01243172  
## class counts: 1183 46  
## probabilities: 0.963 0.037   
## left son=1792 (1211 obs) right son=1793 (18 obs)  
## Primary splits:  
## On.board.service < 3.5 to the left, improve=9.808041, (0 missing)  
## Inflight.service < 4.5 to the left, improve=8.852038, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=8.777704, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=7.454004, (0 missing)  
## BusinessClass < 0.5 to the right, improve=4.519680, (0 missing)  
##   
## Node number 897: 88 observations, complexity param=0.0001759479  
## predicted class=0 expected loss=0.3181818 P(node) =0.0008901477  
## class counts: 60 28  
## probabilities: 0.682 0.318   
## left son=1794 (66 obs) right son=1795 (22 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=17.454550, (0 missing)  
## Food.and.drink < 3.5 to the left, improve= 9.321059, (0 missing)  
## EcoClass < 0.5 to the right, improve= 8.566434, (0 missing)  
## Cleanliness < 2.5 to the left, improve= 7.278343, (0 missing)  
## Flight.Distance < 1494.5 to the left, improve= 6.285714, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 2.5 to the left, agree=0.864, adj=0.455, (0 split)  
## Flight.Distance < 1494.5 to the left, agree=0.852, adj=0.409, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.841, adj=0.364, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.841, adj=0.364, (0 split)  
## Inflight.wifi.service < 2.5 to the right, agree=0.830, adj=0.318, (0 split)  
##   
## Node number 900: 150 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.1866667 P(node) =0.001517297  
## class counts: 122 28  
## probabilities: 0.813 0.187   
## left son=1800 (143 obs) right son=1801 (7 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=2.174039, (0 missing)  
## Inflight.service < 1.5 to the right, improve=1.942951, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.807171, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=1.659343, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=1.076078, (0 missing)  
##   
## Node number 901: 18 observations  
## predicted class=1 expected loss=0.4444444 P(node) =0.0001820757  
## class counts: 8 10  
## probabilities: 0.444 0.556   
##   
## Node number 902: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 903: 29 observations  
## predicted class=1 expected loss=0.1724138 P(node) =0.0002933441  
## class counts: 5 24  
## probabilities: 0.172 0.828   
##   
## Node number 906: 64 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.28125 P(node) =0.0006473801  
## class counts: 46 18  
## probabilities: 0.719 0.281   
## left son=1812 (56 obs) right son=1813 (8 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=4.017857, (0 missing)  
## Inflight.service < 2.5 to the right, improve=2.851220, (0 missing)  
## BusinessClass < 0.5 to the left, improve=2.160714, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=1.875000, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.576010, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the right, agree=0.906, adj=0.25, (0 split)  
##   
## Node number 907: 8 observations  
## predicted class=1 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 1 7  
## probabilities: 0.125 0.875   
##   
## Node number 908: 31 observations, complexity param=0.0001039692  
## predicted class=0 expected loss=0.4193548 P(node) =0.0003135748  
## class counts: 18 13  
## probabilities: 0.581 0.419   
## left son=1816 (23 obs) right son=1817 (8 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the left, improve=7.2706870, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=2.3576440, (0 missing)  
## BusinessClass < 0.5 to the right, improve=1.5729650, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.9634409, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve=0.9119002, (0 missing)  
## Surrogate splits:  
## Age < 50 to the left, agree=0.839, adj=0.375, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.806, adj=0.250, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.806, adj=0.250, (0 split)  
## Flight.Distance < 3606.5 to the left, agree=0.774, adj=0.125, (0 split)  
## Gate.location < 4.5 to the left, agree=0.774, adj=0.125, (0 split)  
##   
## Node number 909: 8 observations  
## predicted class=1 expected loss=0 P(node) =8.092252e-05  
## class counts: 0 8  
## probabilities: 0.000 1.000   
##   
## Node number 910: 39 observations, complexity param=1.199645e-05  
## predicted class=1 expected loss=0.2564103 P(node) =0.0003944973  
## class counts: 10 29  
## probabilities: 0.256 0.744   
## left son=1820 (7 obs) right son=1821 (32 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the right, improve=1.6932230, (0 missing)  
## Departure.Delay.in.Minutes < 10.5 to the right, improve=1.6932230, (0 missing)  
## Arrival.Delay.in.Minutes < 16 to the right, improve=1.6932230, (0 missing)  
## Age < 32.5 to the left, improve=1.1943760, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.8273504, (0 missing)  
##   
## Node number 911: 15 observations  
## predicted class=1 expected loss=0 P(node) =0.0001517297  
## class counts: 0 15  
## probabilities: 0.000 1.000   
##   
## Node number 912: 613 observations, complexity param=0.000107968  
## predicted class=0 expected loss=0.0228385 P(node) =0.006200688  
## class counts: 599 14  
## probabilities: 0.977 0.023   
## left son=1824 (557 obs) right son=1825 (56 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=2.9894010, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.6208285, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.3856435, (0 missing)  
## Age < 35.5 to the right, improve=0.3367543, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=0.3130571, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.976, adj=0.732, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.959, adj=0.554, (0 split)  
## Age < 32.5 to the right, agree=0.958, adj=0.536, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.953, adj=0.482, (0 split)  
## On.board.service < 3.5 to the left, agree=0.935, adj=0.286, (0 split)  
##   
## Node number 913: 27 observations, complexity param=0.0001559538  
## predicted class=0 expected loss=0.4814815 P(node) =0.0002731135  
## class counts: 14 13  
## probabilities: 0.519 0.481   
## left son=1826 (14 obs) right son=1827 (13 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=13.481480, (0 missing)  
## Baggage.handling < 3.5 to the right, improve= 9.778185, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve= 8.540305, (0 missing)  
## Age < 38.5 to the left, improve= 8.206756, (0 missing)  
## On.board.service < 3.5 to the right, improve= 7.363834, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 3.5 to the right, agree=0.926, adj=0.846, (0 split)  
## Age < 38.5 to the left, agree=0.889, adj=0.769, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.889, adj=0.769, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.852, adj=0.692, (0 split)  
## On.board.service < 3.5 to the right, agree=0.852, adj=0.692, (0 split)  
##   
## Node number 914: 284 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.07746479 P(node) =0.002872749  
## class counts: 262 22  
## probabilities: 0.923 0.077   
## left son=1828 (275 obs) right son=1829 (9 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=12.239230, (0 missing)  
## Checkin.service < 4.5 to the left, improve=12.216100, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 5.821049, (0 missing)  
## BusinessClass < 0.5 to the right, improve= 5.083430, (0 missing)  
## Age < 40.5 to the right, improve= 3.878232, (0 missing)  
## Surrogate splits:  
## Checkin.service < 4.5 to the left, agree=0.972, adj=0.111, (0 split)  
##   
## Node number 915: 1044 observations, complexity param=0.001055688  
## predicted class=1 expected loss=0.3917625 P(node) =0.01056039  
## class counts: 409 635  
## probabilities: 0.392 0.608   
## left son=1830 (853 obs) right son=1831 (191 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=60.71012, (0 missing)  
## BusinessClass < 0.5 to the left, improve=57.32390, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=53.21635, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=53.02906, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=51.42356, (0 missing)  
##   
## Node number 916: 601 observations, complexity param=0.000935723  
## predicted class=0 expected loss=0.3560732 P(node) =0.006079304  
## class counts: 387 214  
## probabilities: 0.644 0.356   
## left son=1832 (500 obs) right son=1833 (101 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=27.57437, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=13.24301, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=11.88687, (0 missing)  
## Checkin.service < 4.5 to the left, improve=10.60755, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=10.48900, (0 missing)  
##   
## Node number 917: 178 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.2921348 P(node) =0.001800526  
## class counts: 52 126  
## probabilities: 0.292 0.708   
## left son=1834 (150 obs) right son=1835 (28 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=5.671311, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=3.607170, (0 missing)  
## Cleanliness < 1.5 to the left, improve=3.607170, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=3.040478, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=3.000694, (0 missing)  
## Surrogate splits:  
## Age < 37.5 to the left, agree=0.927, adj=0.536, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.927, adj=0.536, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.927, adj=0.536, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.921, adj=0.500, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.910, adj=0.429, (0 split)  
##   
## Node number 918: 1085 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.2995392 P(node) =0.01097512  
## class counts: 325 760  
## probabilities: 0.300 0.700   
## left son=1836 (844 obs) right son=1837 (241 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=37.37501, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=18.02853, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=16.20200, (0 missing)  
## Inflight.service < 1.5 to the left, improve=15.18984, (0 missing)  
## Gate.location < 3.5 to the left, improve=12.15427, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.858, adj=0.361, (0 split)  
##   
## Node number 919: 248 observations  
## predicted class=1 expected loss=0 P(node) =0.002508598  
## class counts: 0 248  
## probabilities: 0.000 1.000   
##   
## Node number 930: 40 observations  
## predicted class=0 expected loss=0.175 P(node) =0.0004046126  
## class counts: 33 7  
## probabilities: 0.825 0.175   
##   
## Node number 931: 20 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.45 P(node) =0.0002023063  
## class counts: 9 11  
## probabilities: 0.450 0.550   
## left son=1862 (8 obs) right son=1863 (12 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the left, improve=2.400000, (0 missing)  
## On.board.service < 3.5 to the left, improve=2.031868, (0 missing)  
## Flight.Distance < 694 to the left, improve=1.697980, (0 missing)  
## Inflight.service < 3.5 to the right, improve=1.066667, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.900000, (0 missing)  
## Surrogate splits:  
## Age < 35 to the right, agree=0.75, adj=0.375, (0 split)  
## Departure.Arrival.time.convenient < 3 to the left, agree=0.75, adj=0.375, (0 split)  
## On.board.service < 2 to the left, agree=0.75, adj=0.375, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.75, adj=0.375, (0 split)  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.75, adj=0.375, (0 split)  
##   
## Node number 944: 15 observations  
## predicted class=0 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 14 1  
## probabilities: 0.933 0.067   
##   
## Node number 945: 34 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4705882 P(node) =0.0003439207  
## class counts: 18 16  
## probabilities: 0.529 0.471   
## left son=1890 (24 obs) right son=1891 (10 obs)  
## Primary splits:  
## Gate.location < 2.5 to the right, improve=1.491176, (0 missing)  
## Age < 31.5 to the right, improve=1.441176, (0 missing)  
## Male < 0.5 to the left, improve=1.441176, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.412605, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=1.412605, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the left, agree=0.794, adj=0.3, (0 split)  
## Checkin.service < 2 to the right, agree=0.794, adj=0.3, (0 split)  
## Flight.Distance < 1513.5 to the left, agree=0.765, adj=0.2, (0 split)  
## Age < 25.5 to the right, agree=0.735, adj=0.1, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.735, adj=0.1, (0 split)  
##   
## Node number 960: 331 observations  
## predicted class=0 expected loss=0.102719 P(node) =0.003348169  
## class counts: 297 34  
## probabilities: 0.897 0.103   
##   
## Node number 961: 35 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3714286 P(node) =0.000354036  
## class counts: 22 13  
## probabilities: 0.629 0.371   
## left son=1922 (24 obs) right son=1923 (11 obs)  
## Primary splits:  
## Age < 40.5 to the left, improve=2.2519480, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the left, improve=2.1120880, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.2595240, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.2252100, (0 missing)  
## Flight.Distance < 503 to the right, improve=0.6037267, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.743, adj=0.182, (0 split)  
## Gate.location < 2.5 to the right, agree=0.714, adj=0.091, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.714, adj=0.091, (0 split)  
## Arrival.Delay.in.Minutes < 9.5 to the left, agree=0.714, adj=0.091, (0 split)  
##   
## Node number 962: 34 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.3235294 P(node) =0.0003439207  
## class counts: 23 11  
## probabilities: 0.676 0.324   
## left son=1924 (26 obs) right son=1925 (8 obs)  
## Primary splits:  
## Flight.Distance < 770 to the left, improve=3.8054300, (0 missing)  
## Age < 39.5 to the right, improve=1.1045750, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.1045750, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.9126560, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.7851307, (0 missing)  
##   
## Node number 963: 10 observations  
## predicted class=1 expected loss=0.1 P(node) =0.0001011531  
## class counts: 1 9  
## probabilities: 0.100 0.900   
##   
## Node number 966: 294 observations, complexity param=0.0002639219  
## predicted class=0 expected loss=0.3911565 P(node) =0.002973902  
## class counts: 179 115  
## probabilities: 0.609 0.391   
## left son=1932 (79 obs) right son=1933 (215 obs)  
## Primary splits:  
## On.board.service < 2.5 to the left, improve=11.093890, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=10.750780, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve= 6.715535, (0 missing)  
## Inflight.service < 4.5 to the left, improve= 6.512681, (0 missing)  
## Age < 14.5 to the left, improve= 6.032409, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.738, adj=0.025, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.735, adj=0.013, (0 split)  
## Departure.Delay.in.Minutes < 49.5 to the right, agree=0.735, adj=0.013, (0 split)  
##   
## Node number 967: 143 observations, complexity param=8.397514e-05  
## predicted class=1 expected loss=0.3496503 P(node) =0.00144649  
## class counts: 50 93  
## probabilities: 0.350 0.650   
## left son=1934 (98 obs) right son=1935 (45 obs)  
## Primary splits:  
## Flight.Distance < 828 to the left, improve=2.9410870, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.2551440, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.1569320, (0 missing)  
## On.board.service < 4.5 to the left, improve=0.9555258, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.9285393, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.706, adj=0.067, (0 split)  
## Age < 13 to the right, agree=0.692, adj=0.022, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.692, adj=0.022, (0 split)  
##   
## Node number 972: 40 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.225 P(node) =0.0004046126  
## class counts: 31 9  
## probabilities: 0.775 0.225   
## left son=1944 (19 obs) right son=1945 (21 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the right, improve=2.150501, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.950000, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.950000, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.735714, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.735714, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 2.5 to the left, agree=0.65, adj=0.263, (0 split)  
## Flight.Distance < 847.5 to the left, agree=0.60, adj=0.158, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.60, adj=0.158, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.60, adj=0.158, (0 split)  
## Arrival.Delay.in.Minutes < 0.5 to the right, agree=0.60, adj=0.158, (0 split)  
##   
## Node number 973: 476 observations, complexity param=0.0004558651  
## predicted class=1 expected loss=0.3865546 P(node) =0.00481489  
## class counts: 184 292  
## probabilities: 0.387 0.613   
## left son=1946 (246 obs) right son=1947 (230 obs)  
## Primary splits:  
## Age < 36.5 to the left, improve=7.354969, (0 missing)  
## Flight.Distance < 1510 to the right, improve=5.171455, (0 missing)  
## Checkin.service < 1.5 to the left, improve=3.098549, (0 missing)  
## Departure.Delay.in.Minutes < 11.5 to the left, improve=2.116843, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.787152, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 480.5 to the right, agree=0.578, adj=0.126, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.559, adj=0.087, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.538, adj=0.043, (0 split)  
## Departure.Delay.in.Minutes < 15.5 to the right, agree=0.532, adj=0.030, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.527, adj=0.022, (0 split)  
##   
## Node number 974: 16 observations  
## predicted class=0 expected loss=0.25 P(node) =0.000161845  
## class counts: 12 4  
## probabilities: 0.750 0.250   
##   
## Node number 975: 159 observations  
## predicted class=1 expected loss=0.01886792 P(node) =0.001608335  
## class counts: 3 156  
## probabilities: 0.019 0.981   
##   
## Node number 992: 1026 observations, complexity param=0.0006334125  
## predicted class=0 expected loss=0.4356725 P(node) =0.01037831  
## class counts: 579 447  
## probabilities: 0.564 0.436   
## left son=1984 (876 obs) right son=1985 (150 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=48.36137, (0 missing)  
## On.board.service < 4.5 to the left, improve=39.15547, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=24.15573, (0 missing)  
## Flight.Distance < 1150 to the right, improve=20.66091, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=20.04146, (0 missing)  
##   
## Node number 993: 238 observations, complexity param=0.0003359006  
## predicted class=1 expected loss=0.1596639 P(node) =0.002407445  
## class counts: 38 200  
## probabilities: 0.160 0.840   
## left son=1986 (14 obs) right son=1987 (224 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=21.008400, (0 missing)  
## BusinessClass < 0.5 to the left, improve=21.008400, (0 missing)  
## EcoClass < 0.5 to the right, improve=17.847850, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=16.380810, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 7.399646, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.975, adj=0.571, (0 split)  
##   
## Node number 994: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 995: 443 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.1196388 P(node) =0.004481084  
## class counts: 53 390  
## probabilities: 0.120 0.880   
## left son=1990 (287 obs) right son=1991 (156 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=6.893197, (0 missing)  
## Inflight.service < 1.5 to the right, improve=5.643116, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=3.633679, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=3.346233, (0 missing)  
## On.board.service < 4.5 to the left, improve=3.011022, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2162.5 to the left, agree=0.664, adj=0.045, (0 split)  
##   
## Node number 998: 137 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.08029197 P(node) =0.001385798  
## class counts: 11 126  
## probabilities: 0.080 0.920   
## left son=1996 (16 obs) right son=1997 (121 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=13.3585800, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the right, improve= 1.1792980, (0 missing)  
## Flight.Distance < 1994 to the right, improve= 0.9526829, (0 missing)  
## Seat.comfort < 2.5 to the right, improve= 0.9224655, (0 missing)  
## Inflight.wifi.service < 4.5 to the right, improve= 0.4801520, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the left, agree=0.898, adj=0.125, (0 split)  
##   
## Node number 999: 295 observations  
## predicted class=1 expected loss=0.003389831 P(node) =0.002984018  
## class counts: 1 294  
## probabilities: 0.003 0.997   
##   
## Node number 1008: 974 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.3439425 P(node) =0.009852316  
## class counts: 335 639  
## probabilities: 0.344 0.656   
## left son=2016 (662 obs) right son=2017 (312 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=42.730340, (0 missing)  
## On.board.service < 4.5 to the left, improve=32.079710, (0 missing)  
## Inflight.service < 4.5 to the left, improve=30.850720, (0 missing)  
## Flight.Distance < 1509 to the right, improve=10.822260, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 9.524447, (0 missing)  
## Surrogate splits:  
## Age < 9.5 to the right, agree=0.684, adj=0.013, (0 split)  
## Flight.Distance < 70 to the right, agree=0.681, adj=0.003, (0 split)  
##   
## Node number 1009: 180 observations  
## predicted class=1 expected loss=0.01111111 P(node) =0.001820757  
## class counts: 2 178  
## probabilities: 0.011 0.989   
##   
## Node number 1016: 249 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.3413655 P(node) =0.002518713  
## class counts: 85 164  
## probabilities: 0.341 0.659   
## left son=2032 (39 obs) right son=2033 (210 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=40.12025, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=30.10248, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=20.90845, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=17.76109, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=13.66293, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.96, adj=0.744, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.92, adj=0.487, (0 split)  
##   
## Node number 1017: 279 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.08243728 P(node) =0.002822173  
## class counts: 23 256  
## probabilities: 0.082 0.918   
## left son=2034 (23 obs) right son=2035 (256 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the left, improve=16.27310, (0 missing)  
## Age < 36 to the right, improve=13.92801, (0 missing)  
## Gate.location < 3.5 to the right, improve=13.86840, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=11.92512, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=10.82152, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.964, adj=0.565, (0 split)  
## Age < 36 to the right, agree=0.950, adj=0.391, (0 split)  
## Gate.location < 4.5 to the right, agree=0.928, adj=0.130, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.921, adj=0.043, (0 split)  
##   
## Node number 1020: 193 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.3056995 P(node) =0.001952256  
## class counts: 59 134  
## probabilities: 0.306 0.694   
## left son=2040 (35 obs) right son=2041 (158 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=41.21860, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=35.52853, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=23.39133, (0 missing)  
## Online.boarding < 4.5 to the left, improve=22.43166, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=20.99303, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.964, adj=0.800, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.927, adj=0.600, (0 split)  
## Age < 76.5 to the right, agree=0.834, adj=0.086, (0 split)  
## Departure.Delay.in.Minutes < 106 to the right, agree=0.829, adj=0.057, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.824, adj=0.029, (0 split)  
##   
## Node number 1021: 195 observations  
## predicted class=1 expected loss=0 P(node) =0.001972486  
## class counts: 0 195  
## probabilities: 0.000 1.000   
##   
## Node number 1022: 327 observations, complexity param=0.0002319313  
## predicted class=1 expected loss=0.1253823 P(node) =0.003307708  
## class counts: 41 286  
## probabilities: 0.125 0.875   
## left son=2044 (161 obs) right son=2045 (166 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=10.600640, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 8.606295, (0 missing)  
## Checkin.service < 3.5 to the left, improve= 8.201819, (0 missing)  
## Online.boarding < 4.5 to the left, improve= 7.229071, (0 missing)  
## Age < 20.5 to the left, improve= 5.011367, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.911, adj=0.820, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.887, adj=0.770, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.841, adj=0.677, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.584, adj=0.155, (0 split)  
## Male < 0.5 to the right, agree=0.572, adj=0.130, (0 split)  
##   
## Node number 1023: 19960 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.005511022 P(node) =0.2019017  
## class counts: 110 19850  
## probabilities: 0.006 0.994   
## left son=2046 (392 obs) right son=2047 (19568 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the left, improve=5.959509, (0 missing)  
## Inflight.service < 3.5 to the left, improve=3.934510, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=3.297583, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=1.792666, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=1.737993, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 1.5 to the left, agree=0.982, adj=0.089, (0 split)  
##   
## Node number 1070: 126 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.00127453  
## class counts: 117 9  
## probabilities: 0.929 0.071   
##   
## Node number 1071: 35 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.2 P(node) =0.000354036  
## class counts: 28 7  
## probabilities: 0.800 0.200   
## left son=2142 (15 obs) right son=2143 (20 obs)  
## Primary splits:  
## Cleanliness < 2.5 to the right, improve=2.100000, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=1.447863, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.447863, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=1.317647, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.120000, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the right, agree=0.971, adj=0.933, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.943, adj=0.867, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.943, adj=0.867, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.714, adj=0.333, (0 split)  
## Gate.location < 3.5 to the right, agree=0.657, adj=0.200, (0 split)  
##   
## Node number 1072: 3094 observations, complexity param=0.0001439574  
## predicted class=0 expected loss=0.04718811 P(node) =0.03129678  
## class counts: 2948 146  
## probabilities: 0.953 0.047   
## left son=2144 (3031 obs) right son=2145 (63 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=14.327970, (0 missing)  
## Cleanliness < 4.5 to the left, improve=12.738730, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 4.982000, (0 missing)  
## Age < 33.5 to the left, improve= 4.684477, (0 missing)  
## Inflight.service < 2.5 to the right, improve= 4.415569, (0 missing)  
##   
## Node number 1073: 18 observations  
## predicted class=1 expected loss=0.1111111 P(node) =0.0001820757  
## class counts: 2 16  
## probabilities: 0.111 0.889   
##   
## Node number 1088: 1649 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.02668284 P(node) =0.01668015  
## class counts: 1605 44  
## probabilities: 0.973 0.027   
## left son=2176 (520 obs) right son=2177 (1129 obs)  
## Primary splits:  
## Age < 34.5 to the left, improve=1.0814940, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=0.6642643, (0 missing)  
## Flight.Distance < 402.5 to the right, improve=0.6634023, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.6619186, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.5675729, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.693, adj=0.025, (0 split)  
## Flight.Distance < 2545.5 to the right, agree=0.686, adj=0.006, (0 split)  
##   
## Node number 1089: 18 observations  
## predicted class=0 expected loss=0.2222222 P(node) =0.0001820757  
## class counts: 14 4  
## probabilities: 0.778 0.222   
##   
## Node number 1092: 525 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.09904762 P(node) =0.00531054  
## class counts: 473 52  
## probabilities: 0.901 0.099   
## left son=2184 (510 obs) right son=2185 (15 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=4.173557, (0 missing)  
## Flight.Distance < 109.5 to the right, improve=4.088064, (0 missing)  
## Male < 0.5 to the left, improve=3.201905, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=3.019245, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=2.481701, (0 missing)  
##   
## Node number 1093: 46 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.3695652 P(node) =0.0004653045  
## class counts: 29 17  
## probabilities: 0.630 0.370   
## left son=2186 (20 obs) right son=2187 (26 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 50.5 to the right, improve=9.665552, (0 missing)  
## Arrival.Delay.in.Minutes < 41.5 to the right, improve=9.665552, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=7.697941, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=3.949068, (0 missing)  
## Flight.Distance < 1555.5 to the right, improve=3.103780, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 41.5 to the right, agree=1.000, adj=1.00, (0 split)  
## Age < 32 to the left, agree=0.674, adj=0.25, (0 split)  
## Flight.Distance < 788.5 to the left, agree=0.674, adj=0.25, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.652, adj=0.20, (0 split)  
## Inflight.wifi.service < 1.5 to the left, agree=0.630, adj=0.15, (0 split)  
##   
## Node number 1176: 3157 observations, complexity param=0.0002639219  
## predicted class=0 expected loss=0.0690529 P(node) =0.03193405  
## class counts: 2939 218  
## probabilities: 0.931 0.069   
## left son=2352 (3096 obs) right son=2353 (61 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=25.815540, (0 missing)  
## On.board.service < 4.5 to the left, improve=15.731710, (0 missing)  
## Inflight.service < 4.5 to the left, improve=14.595560, (0 missing)  
## Gate.location < 1.5 to the left, improve= 9.752885, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve= 8.963423, (0 missing)  
##   
## Node number 1177: 323 observations, complexity param=0.0004678615  
## predicted class=0 expected loss=0.2631579 P(node) =0.003267247  
## class counts: 238 85  
## probabilities: 0.737 0.263   
## left son=2354 (210 obs) right son=2355 (113 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=58.264670, (0 missing)  
## Flight.Distance < 1454 to the left, improve=35.654720, (0 missing)  
## Age < 32.5 to the right, improve= 8.519286, (0 missing)  
## Gate.location < 1.5 to the left, improve= 7.542728, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 6.807624, (0 missing)  
## Surrogate splits:  
## Age < 24.5 to the right, agree=0.765, adj=0.327, (0 split)  
## Flight.Distance < 1389.5 to the left, agree=0.765, adj=0.327, (0 split)  
## BusinessTravel < 0.5 to the right, agree=0.759, adj=0.310, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.690, adj=0.115, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.687, adj=0.106, (0 split)  
##   
## Node number 1178: 187 observations  
## predicted class=0 expected loss=0.02673797 P(node) =0.001891564  
## class counts: 182 5  
## probabilities: 0.973 0.027   
##   
## Node number 1179: 109 observations, complexity param=0.0004858562  
## predicted class=1 expected loss=0.2385321 P(node) =0.001102569  
## class counts: 26 83  
## probabilities: 0.239 0.761   
## left son=2358 (26 obs) right son=2359 (83 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=39.59633, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=23.21615, (0 missing)  
## Flight.Distance < 1505 to the left, improve=12.63023, (0 missing)  
## Gate.location < 1.5 to the left, improve=11.37633, (0 missing)  
## Age < 21.5 to the left, improve= 5.98583, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.917, adj=0.654, (0 split)  
## Gate.location < 1.5 to the left, agree=0.844, adj=0.346, (0 split)  
## Flight.Distance < 424.5 to the left, agree=0.817, adj=0.231, (0 split)  
## Age < 10.5 to the left, agree=0.798, adj=0.154, (0 split)  
##   
## Node number 1182: 53 observations  
## predicted class=0 expected loss=0 P(node) =0.0005361117  
## class counts: 53 0  
## probabilities: 1.000 0.000   
##   
## Node number 1183: 216 observations, complexity param=0.0003359006  
## predicted class=1 expected loss=0.1898148 P(node) =0.002184908  
## class counts: 41 175  
## probabilities: 0.190 0.810   
## left son=2366 (14 obs) right son=2367 (202 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=19.653010, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=16.945600, (0 missing)  
## Flight.Distance < 301.5 to the left, improve=16.680280, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=13.333350, (0 missing)  
## Seat.comfort < 1.5 to the left, improve= 7.416818, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.972, adj=0.571, (0 split)  
## Age < 11.5 to the left, agree=0.940, adj=0.071, (0 split)  
##   
## Node number 1246: 140 observations  
## predicted class=0 expected loss=0.1 P(node) =0.001416144  
## class counts: 126 14  
## probabilities: 0.900 0.100   
##   
## Node number 1247: 199 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1859296 P(node) =0.002012948  
## class counts: 162 37  
## probabilities: 0.814 0.186   
## left son=2494 (168 obs) right son=2495 (31 obs)  
## Primary splits:  
## Age < 49.5 to the left, improve=2.0952770, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.6517323, (0 missing)  
## Inflight.service < 2.5 to the right, improve=0.5959181, (0 missing)  
## Departure.Delay.in.Minutes < 9.5 to the right, improve=0.5762846, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.5681964, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1489.5 to the left, agree=0.854, adj=0.065, (0 split)  
##   
## Node number 1264: 50 observations  
## predicted class=0 expected loss=0 P(node) =0.0005057657  
## class counts: 50 0  
## probabilities: 1.000 0.000   
##   
## Node number 1265: 100 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.23 P(node) =0.001011531  
## class counts: 77 23  
## probabilities: 0.770 0.230   
## left son=2530 (42 obs) right son=2531 (58 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the left, improve=3.641675, (0 missing)  
## Inflight.service < 3.5 to the left, improve=3.018930, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=2.630181, (0 missing)  
## Flight.Distance < 215.5 to the right, improve=2.505263, (0 missing)  
## Cleanliness < 3.5 to the left, improve=2.373488, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 1.5 to the left, agree=0.69, adj=0.262, (0 split)  
## Age < 54.5 to the right, agree=0.64, adj=0.143, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.62, adj=0.095, (0 split)  
## Flight.Distance < 3764 to the right, agree=0.60, adj=0.048, (0 split)  
## Male < 0.5 to the left, agree=0.60, adj=0.048, (0 split)  
##   
## Node number 1278: 25 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.24 P(node) =0.0002528829  
## class counts: 6 19  
## probabilities: 0.240 0.760   
## left son=2556 (8 obs) right son=2557 (17 obs)  
## Primary splits:  
## Age < 40 to the left, improve=3.4876470, (0 missing)  
## Flight.Distance < 2146 to the left, improve=3.4876470, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=2.2628570, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.9200000, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.8732468, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2146 to the left, agree=0.84, adj=0.500, (0 split)  
## Checkin.service < 3.5 to the right, agree=0.76, adj=0.250, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.76, adj=0.250, (0 split)  
## Departure.Delay.in.Minutes < 203 to the right, agree=0.72, adj=0.125, (0 split)  
##   
## Node number 1279: 1608 observations  
## predicted class=1 expected loss=0.0006218905 P(node) =0.01626543  
## class counts: 1 1607  
## probabilities: 0.001 0.999   
##   
## Node number 1298: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 1299: 13 observations  
## predicted class=1 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 3 10  
## probabilities: 0.231 0.769   
##   
## Node number 1314: 37 observations  
## predicted class=0 expected loss=0.08108108 P(node) =0.0003742666  
## class counts: 34 3  
## probabilities: 0.919 0.081   
##   
## Node number 1315: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 1320: 22 observations  
## predicted class=0 expected loss=0.04545455 P(node) =0.0002225369  
## class counts: 21 1  
## probabilities: 0.955 0.045   
##   
## Node number 1321: 125 observations, complexity param=4.198757e-05  
## predicted class=0 expected loss=0.28 P(node) =0.001264414  
## class counts: 90 35  
## probabilities: 0.720 0.280   
## left son=2642 (87 obs) right son=2643 (38 obs)  
## Primary splits:  
## Age < 60.5 to the left, improve=2.172535, (0 missing)  
## Online.boarding < 2.5 to the right, improve=2.167356, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.427228, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=1.371686, (0 missing)  
## Flight.Distance < 2569.5 to the left, improve=1.259564, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 119 to the right, agree=0.712, adj=0.053, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.704, adj=0.026, (0 split)  
##   
## Node number 1322: 28 observations  
## predicted class=0 expected loss=0.2857143 P(node) =0.0002832288  
## class counts: 20 8  
## probabilities: 0.714 0.286   
##   
## Node number 1323: 15 observations  
## predicted class=1 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 4 11  
## probabilities: 0.267 0.733   
##   
## Node number 1324: 26 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2307692 P(node) =0.0002629982  
## class counts: 20 6  
## probabilities: 0.769 0.231   
## left son=2648 (19 obs) right son=2649 (7 obs)  
## Primary splits:  
## Flight.Distance < 786 to the left, improve=2.2232500, (0 missing)  
## Age < 37.5 to the left, improve=1.2569130, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=1.0202430, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.0202430, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=0.4807692, (0 missing)  
##   
## Node number 1325: 66 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.4545455 P(node) =0.0006676108  
## class counts: 36 30  
## probabilities: 0.545 0.455   
## left son=2650 (37 obs) right son=2651 (29 obs)  
## Primary splits:  
## Flight.Distance < 501.5 to the right, improve=2.855884, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=2.327273, (0 missing)  
## Ease.of.Online.booking < 2.5 to the right, improve=2.227273, (0 missing)  
## Age < 20.5 to the left, improve=2.181818, (0 missing)  
## On.board.service < 4.5 to the right, improve=2.051449, (0 missing)  
## Surrogate splits:  
## Online.boarding < 2.5 to the right, agree=0.758, adj=0.448, (0 split)  
## Age < 28.5 to the left, agree=0.742, adj=0.414, (0 split)  
## Ease.of.Online.booking < 2.5 to the right, agree=0.742, adj=0.414, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.606, adj=0.103, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.606, adj=0.103, (0 split)  
##   
## Node number 1326: 11 observations  
## predicted class=0 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 6 5  
## probabilities: 0.545 0.455   
##   
## Node number 1327: 14 observations  
## predicted class=1 expected loss=0.1428571 P(node) =0.0001416144  
## class counts: 2 12  
## probabilities: 0.143 0.857   
##   
## Node number 1328: 65 observations  
## predicted class=0 expected loss=0.06153846 P(node) =0.0006574954  
## class counts: 61 4  
## probabilities: 0.938 0.062   
##   
## Node number 1329: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 1330: 39 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3076923 P(node) =0.0003944973  
## class counts: 27 12  
## probabilities: 0.692 0.308   
## left son=2660 (14 obs) right son=2661 (25 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=2.438242, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.662753, (0 missing)  
## Flight.Distance < 1159 to the right, improve=1.615385, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.615385, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=1.440060, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 707.5 to the left, agree=0.795, adj=0.429, (0 split)  
## Ease.of.Online.booking < 2.5 to the left, agree=0.795, adj=0.429, (0 split)  
## Gate.location < 1.5 to the left, agree=0.718, adj=0.214, (0 split)  
## EcoClass < 0.5 to the left, agree=0.718, adj=0.214, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.692, adj=0.143, (0 split)  
##   
## Node number 1331: 11 observations  
## predicted class=1 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 3 8  
## probabilities: 0.273 0.727   
##   
## Node number 1336: 186 observations, complexity param=0.0001139663  
## predicted class=0 expected loss=0.4892473 P(node) =0.001881449  
## class counts: 95 91  
## probabilities: 0.511 0.489   
## left son=2672 (169 obs) right son=2673 (17 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=7.642684, (0 missing)  
## Arrival.Delay.in.Minutes < 11.5 to the right, improve=5.987292, (0 missing)  
## Flight.Distance < 149.5 to the right, improve=3.794978, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=3.482129, (0 missing)  
## Age < 71 to the right, improve=3.202444, (0 missing)  
## Surrogate splits:  
## Age < 77.5 to the left, agree=0.914, adj=0.059, (0 split)  
##   
## Node number 1337: 22 observations  
## predicted class=1 expected loss=0.04545455 P(node) =0.0002225369  
## class counts: 1 21  
## probabilities: 0.045 0.955   
##   
## Node number 1370: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 1371: 104 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3365385 P(node) =0.001051993  
## class counts: 69 35  
## probabilities: 0.663 0.337   
## left son=2742 (96 obs) right son=2743 (8 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 3.5 to the left, improve=2.9631410, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the left, improve=1.4423080, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.1632380, (0 missing)  
## Age < 36.5 to the right, improve=1.0263580, (0 missing)  
## Flight.Distance < 2403.5 to the right, improve=0.9917582, (0 missing)  
##   
## Node number 1384: 70 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2714286 P(node) =0.000708072  
## class counts: 51 19  
## probabilities: 0.729 0.271   
## left son=2768 (59 obs) right son=2769 (11 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.959982, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.667499, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.400000, (0 missing)  
## LoyalCustomer < 0.5 to the right, improve=1.400000, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.167654, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.943, adj=0.636, (0 split)  
## Age < 25.5 to the right, agree=0.900, adj=0.364, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.886, adj=0.273, (0 split)  
## Baggage.handling < 1.5 to the right, agree=0.886, adj=0.273, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=0.871, adj=0.182, (0 split)  
##   
## Node number 1385: 7 observations  
## predicted class=1 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 2 5  
## probabilities: 0.286 0.714   
##   
## Node number 1396: 28 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3571429 P(node) =0.0002832288  
## class counts: 18 10  
## probabilities: 0.643 0.357   
## left son=2792 (15 obs) right son=2793 (13 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=1.5956040, (0 missing)  
## Cleanliness < 2.5 to the right, improve=1.5956040, (0 missing)  
## Flight.Distance < 398 to the right, improve=1.0442770, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=0.8571429, (0 missing)  
## Arrival.Delay.in.Minutes < 10 to the right, improve=0.8571429, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 13.5 to the right, agree=0.714, adj=0.385, (0 split)  
## Age < 55.5 to the left, agree=0.679, adj=0.308, (0 split)  
## Flight.Distance < 398 to the right, agree=0.643, adj=0.231, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.643, adj=0.231, (0 split)  
## Online.boarding < 2.5 to the right, agree=0.643, adj=0.231, (0 split)  
##   
## Node number 1397: 19 observations  
## predicted class=1 expected loss=0.2631579 P(node) =0.000192191  
## class counts: 5 14  
## probabilities: 0.263 0.737   
##   
## Node number 1400: 215 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.3302326 P(node) =0.002174793  
## class counts: 71 144  
## probabilities: 0.330 0.670   
## left son=2800 (175 obs) right son=2801 (40 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=9.156977, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=8.935548, (0 missing)  
## Cleanliness < 4.5 to the left, improve=8.217211, (0 missing)  
## Checkin.service < 4.5 to the left, improve=5.308710, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=3.975088, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=0.828, adj=0.075, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.823, adj=0.050, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.819, adj=0.025, (0 split)  
## LoyalCustomer < 0.5 to the right, agree=0.819, adj=0.025, (0 split)  
##   
## Node number 1401: 113 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.1150442 P(node) =0.001143031  
## class counts: 13 100  
## probabilities: 0.115 0.885   
## left son=2802 (25 obs) right son=2803 (88 obs)  
## Primary splits:  
## Cleanliness < 2.5 to the left, improve=5.213395, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=4.736122, (0 missing)  
## Flight.Distance < 343 to the left, improve=3.108580, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=2.551707, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.398460, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 2.5 to the left, agree=0.814, adj=0.16, (0 split)  
## Seat.comfort < 2.5 to the left, agree=0.814, adj=0.16, (0 split)  
## Flight.Distance < 269.5 to the left, agree=0.796, adj=0.08, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.796, adj=0.08, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.796, adj=0.08, (0 split)  
##   
## Node number 1402: 90 observations, complexity param=5.998225e-06  
## predicted class=1 expected loss=0.1444444 P(node) =0.0009103783  
## class counts: 13 77  
## probabilities: 0.144 0.856   
## left son=2804 (58 obs) right son=2805 (32 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the left, improve=2.072031, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.604444, (0 missing)  
## Arrival.Delay.in.Minutes < 15.5 to the right, improve=1.244444, (0 missing)  
## Age < 52.5 to the right, improve=1.016931, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.005008, (0 missing)  
## Surrogate splits:  
## Age < 61 to the left, agree=0.656, adj=0.031, (0 split)  
##   
## Node number 1403: 187 observations  
## predicted class=1 expected loss=0.05347594 P(node) =0.001891564  
## class counts: 10 177  
## probabilities: 0.053 0.947   
##   
## Node number 1620: 124 observations  
## predicted class=0 expected loss=0.07258065 P(node) =0.001254299  
## class counts: 115 9  
## probabilities: 0.927 0.073   
##   
## Node number 1621: 28 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.25 P(node) =0.0002832288  
## class counts: 21 7  
## probabilities: 0.750 0.250   
## left son=3242 (21 obs) right son=3243 (7 obs)  
## Primary splits:  
## Age < 40 to the left, improve=1.9285710, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.4000000, (0 missing)  
## Flight.Distance < 343 to the right, improve=1.1666670, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=0.7000000, (0 missing)  
## Male < 0.5 to the left, improve=0.6428571, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.857, adj=0.429, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.821, adj=0.286, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.821, adj=0.286, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.821, adj=0.286, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.786, adj=0.143, (0 split)  
##   
## Node number 1622: 229 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1528384 P(node) =0.002316407  
## class counts: 194 35  
## probabilities: 0.847 0.153   
## left son=3244 (135 obs) right son=3245 (94 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the right, improve=1.5879920, (0 missing)  
## Departure.Delay.in.Minutes < 25.5 to the left, improve=0.9987107, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.7035216, (0 missing)  
## Age < 13.5 to the right, improve=0.6803577, (0 missing)  
## Checkin.service < 2.5 to the right, improve=0.6035213, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.716, adj=0.309, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.703, adj=0.277, (0 split)  
## On.board.service < 2.5 to the right, agree=0.694, adj=0.255, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.686, adj=0.234, (0 split)  
## Age < 30.5 to the left, agree=0.607, adj=0.043, (0 split)  
##   
## Node number 1623: 115 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2434783 P(node) =0.001163261  
## class counts: 87 28  
## probabilities: 0.757 0.243   
## left son=3246 (22 obs) right son=3247 (93 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the left, improve=2.1335460, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.8944480, (0 missing)  
## Flight.Distance < 560.5 to the right, improve=1.4414080, (0 missing)  
## Departure.Delay.in.Minutes < 5.5 to the right, improve=0.9529367, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.8514811, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the left, agree=0.852, adj=0.227, (0 split)  
## BusinessClass < 0.5 to the right, agree=0.852, adj=0.227, (0 split)  
## Flight.Distance < 2478.5 to the right, agree=0.826, adj=0.091, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.817, adj=0.045, (0 split)  
##   
## Node number 1632: 22 observations  
## predicted class=0 expected loss=0.09090909 P(node) =0.0002225369  
## class counts: 20 2  
## probabilities: 0.909 0.091   
##   
## Node number 1633: 857 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2555426 P(node) =0.008668825  
## class counts: 638 219  
## probabilities: 0.744 0.256   
## left son=3266 (48 obs) right son=3267 (809 obs)  
## Primary splits:  
## Flight.Distance < 134.5 to the left, improve=1.2240240, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.1879110, (0 missing)  
## Checkin.service < 4.5 to the right, improve=0.9760570, (0 missing)  
## Male < 0.5 to the right, improve=0.9683034, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.8811465, (0 missing)  
##   
## Node number 1634: 426 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.2934272 P(node) =0.004309124  
## class counts: 301 125  
## probabilities: 0.707 0.293   
## left son=3268 (94 obs) right son=3269 (332 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the right, improve=2.010791, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.362817, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.275624, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the left, improve=1.263496, (0 missing)  
## Flight.Distance < 1978 to the right, improve=1.114669, (0 missing)  
##   
## Node number 1635: 167 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.3832335 P(node) =0.001689258  
## class counts: 103 64  
## probabilities: 0.617 0.383   
## left son=3270 (8 obs) right son=3271 (159 obs)  
## Primary splits:  
## Age < 67.5 to the right, improve=2.4681200, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=2.4681200, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.6800500, (0 missing)  
## Flight.Distance < 1850.5 to the left, improve=1.4840240, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.9888428, (0 missing)  
##   
## Node number 1640: 23 observations  
## predicted class=0 expected loss=0.04347826 P(node) =0.0002326522  
## class counts: 22 1  
## probabilities: 0.957 0.043   
##   
## Node number 1641: 33 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.2727273 P(node) =0.0003338054  
## class counts: 24 9  
## probabilities: 0.727 0.273   
## left son=3282 (8 obs) right son=3283 (25 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the right, improve=1.5709090, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.0909090, (0 missing)  
## Flight.Distance < 645 to the right, improve=1.0686870, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.7813853, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.7813853, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.848, adj=0.375, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.848, adj=0.375, (0 split)  
## Checkin.service < 4.5 to the right, agree=0.818, adj=0.250, (0 split)  
## Flight.Distance < 2206.5 to the right, agree=0.788, adj=0.125, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.788, adj=0.125, (0 split)  
##   
## Node number 1642: 1094 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.321755 P(node) =0.01106615  
## class counts: 742 352  
## probabilities: 0.678 0.322   
## left son=3284 (35 obs) right son=3285 (1059 obs)  
## Primary splits:  
## Flight.Distance < 2305 to the right, improve=2.314354, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.391420, (0 missing)  
## Age < 12.5 to the right, improve=1.250177, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.203672, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=1.189254, (0 missing)  
##   
## Node number 1643: 9 observations  
## predicted class=1 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 3 6  
## probabilities: 0.333 0.667   
##   
## Node number 1646: 50 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0005057657  
## class counts: 30 20  
## probabilities: 0.600 0.400   
## left son=3292 (23 obs) right son=3293 (27 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the left, improve=1.6489530, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.2727270, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.2426470, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.1477080, (0 missing)  
## Flight.Distance < 584.5 to the right, improve=0.7857143, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.78, adj=0.522, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.74, adj=0.435, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.70, adj=0.348, (0 split)  
## Age < 33.5 to the right, agree=0.64, adj=0.217, (0 split)  
## On.board.service < 1.5 to the left, agree=0.64, adj=0.217, (0 split)  
##   
## Node number 1647: 31 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3548387 P(node) =0.0003135748  
## class counts: 11 20  
## probabilities: 0.355 0.645   
## left son=3294 (11 obs) right son=3295 (20 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the right, improve=1.2390030, (0 missing)  
## Age < 49.5 to the left, improve=1.0086740, (0 missing)  
## Flight.Distance < 855.5 to the left, improve=0.8125960, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.7078341, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=0.5097877, (0 missing)  
## Surrogate splits:  
## Age < 39.5 to the left, agree=0.742, adj=0.273, (0 split)  
## Flight.Distance < 371 to the left, agree=0.710, adj=0.182, (0 split)  
## Gate.location < 1.5 to the left, agree=0.677, adj=0.091, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.677, adj=0.091, (0 split)  
## On.board.service < 2.5 to the left, agree=0.677, adj=0.091, (0 split)  
##   
## Node number 1654: 119 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3697479 P(node) =0.001203722  
## class counts: 75 44  
## probabilities: 0.630 0.370   
## left son=3308 (109 obs) right son=3309 (10 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 4.5 to the left, improve=2.381451, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.668315, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.290756, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.128852, (0 missing)  
## Flight.Distance < 927.5 to the left, improve=1.118665, (0 missing)  
##   
## Node number 1655: 15 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001517297  
## class counts: 5 10  
## probabilities: 0.333 0.667   
##   
## Node number 1792: 1211 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.0297275 P(node) =0.01224965  
## class counts: 1175 36  
## probabilities: 0.970 0.030   
## left son=3584 (1200 obs) right son=3585 (11 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=5.905075, (0 missing)  
## Inflight.service < 4.5 to the left, improve=5.707293, (0 missing)  
## Inflight.wifi.service < 3.5 to the left, improve=3.239147, (0 missing)  
## BusinessClass < 0.5 to the right, improve=2.396790, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.700216, (0 missing)  
##   
## Node number 1793: 18 observations  
## predicted class=1 expected loss=0.4444444 P(node) =0.0001820757  
## class counts: 8 10  
## probabilities: 0.444 0.556   
##   
## Node number 1794: 66 observations  
## predicted class=0 expected loss=0.1363636 P(node) =0.0006676108  
## class counts: 57 9  
## probabilities: 0.864 0.136   
##   
## Node number 1795: 22 observations  
## predicted class=1 expected loss=0.1363636 P(node) =0.0002225369  
## class counts: 3 19  
## probabilities: 0.136 0.864   
##   
## Node number 1800: 143 observations  
## predicted class=0 expected loss=0.1678322 P(node) =0.00144649  
## class counts: 119 24  
## probabilities: 0.832 0.168   
##   
## Node number 1801: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 1812: 56 observations  
## predicted class=0 expected loss=0.2142857 P(node) =0.0005664576  
## class counts: 44 12  
## probabilities: 0.786 0.214   
##   
## Node number 1813: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 1816: 23 observations  
## predicted class=0 expected loss=0.2173913 P(node) =0.0002326522  
## class counts: 18 5  
## probabilities: 0.783 0.217   
##   
## Node number 1817: 8 observations  
## predicted class=1 expected loss=0 P(node) =8.092252e-05  
## class counts: 0 8  
## probabilities: 0.000 1.000   
##   
## Node number 1820: 7 observations  
## predicted class=0 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 4 3  
## probabilities: 0.571 0.429   
##   
## Node number 1821: 32 observations  
## predicted class=1 expected loss=0.1875 P(node) =0.0003236901  
## class counts: 6 26  
## probabilities: 0.187 0.812   
##   
## Node number 1824: 557 observations  
## predicted class=0 expected loss=0.007181329 P(node) =0.00563423  
## class counts: 553 4  
## probabilities: 0.993 0.007   
##   
## Node number 1825: 56 observations, complexity param=0.000107968  
## predicted class=0 expected loss=0.1785714 P(node) =0.0005664576  
## class counts: 46 10  
## probabilities: 0.821 0.179   
## left son=3650 (47 obs) right son=3651 (9 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=14.471120, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=10.821010, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=10.795920, (0 missing)  
## Inflight.wifi.service < 2.5 to the right, improve= 9.053571, (0 missing)  
## Flight.Distance < 1392.5 to the left, improve= 5.109422, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.964, adj=0.778, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.964, adj=0.778, (0 split)  
## Inflight.wifi.service < 2.5 to the right, agree=0.946, adj=0.667, (0 split)  
## Flight.Distance < 1954.5 to the left, agree=0.929, adj=0.556, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.911, adj=0.444, (0 split)  
##   
## Node number 1826: 14 observations  
## predicted class=0 expected loss=0 P(node) =0.0001416144  
## class counts: 14 0  
## probabilities: 1.000 0.000   
##   
## Node number 1827: 13 observations  
## predicted class=1 expected loss=0 P(node) =0.0001314991  
## class counts: 0 13  
## probabilities: 0.000 1.000   
##   
## Node number 1828: 275 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.05090909 P(node) =0.002781712  
## class counts: 261 14  
## probabilities: 0.949 0.051   
## left son=3656 (178 obs) right son=3657 (97 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the right, improve=2.615783, (0 missing)  
## Age < 28.5 to the right, improve=1.496994, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.487589, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.301085, (0 missing)  
## Flight.Distance < 1187 to the right, improve=1.170572, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.931, adj=0.804, (0 split)  
## Flight.Distance < 1384 to the right, agree=0.731, adj=0.237, (0 split)  
## LoyalCustomer < 0.5 to the right, agree=0.716, adj=0.196, (0 split)  
## Age < 28.5 to the right, agree=0.713, adj=0.186, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.698, adj=0.144, (0 split)  
##   
## Node number 1829: 9 observations  
## predicted class=1 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 1 8  
## probabilities: 0.111 0.889   
##   
## Node number 1830: 853 observations, complexity param=0.001055688  
## predicted class=1 expected loss=0.4724502 P(node) =0.008628363  
## class counts: 403 450  
## probabilities: 0.472 0.528   
## left son=3660 (650 obs) right son=3661 (203 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=49.55124, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=49.23829, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=48.59097, (0 missing)  
## BusinessClass < 0.5 to the left, improve=47.07149, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=37.87405, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 3.5 to the left, agree=0.801, adj=0.163, (0 split)  
## Departure.Delay.in.Minutes < 133.5 to the left, agree=0.787, adj=0.103, (0 split)  
## Arrival.Delay.in.Minutes < 128.5 to the left, agree=0.778, adj=0.069, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.776, adj=0.059, (0 split)  
## Flight.Distance < 4116.5 to the left, agree=0.764, adj=0.010, (0 split)  
##   
## Node number 1831: 191 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.03141361 P(node) =0.001932025  
## class counts: 6 185  
## probabilities: 0.031 0.969   
## left son=3662 (10 obs) right son=3663 (181 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=6.823037, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=3.858331, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.359400, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.223595, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.007652, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.979, adj=0.6, (0 split)  
##   
## Node number 1832: 500 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.288 P(node) =0.005057657  
## class counts: 356 144  
## probabilities: 0.712 0.288   
## left son=3664 (415 obs) right son=3665 (85 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=9.723328, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=9.344720, (0 missing)  
## Checkin.service < 4.5 to the left, improve=9.342305, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=8.242992, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=7.229669, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.928, adj=0.576, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.926, adj=0.565, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.924, adj=0.553, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.898, adj=0.400, (0 split)  
## Arrival.Delay.in.Minutes < 119 to the left, agree=0.888, adj=0.341, (0 split)  
##   
## Node number 1833: 101 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.3069307 P(node) =0.001021647  
## class counts: 31 70  
## probabilities: 0.307 0.693   
## left son=3666 (68 obs) right son=3667 (33 obs)  
## Primary splits:  
## Leg.room.service < 2.5 to the right, improve=4.574575, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=3.851249, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=3.319134, (0 missing)  
## Cleanliness < 3.5 to the left, improve=3.319134, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=3.026780, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.713, adj=0.121, (0 split)  
## Flight.Distance < 251 to the right, agree=0.703, adj=0.091, (0 split)  
## Departure.Delay.in.Minutes < 147 to the left, agree=0.703, adj=0.091, (0 split)  
## Arrival.Delay.in.Minutes < 169.5 to the left, agree=0.703, adj=0.091, (0 split)  
##   
## Node number 1834: 150 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.3466667 P(node) =0.001517297  
## class counts: 52 98  
## probabilities: 0.347 0.653   
## left son=3668 (24 obs) right son=3669 (126 obs)  
## Primary splits:  
## Age < 25.5 to the right, improve=7.474444, (0 missing)  
## Inflight.service < 1.5 to the left, improve=5.278256, (0 missing)  
## Flight.Distance < 1392.5 to the left, improve=2.031174, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.681664, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.681664, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.873, adj=0.208, (0 split)  
## Flight.Distance < 111 to the left, agree=0.853, adj=0.083, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.853, adj=0.083, (0 split)  
## EcoClass < 0.5 to the left, agree=0.853, adj=0.083, (0 split)  
##   
## Node number 1835: 28 observations  
## predicted class=1 expected loss=0 P(node) =0.0002832288  
## class counts: 0 28  
## probabilities: 0.000 1.000   
##   
## Node number 1836: 844 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.3696682 P(node) =0.008537326  
## class counts: 312 532  
## probabilities: 0.370 0.630   
## left son=3672 (437 obs) right son=3673 (407 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=19.60918, (0 missing)  
## Cleanliness < 4.5 to the left, improve=13.60305, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=12.69353, (0 missing)  
## Inflight.service < 1.5 to the left, improve=12.01311, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=11.76282, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.746, adj=0.474, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.712, adj=0.403, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.685, adj=0.346, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.681, adj=0.339, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.667, adj=0.310, (0 split)  
##   
## Node number 1837: 241 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.05394191 P(node) =0.002437791  
## class counts: 13 228  
## probabilities: 0.054 0.946   
## left son=3674 (21 obs) right son=3675 (220 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=6.457251, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=3.270304, (0 missing)  
## On.board.service < 2.5 to the left, improve=2.291399, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=1.520294, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=1.317510, (0 missing)  
## Surrogate splits:  
## On.board.service < 1.5 to the left, agree=0.946, adj=0.381, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.934, adj=0.238, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.925, adj=0.143, (0 split)  
## Ease.of.Online.booking < 2.5 to the left, agree=0.921, adj=0.095, (0 split)  
## Departure.Delay.in.Minutes < 158.5 to the right, agree=0.921, adj=0.095, (0 split)  
##   
## Node number 1862: 8 observations  
## predicted class=0 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 6 2  
## probabilities: 0.750 0.250   
##   
## Node number 1863: 12 observations  
## predicted class=1 expected loss=0.25 P(node) =0.0001213838  
## class counts: 3 9  
## probabilities: 0.250 0.750   
##   
## Node number 1890: 24 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.375 P(node) =0.0002427676  
## class counts: 15 9  
## probabilities: 0.625 0.375   
## left son=3780 (10 obs) right son=3781 (14 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=2.5928570, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the right, improve=1.5000000, (0 missing)  
## Flight.Distance < 587 to the right, improve=0.7500000, (0 missing)  
## Age < 36.5 to the left, improve=0.5357143, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.5357143, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.917, adj=0.8, (0 split)  
## Flight.Distance < 860.5 to the right, agree=0.708, adj=0.3, (0 split)  
## Male < 0.5 to the left, agree=0.708, adj=0.3, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.625, adj=0.1, (0 split)  
## Gate.location < 3.5 to the right, agree=0.625, adj=0.1, (0 split)  
##   
## Node number 1891: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 1922: 24 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.25 P(node) =0.0002427676  
## class counts: 18 6  
## probabilities: 0.750 0.250   
## left son=3844 (17 obs) right son=3845 (7 obs)  
## Primary splits:  
## Flight.Distance < 902.5 to the left, improve=2.0420170, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.7714286, (0 missing)  
## Checkin.service < 2.5 to the right, improve=0.6302521, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.6302521, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=0.5555556, (0 missing)  
## Surrogate splits:  
## Age < 25.5 to the right, agree=0.792, adj=0.286, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.792, adj=0.286, (0 split)  
## Arrival.Delay.in.Minutes < 5.5 to the left, agree=0.750, adj=0.143, (0 split)  
##   
## Node number 1923: 11 observations  
## predicted class=1 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 4 7  
## probabilities: 0.364 0.636   
##   
## Node number 1924: 26 observations  
## predicted class=0 expected loss=0.1923077 P(node) =0.0002629982  
## class counts: 21 5  
## probabilities: 0.808 0.192   
##   
## Node number 1925: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 1932: 79 observations, complexity param=0.0001199645  
## predicted class=0 expected loss=0.164557 P(node) =0.0007991099  
## class counts: 66 13  
## probabilities: 0.835 0.165   
## left son=3864 (68 obs) right son=3865 (11 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=8.0931770, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=5.1215190, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.5913600, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.0085940, (0 missing)  
## Departure.Delay.in.Minutes < 19.5 to the right, improve=0.8427311, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.899, adj=0.273, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.886, adj=0.182, (0 split)  
##   
## Node number 1933: 215 observations, complexity param=0.0002639219  
## predicted class=0 expected loss=0.4744186 P(node) =0.002174793  
## class counts: 113 102  
## probabilities: 0.526 0.474   
## left son=3866 (73 obs) right son=3867 (142 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=8.881734, (0 missing)  
## Age < 14.5 to the left, improve=8.309514, (0 missing)  
## Checkin.service < 4.5 to the left, improve=4.124126, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=3.759557, (0 missing)  
## Inflight.service < 3.5 to the left, improve=3.658034, (0 missing)  
## Surrogate splits:  
## Checkin.service < 1.5 to the left, agree=0.712, adj=0.151, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.707, adj=0.137, (0 split)  
## Departure.Delay.in.Minutes < 25.5 to the right, agree=0.693, adj=0.096, (0 split)  
## Arrival.Delay.in.Minutes < 77 to the right, agree=0.679, adj=0.055, (0 split)  
## Flight.Distance < 1492.5 to the right, agree=0.674, adj=0.041, (0 split)  
##   
## Node number 1934: 98 observations, complexity param=8.397514e-05  
## predicted class=1 expected loss=0.4183673 P(node) =0.0009913008  
## class counts: 41 57  
## probabilities: 0.418 0.582   
## left son=3868 (15 obs) right son=3869 (83 obs)  
## Primary splits:  
## Flight.Distance < 690.5 to the right, improve=3.5139580, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=1.6343540, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.4246470, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.2523190, (0 missing)  
## Departure.Delay.in.Minutes < 7.5 to the left, improve=0.9406308, (0 missing)  
##   
## Node number 1935: 45 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0004551892  
## class counts: 9 36  
## probabilities: 0.200 0.800   
##   
## Node number 1944: 19 observations  
## predicted class=0 expected loss=0.05263158 P(node) =0.000192191  
## class counts: 18 1  
## probabilities: 0.947 0.053   
##   
## Node number 1945: 21 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3809524 P(node) =0.0002124216  
## class counts: 13 8  
## probabilities: 0.619 0.381   
## left son=3890 (9 obs) right son=3891 (12 obs)  
## Primary splits:  
## Flight.Distance < 597.5 to the right, improve=2.2936510, (0 missing)  
## Age < 37.5 to the left, improve=1.6932230, (0 missing)  
## Male < 0.5 to the right, improve=1.2502160, (0 missing)  
## Departure.Delay.in.Minutes < 5 to the left, improve=0.7619048, (0 missing)  
## Inflight.service < 2.5 to the right, improve=0.5411255, (0 missing)  
## Surrogate splits:  
## Age < 36 to the left, agree=0.714, adj=0.333, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.714, adj=0.333, (0 split)  
##   
## Node number 1946: 246 observations, complexity param=0.0004558651  
## predicted class=1 expected loss=0.4715447 P(node) =0.002488367  
## class counts: 116 130  
## probabilities: 0.472 0.528   
## left son=3892 (54 obs) right son=3893 (192 obs)  
## Primary splits:  
## Age < 30.5 to the right, improve=38.643290, (0 missing)  
## Flight.Distance < 1510.5 to the right, improve= 5.806171, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 4.850223, (0 missing)  
## Departure.Delay.in.Minutes < 20.5 to the left, improve= 3.204944, (0 missing)  
## Arrival.Delay.in.Minutes < 27.5 to the left, improve= 3.147967, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 124.5 to the right, agree=0.789, adj=0.037, (0 split)  
## Arrival.Delay.in.Minutes < 112 to the right, agree=0.789, adj=0.037, (0 split)  
##   
## Node number 1947: 230 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.2956522 P(node) =0.002326522  
## class counts: 68 162  
## probabilities: 0.296 0.704   
## left son=3894 (53 obs) right son=3895 (177 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=1.965060, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.600388, (0 missing)  
## Flight.Distance < 1510 to the right, improve=1.495850, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.348351, (0 missing)  
## Age < 47.5 to the left, improve=1.167528, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 16.5 to the right, agree=0.896, adj=0.547, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.778, adj=0.038, (0 split)  
## Flight.Distance < 2530 to the right, agree=0.774, adj=0.019, (0 split)  
##   
## Node number 1984: 876 observations, complexity param=0.0006334125  
## predicted class=0 expected loss=0.3721461 P(node) =0.008861016  
## class counts: 550 326  
## probabilities: 0.628 0.372   
## left son=3968 (821 obs) right son=3969 (55 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=46.26694, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=27.03998, (0 missing)  
## On.board.service < 4.5 to the left, improve=25.33706, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=17.42620, (0 missing)  
## Age < 32.5 to the left, improve=15.04775, (0 missing)  
##   
## Node number 1985: 150 observations, complexity param=0.0002159361  
## predicted class=1 expected loss=0.1933333 P(node) =0.001517297  
## class counts: 29 121  
## probabilities: 0.193 0.807   
## left son=3970 (25 obs) right son=3971 (125 obs)  
## Primary splits:  
## Flight.Distance < 1589.5 to the right, improve=14.210670, (0 missing)  
## BusinessClass < 0.5 to the right, improve= 7.053333, (0 missing)  
## Baggage.handling < 1.5 to the right, improve= 5.672271, (0 missing)  
## Age < 28.5 to the left, improve= 4.320000, (0 missing)  
## On.board.service < 2.5 to the left, improve= 3.660976, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the right, agree=0.887, adj=0.32, (0 split)  
## Age < 16.5 to the left, agree=0.853, adj=0.12, (0 split)  
##   
## Node number 1986: 14 observations  
## predicted class=0 expected loss=0 P(node) =0.0001416144  
## class counts: 14 0  
## probabilities: 1.000 0.000   
##   
## Node number 1987: 224 observations, complexity param=0.0002159361  
## predicted class=1 expected loss=0.1071429 P(node) =0.00226583  
## class counts: 24 200  
## probabilities: 0.107 0.893   
## left son=3974 (9 obs) right son=3975 (215 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=14.950170, (0 missing)  
## EcoClass < 0.5 to the right, improve=11.520740, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 3.846568, (0 missing)  
## Flight.Distance < 223.5 to the left, improve= 3.209978, (0 missing)  
## Age < 66.5 to the right, improve= 3.115207, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.991, adj=0.778, (0 split)  
##   
## Node number 1990: 287 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.184669 P(node) =0.002903095  
## class counts: 53 234  
## probabilities: 0.185 0.815   
## left son=3980 (163 obs) right son=3981 (124 obs)  
## Primary splits:  
## Inflight.service < 1.5 to the right, improve=8.110027, (0 missing)  
## On.board.service < 4.5 to the left, improve=4.640604, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=4.575215, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=4.368565, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=3.916689, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 101.5 to the right, agree=0.585, adj=0.040, (0 split)  
## On.board.service < 4.5 to the left, agree=0.578, adj=0.024, (0 split)  
## Arrival.Delay.in.Minutes < 81 to the left, agree=0.575, adj=0.016, (0 split)  
##   
## Node number 1991: 156 observations  
## predicted class=1 expected loss=0 P(node) =0.001577989  
## class counts: 0 156  
## probabilities: 0.000 1.000   
##   
## Node number 1996: 16 observations  
## predicted class=0 expected loss=0.3125 P(node) =0.000161845  
## class counts: 11 5  
## probabilities: 0.688 0.312   
##   
## Node number 1997: 121 observations  
## predicted class=1 expected loss=0 P(node) =0.001223953  
## class counts: 0 121  
## probabilities: 0.000 1.000   
##   
## Node number 2016: 662 observations, complexity param=0.0003187628  
## predicted class=1 expected loss=0.4456193 P(node) =0.006696338  
## class counts: 295 367  
## probabilities: 0.446 0.554   
## left son=4032 (527 obs) right son=4033 (135 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=33.076240, (0 missing)  
## On.board.service < 4.5 to the left, improve=25.772060, (0 missing)  
## Age < 25.5 to the left, improve=11.097370, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve= 9.414065, (0 missing)  
## Departure.Delay.in.Minutes < 12.5 to the right, improve= 7.723963, (0 missing)  
## Surrogate splits:  
## Age < 75.5 to the left, agree=0.799, adj=0.015, (0 split)  
##   
## Node number 2017: 312 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.1282051 P(node) =0.003155978  
## class counts: 40 272  
## probabilities: 0.128 0.872   
## left son=4034 (11 obs) right son=4035 (301 obs)  
## Primary splits:  
## Flight.Distance < 1648.5 to the right, improve=5.888561, (0 missing)  
## Inflight.service < 3.5 to the left, improve=5.604006, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=3.096259, (0 missing)  
## On.board.service < 4.5 to the left, improve=2.543590, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.536495, (0 missing)  
##   
## Node number 2032: 39 observations  
## predicted class=0 expected loss=0 P(node) =0.0003944973  
## class counts: 39 0  
## probabilities: 1.000 0.000   
##   
## Node number 2033: 210 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.2190476 P(node) =0.002124216  
## class counts: 46 164  
## probabilities: 0.219 0.781   
## left son=4066 (122 obs) right son=4067 (88 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=9.129288, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=6.487567, (0 missing)  
## On.board.service < 4.5 to the left, improve=5.496104, (0 missing)  
## Inflight.service < 4.5 to the left, improve=5.496104, (0 missing)  
## Checkin.service < 4.5 to the left, improve=4.596157, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.876, adj=0.705, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.867, adj=0.682, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.838, adj=0.614, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.624, adj=0.102, (0 split)  
## Departure.Delay.in.Minutes < 150.5 to the left, agree=0.610, adj=0.068, (0 split)  
##   
## Node number 2034: 23 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3478261 P(node) =0.0002326522  
## class counts: 15 8  
## probabilities: 0.652 0.348   
## left son=4068 (9 obs) right son=4069 (14 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the left, improve=3.577640, (0 missing)  
## Arrival.Delay.in.Minutes < 2 to the right, improve=2.968116, (0 missing)  
## Age < 48.5 to the left, improve=2.783267, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=2.173244, (0 missing)  
## Gate.location < 2.5 to the right, improve=2.173244, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 0.5 to the right, agree=0.783, adj=0.444, (0 split)  
## Arrival.Delay.in.Minutes < 2 to the right, agree=0.783, adj=0.444, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.739, adj=0.333, (0 split)  
## Age < 41.5 to the left, agree=0.696, adj=0.222, (0 split)  
## Inflight.wifi.service < 2.5 to the left, agree=0.696, adj=0.222, (0 split)  
##   
## Node number 2035: 256 observations  
## predicted class=1 expected loss=0.03125 P(node) =0.002589521  
## class counts: 8 248  
## probabilities: 0.031 0.969   
##   
## Node number 2040: 35 observations  
## predicted class=0 expected loss=0 P(node) =0.000354036  
## class counts: 35 0  
## probabilities: 1.000 0.000   
##   
## Node number 2041: 158 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.1518987 P(node) =0.00159822  
## class counts: 24 134  
## probabilities: 0.152 0.848   
## left son=4082 (84 obs) right son=4083 (74 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=6.423146, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=5.950240, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=4.760159, (0 missing)  
## On.board.service < 4.5 to the left, improve=4.760159, (0 missing)  
## Inflight.service < 4.5 to the left, improve=4.760159, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.620, adj=0.189, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.614, adj=0.176, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.595, adj=0.135, (0 split)  
## On.board.service < 4.5 to the left, agree=0.595, adj=0.135, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.595, adj=0.135, (0 split)  
##   
## Node number 2044: 161 observations, complexity param=0.0002319313  
## predicted class=1 expected loss=0.2546584 P(node) =0.001628566  
## class counts: 41 120  
## probabilities: 0.255 0.745   
## left son=4088 (29 obs) right son=4089 (132 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=39.29983, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=35.55409, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=19.28759, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=13.77781, (0 missing)  
## Online.boarding < 4.5 to the left, improve=11.13706, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.963, adj=0.793, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.913, adj=0.517, (0 split)  
## Age < 21.5 to the left, agree=0.832, adj=0.069, (0 split)  
##   
## Node number 2045: 166 observations  
## predicted class=1 expected loss=0 P(node) =0.001679142  
## class counts: 0 166  
## probabilities: 0.000 1.000   
##   
## Node number 2046: 392 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.09183673 P(node) =0.003965203  
## class counts: 36 356  
## probabilities: 0.092 0.908   
## left son=4092 (155 obs) right son=4093 (237 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=10.110340, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve= 6.817807, (0 missing)  
## Online.boarding < 4.5 to the left, improve= 5.556769, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 5.349670, (0 missing)  
## Leg.room.service < 4.5 to the left, improve= 5.223372, (0 missing)  
## Surrogate splits:  
## Age < 33.5 to the left, agree=0.625, adj=0.052, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.622, adj=0.045, (0 split)  
## On.board.service < 3.5 to the left, agree=0.615, adj=0.026, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.612, adj=0.019, (0 split)  
## Flight.Distance < 95 to the left, agree=0.610, adj=0.013, (0 split)  
##   
## Node number 2047: 19568 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.003781684 P(node) =0.1979365  
## class counts: 74 19494  
## probabilities: 0.004 0.996   
## left son=4094 (325 obs) right son=4095 (19243 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=4.1560550, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=3.4731340, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=1.7849590, (0 missing)  
## Age < 25.5 to the left, improve=1.1264160, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=0.8336949, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.984, adj=0.012, (0 split)  
##   
## Node number 2142: 15 observations  
## predicted class=0 expected loss=0 P(node) =0.0001517297  
## class counts: 15 0  
## probabilities: 1.000 0.000   
##   
## Node number 2143: 20 observations, complexity param=3.998816e-06  
## predicted class=0 expected loss=0.35 P(node) =0.0002023063  
## class counts: 13 7  
## probabilities: 0.650 0.350   
## left son=4286 (13 obs) right son=4287 (7 obs)  
## Primary splits:  
## On.board.service < 3.5 to the right, improve=1.0560440, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.0560440, (0 missing)  
## Departure.Delay.in.Minutes < 37.5 to the right, improve=0.9241758, (0 missing)  
## Flight.Distance < 1231 to the left, improve=0.6000000, (0 missing)  
## Male < 0.5 to the right, improve=0.6000000, (0 missing)  
## Surrogate splits:  
## Age < 27.5 to the left, agree=0.75, adj=0.286, (0 split)  
## Flight.Distance < 1440 to the left, agree=0.75, adj=0.286, (0 split)  
## Departure.Delay.in.Minutes < 10 to the right, agree=0.75, adj=0.286, (0 split)  
## Arrival.Delay.in.Minutes < 123.5 to the left, agree=0.75, adj=0.286, (0 split)  
## Male < 0.5 to the right, agree=0.75, adj=0.286, (0 split)  
##   
## Node number 2144: 3031 observations, complexity param=0.0001439574  
## predicted class=0 expected loss=0.04025074 P(node) =0.03065952  
## class counts: 2909 122  
## probabilities: 0.960 0.040   
## left son=4288 (3024 obs) right son=4289 (7 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=12.925510, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 4.410663, (0 missing)  
## Inflight.service < 2.5 to the right, improve= 3.429438, (0 missing)  
## Age < 33.5 to the left, improve= 3.362167, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve= 2.516320, (0 missing)  
##   
## Node number 2145: 63 observations, complexity param=0.0001439574  
## predicted class=0 expected loss=0.3809524 P(node) =0.0006372648  
## class counts: 39 24  
## probabilities: 0.619 0.381   
## left son=4290 (36 obs) right son=4291 (27 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=9.843915, (0 missing)  
## Flight.Distance < 702.5 to the right, improve=7.023377, (0 missing)  
## Departure.Delay.in.Minutes < 1.5 to the right, improve=6.567108, (0 missing)  
## Online.boarding < 1.5 to the left, improve=4.754286, (0 missing)  
## Age < 33.5 to the left, improve=4.302521, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 1.5 to the right, agree=0.873, adj=0.704, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=0.635, adj=0.148, (0 split)  
## Baggage.handling < 1.5 to the right, agree=0.619, adj=0.111, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.619, adj=0.111, (0 split)  
## Age < 63 to the left, agree=0.603, adj=0.074, (0 split)  
##   
## Node number 2176: 520 observations  
## predicted class=0 expected loss=0 P(node) =0.005259964  
## class counts: 520 0  
## probabilities: 1.000 0.000   
##   
## Node number 2177: 1129 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.03897254 P(node) =0.01142019  
## class counts: 1085 44  
## probabilities: 0.961 0.039   
## left son=4354 (1048 obs) right son=4355 (81 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the left, improve=0.9082026, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=0.7450455, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=0.7160266, (0 missing)  
## Flight.Distance < 402.5 to the right, improve=0.5537180, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.5488209, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the left, agree=0.931, adj=0.037, (0 split)  
##   
## Node number 2184: 510 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.08823529 P(node) =0.00515881  
## class counts: 465 45  
## probabilities: 0.912 0.088   
## left son=4368 (491 obs) right son=4369 (19 obs)  
## Primary splits:  
## Flight.Distance < 109.5 to the right, improve=4.372040, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=2.390456, (0 missing)  
## Male < 0.5 to the left, improve=1.953422, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.703651, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=1.547159, (0 missing)  
##   
## Node number 2185: 15 observations  
## predicted class=0 expected loss=0.4666667 P(node) =0.0001517297  
## class counts: 8 7  
## probabilities: 0.533 0.467   
##   
## Node number 2186: 20 observations  
## predicted class=0 expected loss=0 P(node) =0.0002023063  
## class counts: 20 0  
## probabilities: 1.000 0.000   
##   
## Node number 2187: 26 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.3461538 P(node) =0.0002629982  
## class counts: 9 17  
## probabilities: 0.346 0.654   
## left son=4374 (10 obs) right son=4375 (16 obs)  
## Primary splits:  
## Flight.Distance < 1804.5 to the right, improve=9.9692310, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=2.7692310, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.0549450, (0 missing)  
## Age < 41 to the right, improve=1.0298370, (0 missing)  
## Checkin.service < 1.5 to the right, improve=0.6942308, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.769, adj=0.4, (0 split)  
## Age < 34 to the left, agree=0.692, adj=0.2, (0 split)  
## Inflight.wifi.service < 1.5 to the left, agree=0.692, adj=0.2, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.692, adj=0.2, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.692, adj=0.2, (0 split)  
##   
## Node number 2352: 3096 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.06007752 P(node) =0.03131701  
## class counts: 2910 186  
## probabilities: 0.940 0.060   
## left son=4704 (2954 obs) right son=4705 (142 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=16.535500, (0 missing)  
## Inflight.service < 4.5 to the left, improve=16.375890, (0 missing)  
## Gate.location < 1.5 to the left, improve= 7.211003, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve= 6.626673, (0 missing)  
## Baggage.handling < 3.5 to the left, improve= 4.803558, (0 missing)  
##   
## Node number 2353: 61 observations, complexity param=0.0002639219  
## predicted class=1 expected loss=0.4754098 P(node) =0.0006170342  
## class counts: 29 32  
## probabilities: 0.475 0.525   
## left son=4706 (35 obs) right son=4707 (26 obs)  
## Primary splits:  
## Flight.Distance < 1364.5 to the left, improve=14.391060, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=11.807180, (0 missing)  
## Age < 33 to the left, improve= 8.222148, (0 missing)  
## BusinessTravel < 0.5 to the left, improve= 6.583092, (0 missing)  
## Cleanliness < 3.5 to the left, improve= 5.564074, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.738, adj=0.385, (0 split)  
## Online.boarding < 2.5 to the left, agree=0.656, adj=0.192, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.656, adj=0.192, (0 split)  
## Age < 38.5 to the left, agree=0.639, adj=0.154, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.639, adj=0.154, (0 split)  
##   
## Node number 2354: 210 observations  
## predicted class=0 expected loss=0.04285714 P(node) =0.002124216  
## class counts: 201 9  
## probabilities: 0.957 0.043   
##   
## Node number 2355: 113 observations, complexity param=0.0004678615  
## predicted class=1 expected loss=0.3274336 P(node) =0.001143031  
## class counts: 37 76  
## probabilities: 0.327 0.673   
## left son=4710 (36 obs) right son=4711 (77 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=47.795890, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=35.029550, (0 missing)  
## Flight.Distance < 1007 to the left, improve=16.263810, (0 missing)  
## Gate.location < 1.5 to the left, improve= 9.925251, (0 missing)  
## Age < 15.5 to the left, improve= 8.245847, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.938, adj=0.806, (0 split)  
## Flight.Distance < 847.5 to the left, agree=0.805, adj=0.389, (0 split)  
## Age < 15.5 to the left, agree=0.761, adj=0.250, (0 split)  
## Gate.location < 1.5 to the left, agree=0.752, adj=0.222, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.699, adj=0.056, (0 split)  
##   
## Node number 2358: 26 observations  
## predicted class=0 expected loss=0 P(node) =0.0002629982  
## class counts: 26 0  
## probabilities: 1.000 0.000   
##   
## Node number 2359: 83 observations  
## predicted class=1 expected loss=0 P(node) =0.0008395711  
## class counts: 0 83  
## probabilities: 0.000 1.000   
##   
## Node number 2366: 14 observations  
## predicted class=0 expected loss=0 P(node) =0.0001416144  
## class counts: 14 0  
## probabilities: 1.000 0.000   
##   
## Node number 2367: 202 observations, complexity param=0.0002879148  
## predicted class=1 expected loss=0.1336634 P(node) =0.002043294  
## class counts: 27 175  
## probabilities: 0.134 0.866   
## left son=4734 (24 obs) right son=4735 (178 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the left, improve=20.692290, (0 missing)  
## Flight.Distance < 268 to the left, improve=14.139690, (0 missing)  
## Age < 50.5 to the right, improve= 7.076005, (0 missing)  
## Seat.comfort < 1.5 to the left, improve= 7.034594, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 5.278227, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 194 to the left, agree=0.906, adj=0.208, (0 split)  
##   
## Node number 2494: 168 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1547619 P(node) =0.001699373  
## class counts: 142 26  
## probabilities: 0.845 0.155   
## left son=4988 (142 obs) right son=4989 (26 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 2.5 to the left, improve=0.8061188, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=0.7025780, (0 missing)  
## Checkin.service < 2.5 to the left, improve=0.5638459, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.3968254, (0 missing)  
## Flight.Distance < 1110.5 to the right, improve=0.3010652, (0 missing)  
##   
## Node number 2495: 31 observations  
## predicted class=0 expected loss=0.3548387 P(node) =0.0003135748  
## class counts: 20 11  
## probabilities: 0.645 0.355   
##   
## Node number 2530: 42 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0004248432  
## class counts: 39 3  
## probabilities: 0.929 0.071   
##   
## Node number 2531: 58 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.3448276 P(node) =0.0005866882  
## class counts: 38 20  
## probabilities: 0.655 0.345   
## left son=5062 (24 obs) right son=5063 (34 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=7.525524, (0 missing)  
## Arrival.Delay.in.Minutes < 121.5 to the right, improve=5.719092, (0 missing)  
## Departure.Delay.in.Minutes < 135.5 to the right, improve=5.254516, (0 missing)  
## Flight.Distance < 385.5 to the right, improve=4.191393, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=4.101362, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 56 to the right, agree=0.828, adj=0.583, (0 split)  
## Arrival.Delay.in.Minutes < 93 to the right, agree=0.828, adj=0.583, (0 split)  
## On.board.service < 3.5 to the left, agree=0.793, adj=0.500, (0 split)  
## Age < 32.5 to the left, agree=0.759, adj=0.417, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.672, adj=0.208, (0 split)  
##   
## Node number 2556: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 2557: 17 observations  
## predicted class=1 expected loss=0.05882353 P(node) =0.0001719603  
## class counts: 1 16  
## probabilities: 0.059 0.941   
##   
## Node number 2642: 87 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.2183908 P(node) =0.0008800324  
## class counts: 68 19  
## probabilities: 0.782 0.218   
## left son=5284 (20 obs) right son=5285 (67 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.4727910, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.2915750, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.1274310, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=0.8403899, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.7617555, (0 missing)  
## Surrogate splits:  
## Age < 23 to the left, agree=0.793, adj=0.10, (0 split)  
## Flight.Distance < 127.5 to the left, agree=0.782, adj=0.05, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.782, adj=0.05, (0 split)  
##   
## Node number 2643: 38 observations, complexity param=4.198757e-05  
## predicted class=0 expected loss=0.4210526 P(node) =0.000384382  
## class counts: 22 16  
## probabilities: 0.579 0.421   
## left son=5286 (17 obs) right son=5287 (21 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=2.1229540, (0 missing)  
## Flight.Distance < 1790.5 to the left, improve=1.4756250, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=1.2374270, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.9237517, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.8421053, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the left, agree=0.711, adj=0.353, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.684, adj=0.294, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.684, adj=0.294, (0 split)  
## Flight.Distance < 619.5 to the left, agree=0.658, adj=0.235, (0 split)  
## Gate.location < 2.5 to the right, agree=0.658, adj=0.235, (0 split)  
##   
## Node number 2648: 19 observations  
## predicted class=0 expected loss=0.1052632 P(node) =0.000192191  
## class counts: 17 2  
## probabilities: 0.895 0.105   
##   
## Node number 2649: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 2650: 37 observations  
## predicted class=0 expected loss=0.3243243 P(node) =0.0003742666  
## class counts: 25 12  
## probabilities: 0.676 0.324   
##   
## Node number 2651: 29 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3793103 P(node) =0.0002933441  
## class counts: 11 18  
## probabilities: 0.379 0.621   
## left son=5302 (14 obs) right son=5303 (15 obs)  
## Primary splits:  
## Ease.of.Online.booking < 2.5 to the right, improve=1.998030, (0 missing)  
## Flight.Distance < 402 to the left, improve=1.851251, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.486751, (0 missing)  
## Online.boarding < 2.5 to the right, improve=1.193634, (0 missing)  
## Age < 37.5 to the right, improve=1.039788, (0 missing)  
## Surrogate splits:  
## Online.boarding < 2.5 to the right, agree=0.966, adj=0.929, (0 split)  
## Checkin.service < 3.5 to the right, agree=0.724, adj=0.429, (0 split)  
## Age < 54.5 to the right, agree=0.655, adj=0.286, (0 split)  
## On.board.service < 3.5 to the right, agree=0.655, adj=0.286, (0 split)  
## Flight.Distance < 402 to the left, agree=0.621, adj=0.214, (0 split)  
##   
## Node number 2660: 14 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0001416144  
## class counts: 13 1  
## probabilities: 0.929 0.071   
##   
## Node number 2661: 25 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.44 P(node) =0.0002528829  
## class counts: 14 11  
## probabilities: 0.560 0.440   
## left son=5322 (15 obs) right son=5323 (10 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 1 to the right, improve=2.253333, (0 missing)  
## Flight.Distance < 978 to the right, improve=1.920000, (0 missing)  
## Age < 18.5 to the left, improve=1.716825, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.462857, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.099221, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 10.5 to the right, agree=0.84, adj=0.6, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.76, adj=0.4, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.72, adj=0.3, (0 split)  
## Age < 12 to the right, agree=0.68, adj=0.2, (0 split)  
## Flight.Distance < 851.5 to the right, agree=0.68, adj=0.2, (0 split)  
##   
## Node number 2672: 169 observations, complexity param=0.0001139663  
## predicted class=0 expected loss=0.443787 P(node) =0.001709488  
## class counts: 94 75  
## probabilities: 0.556 0.444   
## left son=5344 (68 obs) right son=5345 (101 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 8.5 to the right, improve=5.097649, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=4.254100, (0 missing)  
## Age < 71 to the right, improve=3.307729, (0 missing)  
## Flight.Distance < 851 to the right, improve=2.943064, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=2.876397, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 11.5 to the right, agree=0.858, adj=0.647, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.633, adj=0.088, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.633, adj=0.088, (0 split)  
## On.board.service < 2.5 to the left, agree=0.627, adj=0.074, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.627, adj=0.074, (0 split)  
##   
## Node number 2673: 17 observations  
## predicted class=1 expected loss=0.05882353 P(node) =0.0001719603  
## class counts: 1 16  
## probabilities: 0.059 0.941   
##   
## Node number 2742: 96 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3020833 P(node) =0.0009710702  
## class counts: 67 29  
## probabilities: 0.698 0.302   
## left son=5484 (16 obs) right son=5485 (80 obs)  
## Primary splits:  
## Inflight.entertainment < 4.5 to the right, improve=1.2041670, (0 missing)  
## Male < 0.5 to the left, improve=0.8402778, (0 missing)  
## Flight.Distance < 549 to the left, improve=0.7529701, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the left, improve=0.6837121, (0 missing)  
## Inflight.service < 2.5 to the right, improve=0.6784077, (0 missing)  
## Surrogate splits:  
## Inflight.service < 4.5 to the right, agree=0.917, adj=0.500, (0 split)  
## On.board.service < 4.5 to the right, agree=0.896, adj=0.375, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.865, adj=0.188, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.854, adj=0.125, (0 split)  
## Age < 10.5 to the left, agree=0.844, adj=0.062, (0 split)  
##   
## Node number 2743: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 2768: 59 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.220339 P(node) =0.0005968036  
## class counts: 46 13  
## probabilities: 0.780 0.220   
## left son=5536 (48 obs) right son=5537 (11 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the right, improve=1.4833080, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=1.1691460, (0 missing)  
## Age < 51.5 to the left, improve=1.0330910, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.6870595, (0 missing)  
## Flight.Distance < 387 to the right, improve=0.5320560, (0 missing)  
## Surrogate splits:  
## On.board.service < 3.5 to the right, agree=0.915, adj=0.545, (0 split)  
## Inflight.entertainment < 3.5 to the right, agree=0.864, adj=0.273, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.864, adj=0.273, (0 split)  
## Male < 0.5 to the left, agree=0.847, adj=0.182, (0 split)  
## Age < 36 to the right, agree=0.831, adj=0.091, (0 split)  
##   
## Node number 2769: 11 observations  
## predicted class=1 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 5 6  
## probabilities: 0.455 0.545   
##   
## Node number 2792: 15 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001517297  
## class counts: 12 3  
## probabilities: 0.800 0.200   
##   
## Node number 2793: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 2800: 175 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4 P(node) =0.00177018  
## class counts: 70 105  
## probabilities: 0.400 0.600   
## left son=5600 (29 obs) right son=5601 (146 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=8.940954, (0 missing)  
## Cleanliness < 4.5 to the left, improve=7.636364, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=6.025316, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=5.250000, (0 missing)  
## Checkin.service < 4.5 to the left, improve=5.250000, (0 missing)  
## Surrogate splits:  
## Age < 32 to the left, agree=0.874, adj=0.241, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.869, adj=0.207, (0 split)  
## On.board.service < 2.5 to the left, agree=0.863, adj=0.172, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.857, adj=0.138, (0 split)  
## Departure.Delay.in.Minutes < 181.5 to the right, agree=0.840, adj=0.034, (0 split)  
##   
## Node number 2801: 40 observations  
## predicted class=1 expected loss=0.025 P(node) =0.0004046126  
## class counts: 1 39  
## probabilities: 0.025 0.975   
##   
## Node number 2802: 25 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4 P(node) =0.0002528829  
## class counts: 10 15  
## probabilities: 0.400 0.600   
## left son=5604 (8 obs) right son=5605 (17 obs)  
## Primary splits:  
## Food.and.drink < 1.5 to the left, improve=2.882353, (0 missing)  
## On.board.service < 2.5 to the left, improve=2.000000, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=1.870130, (0 missing)  
## Age < 34.5 to the right, improve=1.779412, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.191176, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.80, adj=0.375, (0 split)  
## Flight.Distance < 211 to the left, agree=0.76, adj=0.250, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.76, adj=0.250, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.72, adj=0.125, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.72, adj=0.125, (0 split)  
##   
## Node number 2803: 88 observations  
## predicted class=1 expected loss=0.03409091 P(node) =0.0008901477  
## class counts: 3 85  
## probabilities: 0.034 0.966   
##   
## Node number 2804: 58 observations, complexity param=5.998225e-06  
## predicted class=1 expected loss=0.2241379 P(node) =0.0005866882  
## class counts: 13 45  
## probabilities: 0.224 0.776   
## left son=5608 (28 obs) right son=5609 (30 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the left, improve=1.9152710, (0 missing)  
## Age < 49 to the right, improve=1.6190030, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.3639030, (0 missing)  
## Arrival.Delay.in.Minutes < 15.5 to the right, improve=1.2514840, (0 missing)  
## Departure.Delay.in.Minutes < 3 to the right, improve=0.9671506, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1881 to the left, agree=0.638, adj=0.250, (0 split)  
## Departure.Delay.in.Minutes < 19.5 to the right, agree=0.638, adj=0.250, (0 split)  
## Arrival.Delay.in.Minutes < 3.5 to the right, agree=0.621, adj=0.214, (0 split)  
## Age < 31 to the left, agree=0.603, adj=0.179, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.603, adj=0.179, (0 split)  
##   
## Node number 2805: 32 observations  
## predicted class=1 expected loss=0 P(node) =0.0003236901  
## class counts: 0 32  
## probabilities: 0.000 1.000   
##   
## Node number 3242: 21 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.0002124216  
## class counts: 18 3  
## probabilities: 0.857 0.143   
##   
## Node number 3243: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 3244: 135 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.1037037 P(node) =0.001365567  
## class counts: 121 14  
## probabilities: 0.896 0.104   
## left son=6488 (88 obs) right son=6489 (47 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 34 to the left, improve=0.6378824, (0 missing)  
## On.board.service < 4.5 to the left, improve=0.4833931, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.4810160, (0 missing)  
## Flight.Distance < 1478.5 to the right, improve=0.4467236, (0 missing)  
## Age < 15.5 to the right, improve=0.4253046, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 44.5 to the left, agree=0.852, adj=0.574, (0 split)  
## Flight.Distance < 528.5 to the right, agree=0.674, adj=0.064, (0 split)  
##   
## Node number 3245: 94 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2234043 P(node) =0.0009508396  
## class counts: 73 21  
## probabilities: 0.777 0.223   
## left son=6490 (10 obs) right son=6491 (84 obs)  
## Primary splits:  
## On.board.service < 4.5 to the right, improve=1.1170210, (0 missing)  
## Gate.location < 3.5 to the left, improve=1.0888260, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.9470912, (0 missing)  
## Age < 12.5 to the right, improve=0.8143186, (0 missing)  
## Arrival.Delay.in.Minutes < 85 to the left, improve=0.6979737, (0 missing)  
##   
## Node number 3246: 22 observations  
## predicted class=0 expected loss=0.04545455 P(node) =0.0002225369  
## class counts: 21 1  
## probabilities: 0.955 0.045   
##   
## Node number 3247: 93 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2903226 P(node) =0.0009407243  
## class counts: 66 27  
## probabilities: 0.710 0.290   
## left son=6494 (72 obs) right son=6495 (21 obs)  
## Primary splits:  
## Flight.Distance < 679 to the right, improve=2.9575010, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.3661150, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.1717190, (0 missing)  
## Departure.Delay.in.Minutes < 5.5 to the right, improve=1.0983380, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.8709677, (0 missing)  
##   
## Node number 3266: 48 observations  
## predicted class=0 expected loss=0.1458333 P(node) =0.0004855351  
## class counts: 41 7  
## probabilities: 0.854 0.146   
##   
## Node number 3267: 809 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2620519 P(node) =0.00818329  
## class counts: 597 212  
## probabilities: 0.738 0.262   
## left son=6534 (795 obs) right son=6535 (14 obs)  
## Primary splits:  
## Flight.Distance < 154.5 to the right, improve=4.1318560, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.3304970, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.2499880, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.1038420, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.9464987, (0 missing)  
##   
## Node number 3268: 94 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.2021277 P(node) =0.0009508396  
## class counts: 75 19  
## probabilities: 0.798 0.202   
## left son=6536 (52 obs) right son=6537 (42 obs)  
## Primary splits:  
## Flight.Distance < 1057 to the right, improve=1.0609070, (0 missing)  
## Age < 25.5 to the left, improve=0.9565758, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=0.7756350, (0 missing)  
## Gate.location < 4.5 to the right, improve=0.7144978, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=0.3362430, (0 missing)  
## Surrogate splits:  
## Gate.location < 2.5 to the right, agree=0.606, adj=0.119, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.606, adj=0.119, (0 split)  
## On.board.service < 3.5 to the left, agree=0.606, adj=0.119, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.596, adj=0.095, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.596, adj=0.095, (0 split)  
##   
## Node number 3269: 332 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.3192771 P(node) =0.003358284  
## class counts: 226 106  
## probabilities: 0.681 0.319   
## left son=6538 (250 obs) right son=6539 (82 obs)  
## Primary splits:  
## Age < 51.5 to the left, improve=1.5062290, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.0329470, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the left, improve=1.0328950, (0 missing)  
## Flight.Distance < 826.5 to the right, improve=0.9347056, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=0.8865014, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.780, adj=0.110, (0 split)  
## Inflight.entertainment < 1.5 to the right, agree=0.771, adj=0.073, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.765, adj=0.049, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.765, adj=0.049, (0 split)  
## Departure.Delay.in.Minutes < 5.5 to the left, agree=0.762, adj=0.037, (0 split)  
##   
## Node number 3270: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 3271: 159 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.4025157 P(node) =0.001608335  
## class counts: 95 64  
## probabilities: 0.597 0.403   
## left son=6542 (7 obs) right son=6543 (152 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the left, improve=2.3727240, (0 missing)  
## Age < 56.5 to the left, improve=2.3138080, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=2.2344460, (0 missing)  
## Flight.Distance < 1850.5 to the left, improve=1.4714200, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.9274555, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.969, adj=0.286, (0 split)  
##   
## Node number 3282: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 3283: 25 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.36 P(node) =0.0002528829  
## class counts: 16 9  
## probabilities: 0.640 0.360   
## left son=6566 (14 obs) right son=6567 (11 obs)  
## Primary splits:  
## On.board.service < 2.5 to the right, improve=1.3511690, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.6533333, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.5584615, (0 missing)  
## Flight.Distance < 645 to the right, improve=0.5338889, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.3511688, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 3.5 to the right, agree=0.80, adj=0.545, (0 split)  
## Checkin.service < 3.5 to the right, agree=0.76, adj=0.455, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.72, adj=0.364, (0 split)  
## Flight.Distance < 1736.5 to the left, agree=0.68, adj=0.273, (0 split)  
## Male < 0.5 to the left, agree=0.68, adj=0.273, (0 split)  
##   
## Node number 3284: 35 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.000354036  
## class counts: 30 5  
## probabilities: 0.857 0.143   
##   
## Node number 3285: 1059 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3276676 P(node) =0.01071212  
## class counts: 712 347  
## probabilities: 0.672 0.328   
## left son=6570 (853 obs) right son=6571 (206 obs)  
## Primary splits:  
## Flight.Distance < 1074.5 to the left, improve=1.594194, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.569420, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.532011, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=1.318736, (0 missing)  
## Age < 12.5 to the right, improve=1.303831, (0 missing)  
##   
## Node number 3292: 23 observations  
## predicted class=0 expected loss=0.2608696 P(node) =0.0002326522  
## class counts: 17 6  
## probabilities: 0.739 0.261   
##   
## Node number 3293: 27 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4814815 P(node) =0.0002731135  
## class counts: 13 14  
## probabilities: 0.481 0.519   
## left son=6586 (15 obs) right son=6587 (12 obs)  
## Primary splits:  
## Flight.Distance < 584.5 to the right, improve=0.9481481, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.9259259, (0 missing)  
## Male < 0.5 to the right, improve=0.4704925, (0 missing)  
## Age < 45 to the right, improve=0.4683236, (0 missing)  
## Inflight.service < 3.5 to the right, improve=0.4481481, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.704, adj=0.333, (0 split)  
## Age < 12 to the right, agree=0.667, adj=0.250, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.630, adj=0.167, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.630, adj=0.167, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.593, adj=0.083, (0 split)  
##   
## Node number 3294: 11 observations  
## predicted class=0 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 6 5  
## probabilities: 0.545 0.455   
##   
## Node number 3295: 20 observations  
## predicted class=1 expected loss=0.25 P(node) =0.0002023063  
## class counts: 5 15  
## probabilities: 0.250 0.750   
##   
## Node number 3308: 109 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3394495 P(node) =0.001102569  
## class counts: 72 37  
## probabilities: 0.661 0.339   
## left son=6616 (82 obs) right son=6617 (27 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=2.3016910, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.2676070, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.1743850, (0 missing)  
## Flight.Distance < 940 to the left, improve=1.1698180, (0 missing)  
## Male < 0.5 to the left, improve=0.8119839, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the left, agree=0.789, adj=0.148, (0 split)  
## Departure.Delay.in.Minutes < 29.5 to the left, agree=0.780, adj=0.111, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.761, adj=0.037, (0 split)  
##   
## Node number 3309: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 3584: 1200 observations  
## predicted class=0 expected loss=0.025 P(node) =0.01213838  
## class counts: 1170 30  
## probabilities: 0.975 0.025   
##   
## Node number 3585: 11 observations  
## predicted class=1 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 5 6  
## probabilities: 0.455 0.545   
##   
## Node number 3650: 47 observations  
## predicted class=0 expected loss=0.0212766 P(node) =0.0004754198  
## class counts: 46 1  
## probabilities: 0.979 0.021   
##   
## Node number 3651: 9 observations  
## predicted class=1 expected loss=0 P(node) =9.103783e-05  
## class counts: 0 9  
## probabilities: 0.000 1.000   
##   
## Node number 3656: 178 observations  
## predicted class=0 expected loss=0 P(node) =0.001800526  
## class counts: 178 0  
## probabilities: 1.000 0.000   
##   
## Node number 3657: 97 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.1443299 P(node) =0.0009811855  
## class counts: 83 14  
## probabilities: 0.856 0.144   
## left son=7314 (62 obs) right son=7315 (35 obs)  
## Primary splits:  
## Age < 40.5 to the right, improve=2.189178, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=2.047940, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=1.897502, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=1.790494, (0 missing)  
## Gate.location < 4.5 to the left, improve=1.638692, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.845, adj=0.571, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.814, adj=0.486, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.804, adj=0.457, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.794, adj=0.429, (0 split)  
## On.board.service < 3.5 to the left, agree=0.742, adj=0.286, (0 split)  
##   
## Node number 3660: 650 observations, complexity param=0.001055688  
## predicted class=0 expected loss=0.4323077 P(node) =0.006574954  
## class counts: 369 281  
## probabilities: 0.568 0.432   
## left son=7320 (586 obs) right son=7321 (64 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=45.75639, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=39.12563, (0 missing)  
## BusinessClass < 0.5 to the left, improve=30.57138, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=26.28642, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=26.05106, (0 missing)  
##   
## Node number 3661: 203 observations, complexity param=0.0005518367  
## predicted class=1 expected loss=0.1674877 P(node) =0.002053409  
## class counts: 34 169  
## probabilities: 0.167 0.833   
## left son=7322 (23 obs) right son=7323 (180 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=35.955280, (0 missing)  
## BusinessClass < 0.5 to the left, improve=17.326350, (0 missing)  
## EcoClass < 0.5 to the right, improve=14.517440, (0 missing)  
## Food.and.drink < 3.5 to the left, improve= 9.776469, (0 missing)  
## Flight.Distance < 1411.5 to the left, improve= 8.622788, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.906, adj=0.174, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.901, adj=0.130, (0 split)  
## EcoClass < 0.5 to the right, agree=0.892, adj=0.043, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.892, adj=0.043, (0 split)  
##   
## Node number 3662: 10 observations  
## predicted class=0 expected loss=0.4 P(node) =0.0001011531  
## class counts: 6 4  
## probabilities: 0.600 0.400   
##   
## Node number 3663: 181 observations  
## predicted class=1 expected loss=0 P(node) =0.001830872  
## class counts: 0 181  
## probabilities: 0.000 1.000   
##   
## Node number 3664: 415 observations, complexity param=0.0001559538  
## predicted class=0 expected loss=0.2433735 P(node) =0.004197856  
## class counts: 314 101  
## probabilities: 0.757 0.243   
## left son=7328 (164 obs) right son=7329 (251 obs)  
## Primary splits:  
## Age < 27.5 to the right, improve=10.586050, (0 missing)  
## Checkin.service < 4.5 to the left, improve= 9.873882, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve= 8.152280, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve= 4.793676, (0 missing)  
## On.board.service < 4.5 to the left, improve= 4.705369, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 166.5 to the left, agree=0.627, adj=0.055, (0 split)  
## EcoClass < 0.5 to the left, agree=0.624, adj=0.049, (0 split)  
## Departure.Delay.in.Minutes < 89 to the right, agree=0.612, adj=0.018, (0 split)  
## Arrival.Delay.in.Minutes < 78.5 to the right, agree=0.610, adj=0.012, (0 split)  
##   
## Node number 3665: 85 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.4941176 P(node) =0.0008598017  
## class counts: 42 43  
## probabilities: 0.494 0.506   
## left son=7330 (71 obs) right son=7331 (14 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the right, improve=8.184258, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=3.520784, (0 missing)  
## Flight.Distance < 323 to the right, improve=2.909702, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=2.490358, (0 missing)  
## Arrival.Delay.in.Minutes < 151.5 to the right, improve=1.991385, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 191 to the right, agree=0.847, adj=0.071, (0 split)  
##   
## Node number 3666: 68 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.4117647 P(node) =0.0006878414  
## class counts: 28 40  
## probabilities: 0.412 0.588   
## left son=7332 (59 obs) right son=7333 (9 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the left, improve=3.517448, (0 missing)  
## Cleanliness < 3.5 to the left, improve=3.517448, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=3.517448, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=3.143557, (0 missing)  
## Flight.Distance < 553 to the left, improve=2.801642, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the left, agree=1.000, adj=1.000, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.971, adj=0.778, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.956, adj=0.667, (0 split)  
## Flight.Distance < 2293.5 to the left, agree=0.941, adj=0.556, (0 split)  
## Ease.of.Online.booking < 2.5 to the right, agree=0.926, adj=0.444, (0 split)  
##   
## Node number 3667: 33 observations  
## predicted class=1 expected loss=0.09090909 P(node) =0.0003338054  
## class counts: 3 30  
## probabilities: 0.091 0.909   
##   
## Node number 3668: 24 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2916667 P(node) =0.0002427676  
## class counts: 17 7  
## probabilities: 0.708 0.292   
## left son=7336 (17 obs) right son=7337 (7 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=1.5469190, (0 missing)  
## Flight.Distance < 768 to the left, improve=1.0416670, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.7500000, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=0.4900932, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.4900932, (0 missing)  
## Surrogate splits:  
## Age < 26.5 to the right, agree=0.75, adj=0.143, (0 split)  
## Flight.Distance < 835 to the left, agree=0.75, adj=0.143, (0 split)  
##   
## Node number 3669: 126 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.2777778 P(node) =0.00127453  
## class counts: 35 91  
## probabilities: 0.278 0.722   
## left son=7338 (62 obs) right son=7339 (64 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=2.1200720, (0 missing)  
## Departure.Delay.in.Minutes < 2.5 to the right, improve=1.1613270, (0 missing)  
## Flight.Distance < 1392.5 to the left, improve=1.1437910, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.9789728, (0 missing)  
## Age < 15.5 to the left, improve=0.8436911, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 928 to the left, agree=0.595, adj=0.177, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.595, adj=0.177, (0 split)  
## Male < 0.5 to the right, agree=0.556, adj=0.097, (0 split)  
## Gate.location < 2.5 to the right, agree=0.548, adj=0.081, (0 split)  
## On.board.service < 4.5 to the right, agree=0.548, adj=0.081, (0 split)  
##   
## Node number 3672: 437 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.4736842 P(node) =0.004420392  
## class counts: 207 230  
## probabilities: 0.474 0.526   
## left son=7344 (40 obs) right son=7345 (397 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the right, improve=24.39348, (0 missing)  
## Inflight.service < 3.5 to the left, improve=24.01725, (0 missing)  
## Flight.Distance < 1635.5 to the right, improve=17.93310, (0 missing)  
## Cleanliness < 3.5 to the right, improve=15.65674, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=14.87970, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=0.977, adj=0.750, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.968, adj=0.650, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.959, adj=0.550, (0 split)  
## Arrival.Delay.in.Minutes < 124 to the right, agree=0.947, adj=0.425, (0 split)  
## Departure.Delay.in.Minutes < 102 to the right, agree=0.943, adj=0.375, (0 split)  
##   
## Node number 3673: 407 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.2579853 P(node) =0.004116933  
## class counts: 105 302  
## probabilities: 0.258 0.742   
## left son=7346 (81 obs) right son=7347 (326 obs)  
## Primary splits:  
## Gate.location < 4.5 to the right, improve=19.42584, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=18.20359, (0 missing)  
## Cleanliness < 2.5 to the left, improve=16.52619, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=15.30150, (0 missing)  
## On.board.service < 3.5 to the right, improve=14.93096, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.848, adj=0.235, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.830, adj=0.148, (0 split)  
##   
## Node number 3674: 21 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.4285714 P(node) =0.0002124216  
## class counts: 9 12  
## probabilities: 0.429 0.571   
## left son=7348 (12 obs) right son=7349 (9 obs)  
## Primary splits:  
## Flight.Distance < 404 to the right, improve=1.3412700, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.3412700, (0 missing)  
## Gate.location < 3.5 to the left, improve=1.3412700, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.5079365, (0 missing)  
## Departure.Delay.in.Minutes < 32.5 to the left, improve=0.4285714, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.714, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 5 to the right, agree=0.714, adj=0.333, (0 split)  
## Age < 22.5 to the left, agree=0.667, adj=0.222, (0 split)  
## Leg.room.service < 1.5 to the right, agree=0.667, adj=0.222, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.667, adj=0.222, (0 split)  
##   
## Node number 3675: 220 observations  
## predicted class=1 expected loss=0.01818182 P(node) =0.002225369  
## class counts: 4 216  
## probabilities: 0.018 0.982   
##   
## Node number 3780: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 3781: 14 observations  
## predicted class=1 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 6 8  
## probabilities: 0.429 0.571   
##   
## Node number 3844: 17 observations  
## predicted class=0 expected loss=0.1176471 P(node) =0.0001719603  
## class counts: 15 2  
## probabilities: 0.882 0.118   
##   
## Node number 3845: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 3864: 68 observations  
## predicted class=0 expected loss=0.07352941 P(node) =0.0006878414  
## class counts: 63 5  
## probabilities: 0.926 0.074   
##   
## Node number 3865: 11 observations  
## predicted class=1 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 3 8  
## probabilities: 0.273 0.727   
##   
## Node number 3866: 73 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.2739726 P(node) =0.000738418  
## class counts: 53 20  
## probabilities: 0.726 0.274   
## left son=7732 (53 obs) right son=7733 (20 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=5.856190, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=4.013510, (0 missing)  
## Inflight.service < 1.5 to the right, improve=2.214173, (0 missing)  
## Age < 16.5 to the left, improve=1.739509, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=1.112891, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.767, adj=0.15, (0 split)  
## On.board.service < 4.5 to the left, agree=0.753, adj=0.10, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.753, adj=0.10, (0 split)  
##   
## Node number 3867: 142 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.4225352 P(node) =0.001436375  
## class counts: 60 82  
## probabilities: 0.423 0.577   
## left son=7734 (10 obs) right son=7735 (132 obs)  
## Primary splits:  
## Age < 14 to the left, improve=7.174563, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=3.678927, (0 missing)  
## Checkin.service < 4.5 to the left, improve=2.635856, (0 missing)  
## Flight.Distance < 1252.5 to the left, improve=2.629108, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.739032, (0 missing)  
##   
## Node number 3868: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 3869: 83 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3614458 P(node) =0.0008395711  
## class counts: 30 53  
## probabilities: 0.361 0.639   
## left son=7738 (31 obs) right son=7739 (52 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=1.483228, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.339569, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.109963, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.109963, (0 missing)  
## Cleanliness < 4.5 to the left, improve=1.109963, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 4.5 to the right, agree=0.651, adj=0.065, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.639, adj=0.032, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.639, adj=0.032, (0 split)  
## Departure.Delay.in.Minutes < 14.5 to the right, agree=0.639, adj=0.032, (0 split)  
##   
## Node number 3890: 9 observations  
## predicted class=0 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 8 1  
## probabilities: 0.889 0.111   
##   
## Node number 3891: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583   
##   
## Node number 3892: 54 observations  
## predicted class=0 expected loss=0 P(node) =0.000546227  
## class counts: 54 0  
## probabilities: 1.000 0.000   
##   
## Node number 3893: 192 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.3229167 P(node) =0.00194214  
## class counts: 62 130  
## probabilities: 0.323 0.677   
## left son=7786 (13 obs) right son=7787 (179 obs)  
## Primary splits:  
## Flight.Distance < 1622 to the right, improve=5.555239, (0 missing)  
## Departure.Delay.in.Minutes < 18 to the left, improve=2.841430, (0 missing)  
## Arrival.Delay.in.Minutes < 27.5 to the left, improve=2.555504, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=2.292839, (0 missing)  
## Checkin.service < 2.5 to the left, improve=2.225515, (0 missing)  
##   
## Node number 3894: 53 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4150943 P(node) =0.0005361117  
## class counts: 22 31  
## probabilities: 0.415 0.585   
## left son=7788 (28 obs) right son=7789 (25 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 34.5 to the left, improve=4.378706, (0 missing)  
## Arrival.Delay.in.Minutes < 68.5 to the left, improve=3.735849, (0 missing)  
## Checkin.service < 4.5 to the right, improve=2.094579, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.524705, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.177444, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 31.5 to the left, agree=0.925, adj=0.84, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.679, adj=0.32, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.679, adj=0.32, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.642, adj=0.24, (0 split)  
## Flight.Distance < 617.5 to the right, agree=0.623, adj=0.20, (0 split)  
##   
## Node number 3895: 177 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.259887 P(node) =0.001790411  
## class counts: 46 131  
## probabilities: 0.260 0.740   
## left son=7790 (164 obs) right son=7791 (13 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 11.5 to the left, improve=1.895274, (0 missing)  
## Flight.Distance < 1835.5 to the right, improve=1.752972, (0 missing)  
## Male < 0.5 to the right, improve=1.698414, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.657856, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.227644, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 9.5 to the left, agree=0.938, adj=0.154, (0 split)  
##   
## Node number 3968: 821 observations, complexity param=0.0006334125  
## predicted class=0 expected loss=0.3300853 P(node) =0.008304673  
## class counts: 550 271  
## probabilities: 0.670 0.330   
## left son=7936 (741 obs) right son=7937 (80 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=25.92473, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=21.20143, (0 missing)  
## On.board.service < 4.5 to the left, improve=20.29028, (0 missing)  
## Age < 32.5 to the left, improve=14.62112, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=13.50905, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.928, adj=0.262, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.926, adj=0.238, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.911, adj=0.087, (0 split)  
##   
## Node number 3969: 55 observations  
## predicted class=1 expected loss=0 P(node) =0.0005563423  
## class counts: 0 55  
## probabilities: 0.000 1.000   
##   
## Node number 3970: 25 observations  
## predicted class=0 expected loss=0.32 P(node) =0.0002528829  
## class counts: 17 8  
## probabilities: 0.680 0.320   
##   
## Node number 3971: 125 observations  
## predicted class=1 expected loss=0.096 P(node) =0.001264414  
## class counts: 12 113  
## probabilities: 0.096 0.904   
##   
## Node number 3974: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 3975: 215 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.06976744 P(node) =0.002174793  
## class counts: 15 200  
## probabilities: 0.070 0.930   
## left son=7950 (22 obs) right son=7951 (193 obs)  
## Primary splits:  
## Flight.Distance < 223.5 to the left, improve=4.232931, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=3.394782, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=1.930506, (0 missing)  
## Age < 65 to the right, improve=1.863021, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=1.533350, (0 missing)  
##   
## Node number 3980: 163 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.2883436 P(node) =0.001648796  
## class counts: 47 116  
## probabilities: 0.288 0.712   
## left son=7960 (121 obs) right son=7961 (42 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the right, improve=6.557256, (0 missing)  
## Flight.Distance < 527.5 to the right, improve=6.188604, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=5.686611, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=5.612337, (0 missing)  
## On.board.service < 4.5 to the left, improve=5.143881, (0 missing)  
## Surrogate splits:  
## Age < 16.5 to the right, agree=0.755, adj=0.048, (0 split)  
##   
## Node number 3981: 124 observations  
## predicted class=1 expected loss=0.0483871 P(node) =0.001254299  
## class counts: 6 118  
## probabilities: 0.048 0.952   
##   
## Node number 4032: 527 observations, complexity param=0.0003187628  
## predicted class=0 expected loss=0.4743833 P(node) =0.005330771  
## class counts: 277 250  
## probabilities: 0.526 0.474   
## left son=8064 (461 obs) right son=8065 (66 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=41.689040, (0 missing)  
## On.board.service < 4.5 to the left, improve=24.282380, (0 missing)  
## Age < 25.5 to the left, improve= 9.758081, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve= 8.173893, (0 missing)  
## Departure.Delay.in.Minutes < 13.5 to the right, improve= 4.993096, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 142 to the left, agree=0.879, adj=0.030, (0 split)  
## Arrival.Delay.in.Minutes < 180.5 to the left, agree=0.879, adj=0.030, (0 split)  
## Age < 10.5 to the right, agree=0.877, adj=0.015, (0 split)  
##   
## Node number 4033: 135 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.1333333 P(node) =0.001365567  
## class counts: 18 117  
## probabilities: 0.133 0.867   
## left son=8066 (30 obs) right son=8067 (105 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 17.5 to the right, improve=5.485714, (0 missing)  
## Departure.Delay.in.Minutes < 40.5 to the right, improve=5.334146, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=2.645344, (0 missing)  
## Flight.Distance < 1498 to the right, improve=2.286614, (0 missing)  
## Inflight.service < 1.5 to the right, improve=1.426137, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 22 to the right, agree=0.911, adj=0.600, (0 split)  
## Flight.Distance < 1707 to the right, agree=0.785, adj=0.033, (0 split)  
##   
## Node number 4034: 11 observations  
## predicted class=0 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 7 4  
## probabilities: 0.636 0.364   
##   
## Node number 4035: 301 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.1096346 P(node) =0.00304471  
## class counts: 33 268  
## probabilities: 0.110 0.890   
## left son=8070 (184 obs) right son=8071 (117 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=4.601076, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.877090, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=1.751751, (0 missing)  
## Flight.Distance < 327 to the right, improve=1.569749, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.065936, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 95 to the left, agree=0.635, adj=0.060, (0 split)  
## Arrival.Delay.in.Minutes < 88.5 to the left, agree=0.625, adj=0.034, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.618, adj=0.017, (0 split)  
##   
## Node number 4066: 122 observations, complexity param=0.0002536392  
## predicted class=1 expected loss=0.3442623 P(node) =0.001234068  
## class counts: 42 80  
## probabilities: 0.344 0.656   
## left son=8132 (23 obs) right son=8133 (99 obs)  
## Primary splits:  
## Ease.of.Online.booking < 4.5 to the right, improve=24.374900, (0 missing)  
## Gate.location < 4.5 to the right, improve=24.374900, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=23.081970, (0 missing)  
## Baggage.handling < 2.5 to the right, improve= 9.123634, (0 missing)  
## On.board.service < 4.5 to the left, improve= 7.453101, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the right, agree=0.967, adj=0.826, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.943, adj=0.696, (0 split)  
##   
## Node number 4067: 88 observations  
## predicted class=1 expected loss=0.04545455 P(node) =0.0008901477  
## class counts: 4 84  
## probabilities: 0.045 0.955   
##   
## Node number 4068: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 4069: 14 observations  
## predicted class=1 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 6 8  
## probabilities: 0.429 0.571   
##   
## Node number 4082: 84 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.2857143 P(node) =0.0008496864  
## class counts: 24 60  
## probabilities: 0.286 0.714   
## left son=8164 (55 obs) right son=8165 (29 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=7.231169, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=5.944974, (0 missing)  
## On.board.service < 4.5 to the left, improve=5.944974, (0 missing)  
## Inflight.service < 4.5 to the left, improve=5.944974, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=5.591043, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.964, adj=0.897, (0 split)  
## On.board.service < 4.5 to the left, agree=0.964, adj=0.897, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.964, adj=0.897, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.929, adj=0.793, (0 split)  
## Departure.Delay.in.Minutes < 46 to the left, agree=0.714, adj=0.172, (0 split)  
##   
## Node number 4083: 74 observations  
## predicted class=1 expected loss=0 P(node) =0.0007485333  
## class counts: 0 74  
## probabilities: 0.000 1.000   
##   
## Node number 4088: 29 observations  
## predicted class=0 expected loss=0 P(node) =0.0002933441  
## class counts: 29 0  
## probabilities: 1.000 0.000   
##   
## Node number 4089: 132 observations, complexity param=4.198757e-05  
## predicted class=1 expected loss=0.09090909 P(node) =0.001335222  
## class counts: 12 120  
## probabilities: 0.091 0.909   
## left son=8178 (63 obs) right son=8179 (69 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=2.389610, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=2.181818, (0 missing)  
## Checkin.service < 3.5 to the left, improve=2.138182, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=2.053476, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.932468, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.977, adj=0.952, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.955, adj=0.905, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.909, adj=0.810, (0 split)  
## Flight.Distance < 1665 to the left, agree=0.583, adj=0.127, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.568, adj=0.095, (0 split)  
##   
## Node number 4092: 155 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.2322581 P(node) =0.001567874  
## class counts: 36 119  
## probabilities: 0.232 0.768   
## left son=8184 (82 obs) right son=8185 (73 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=14.887180, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=12.401010, (0 missing)  
## Online.boarding < 4.5 to the left, improve=10.561630, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=10.530410, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve= 9.374036, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.845, adj=0.671, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.832, adj=0.644, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.768, adj=0.507, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.645, adj=0.247, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.626, adj=0.205, (0 split)  
##   
## Node number 4093: 237 observations  
## predicted class=1 expected loss=0 P(node) =0.00239733  
## class counts: 0 237  
## probabilities: 0.000 1.000   
##   
## Node number 4094: 325 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.08307692 P(node) =0.003287477  
## class counts: 27 298  
## probabilities: 0.083 0.917   
## left son=8188 (145 obs) right son=8189 (180 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=5.569019, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=3.893156, (0 missing)  
## Age < 25.5 to the left, improve=3.403208, (0 missing)  
## Online.boarding < 4.5 to the left, improve=3.068250, (0 missing)  
## Checkin.service < 4.5 to the left, improve=2.731668, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.960, adj=0.910, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.945, adj=0.876, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.898, adj=0.772, (0 split)  
## Age < 26.5 to the left, agree=0.594, adj=0.090, (0 split)  
## Flight.Distance < 648.5 to the left, agree=0.578, adj=0.055, (0 split)  
##   
## Node number 4095: 19243 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.002442447 P(node) =0.194649  
## class counts: 47 19196  
## probabilities: 0.002 0.998   
## left son=8190 (45 obs) right son=8191 (19198 obs)  
## Primary splits:  
## Food.and.drink < 1.5 to the left, improve=3.5208420, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=0.7218773, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=0.3430607, (0 missing)  
## Age < 78.5 to the right, improve=0.2761285, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.2193938, (0 missing)  
##   
## Node number 4286: 13 observations  
## predicted class=0 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 10 3  
## probabilities: 0.769 0.231   
##   
## Node number 4287: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 4288: 3024 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.0380291 P(node) =0.03058871  
## class counts: 2909 115  
## probabilities: 0.962 0.038   
## left son=8576 (2213 obs) right son=8577 (811 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=4.165505, (0 missing)  
## Inflight.service < 2.5 to the right, improve=3.184151, (0 missing)  
## Age < 33.5 to the left, improve=3.003640, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=2.237340, (0 missing)  
## Flight.Distance < 219 to the right, improve=1.945853, (0 missing)  
## Surrogate splits:  
## Inflight.service < 2.5 to the right, agree=0.888, adj=0.582, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.745, adj=0.051, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.738, adj=0.023, (0 split)  
## Flight.Distance < 2612.5 to the left, agree=0.732, adj=0.002, (0 split)  
## Age < 79.5 to the left, agree=0.732, adj=0.001, (0 split)  
##   
## Node number 4289: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 4290: 36 observations  
## predicted class=0 expected loss=0.1388889 P(node) =0.0003641513  
## class counts: 31 5  
## probabilities: 0.861 0.139   
##   
## Node number 4291: 27 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.2962963 P(node) =0.0002731135  
## class counts: 8 19  
## probabilities: 0.296 0.704   
## left son=8582 (11 obs) right son=8583 (16 obs)  
## Primary splits:  
## Flight.Distance < 1020 to the right, improve=6.8956230, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.5660770, (0 missing)  
## Age < 37.5 to the left, improve=1.4306880, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.3691490, (0 missing)  
## Inflight.wifi.service < 2.5 to the right, improve=0.9297138, (0 missing)  
## Surrogate splits:  
## Age < 35.5 to the left, agree=0.778, adj=0.455, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.704, adj=0.273, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.704, adj=0.273, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.704, adj=0.273, (0 split)  
## Inflight.wifi.service < 1.5 to the left, agree=0.667, adj=0.182, (0 split)  
##   
## Node number 4354: 1048 observations  
## predicted class=0 expected loss=0.03339695 P(node) =0.01060085  
## class counts: 1013 35  
## probabilities: 0.967 0.033   
##   
## Node number 4355: 81 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.1111111 P(node) =0.0008193405  
## class counts: 72 9  
## probabilities: 0.889 0.111   
## left son=8710 (73 obs) right son=8711 (8 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=4.6883560, (0 missing)  
## Flight.Distance < 304.5 to the right, improve=1.4411760, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.0319830, (0 missing)  
## Departure.Delay.in.Minutes < 1.5 to the right, improve=0.7272727, (0 missing)  
## Checkin.service < 3.5 to the right, improve=0.6557377, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 4.5 to the left, agree=0.926, adj=0.250, (0 split)  
## Flight.Distance < 1774.5 to the left, agree=0.914, adj=0.125, (0 split)  
##   
## Node number 4368: 491 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.07535642 P(node) =0.004966619  
## class counts: 454 37  
## probabilities: 0.925 0.075   
## left son=8736 (331 obs) right son=8737 (160 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=1.833142, (0 missing)  
## Flight.Distance < 501.5 to the right, improve=1.750681, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=1.724959, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.445560, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.157699, (0 missing)  
## Surrogate splits:  
## On.board.service < 2.5 to the left, agree=0.796, adj=0.375, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.770, adj=0.294, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.758, adj=0.256, (0 split)  
## Inflight.wifi.service < 2.5 to the left, agree=0.737, adj=0.194, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.733, adj=0.181, (0 split)  
##   
## Node number 4369: 19 observations  
## predicted class=0 expected loss=0.4210526 P(node) =0.000192191  
## class counts: 11 8  
## probabilities: 0.579 0.421   
##   
## Node number 4374: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 4375: 16 observations  
## predicted class=1 expected loss=0 P(node) =0.000161845  
## class counts: 0 16  
## probabilities: 0.000 1.000   
##   
## Node number 4704: 2954 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.04874746 P(node) =0.02988064  
## class counts: 2810 144  
## probabilities: 0.951 0.049   
## left son=9408 (2841 obs) right son=9409 (113 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=11.038830, (0 missing)  
## Gate.location < 1.5 to the left, improve= 4.658923, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve= 4.545924, (0 missing)  
## Baggage.handling < 1.5 to the right, improve= 4.287747, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve= 3.134234, (0 missing)  
##   
## Node number 4705: 142 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.2957746 P(node) =0.001436375  
## class counts: 100 42  
## probabilities: 0.704 0.296   
## left son=9410 (73 obs) right son=9411 (69 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=17.448360, (0 missing)  
## Flight.Distance < 1556 to the left, improve= 9.650781, (0 missing)  
## Age < 33.5 to the right, improve= 8.716220, (0 missing)  
## Gate.location < 1.5 to the left, improve= 4.463786, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 2.717430, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1556 to the left, agree=0.746, adj=0.478, (0 split)  
## Age < 33.5 to the right, agree=0.725, adj=0.435, (0 split)  
## Departure.Delay.in.Minutes < 7.5 to the left, agree=0.669, adj=0.319, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.655, adj=0.290, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.641, adj=0.261, (0 split)  
##   
## Node number 4706: 35 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.2285714 P(node) =0.000354036  
## class counts: 27 8  
## probabilities: 0.771 0.229   
## left son=9412 (13 obs) right son=9413 (22 obs)  
## Primary splits:  
## Age < 37 to the left, improve=2.161039, (0 missing)  
## Cleanliness < 3.5 to the left, improve=2.057143, (0 missing)  
## Flight.Distance < 744 to the right, improve=1.904949, (0 missing)  
## Male < 0.5 to the right, improve=1.904949, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=1.542857, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1074 to the right, agree=0.714, adj=0.231, (0 split)  
## Gate.location < 1.5 to the left, agree=0.714, adj=0.231, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.714, adj=0.231, (0 split)  
## On.board.service < 1.5 to the left, agree=0.657, adj=0.077, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.657, adj=0.077, (0 split)  
##   
## Node number 4707: 26 observations  
## predicted class=1 expected loss=0.07692308 P(node) =0.0002629982  
## class counts: 2 24  
## probabilities: 0.077 0.923   
##   
## Node number 4710: 36 observations  
## predicted class=0 expected loss=0 P(node) =0.0003641513  
## class counts: 36 0  
## probabilities: 1.000 0.000   
##   
## Node number 4711: 77 observations  
## predicted class=1 expected loss=0.01298701 P(node) =0.0007788792  
## class counts: 1 76  
## probabilities: 0.013 0.987   
##   
## Node number 4734: 24 observations, complexity param=0.0001199645  
## predicted class=0 expected loss=0.25 P(node) =0.0002427676  
## class counts: 18 6  
## probabilities: 0.750 0.250   
## left son=9468 (17 obs) right son=9469 (7 obs)  
## Primary splits:  
## Age < 37.5 to the right, improve=7.2857140, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=4.2605040, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.5000000, (0 missing)  
## Flight.Distance < 412.5 to the left, improve=1.2352940, (0 missing)  
## Departure.Delay.in.Minutes < 15 to the left, improve=0.6302521, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 3.5 to the left, agree=0.833, adj=0.429, (0 split)  
## On.board.service < 1.5 to the right, agree=0.792, adj=0.286, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.792, adj=0.286, (0 split)  
## Ease.of.Online.booking < 2 to the left, agree=0.750, adj=0.143, (0 split)  
## Departure.Delay.in.Minutes < 15 to the left, agree=0.750, adj=0.143, (0 split)  
##   
## Node number 4735: 178 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.0505618 P(node) =0.001800526  
## class counts: 9 169  
## probabilities: 0.051 0.949   
## left son=9470 (17 obs) right son=9471 (161 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the left, improve=8.619299, (0 missing)  
## Departure.Delay.in.Minutes < 75.5 to the right, improve=3.449325, (0 missing)  
## Arrival.Delay.in.Minutes < 82 to the right, improve=3.449325, (0 missing)  
## Checkin.service < 1.5 to the left, improve=2.633109, (0 missing)  
## Cleanliness < 1.5 to the left, improve=2.633109, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 258.5 to the left, agree=0.916, adj=0.118, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.910, adj=0.059, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.910, adj=0.059, (0 split)  
## Departure.Delay.in.Minutes < 198 to the right, agree=0.910, adj=0.059, (0 split)  
## Arrival.Delay.in.Minutes < 181 to the right, agree=0.910, adj=0.059, (0 split)  
##   
## Node number 4988: 142 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1338028 P(node) =0.001436375  
## class counts: 123 19  
## probabilities: 0.866 0.134   
## left son=9976 (56 obs) right son=9977 (86 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the right, improve=0.7194797, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.4967865, (0 missing)  
## Ease.of.Online.booking < 2.5 to the right, improve=0.4967865, (0 missing)  
## Flight.Distance < 1018.5 to the left, improve=0.4869215, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.4467973, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 4.5 to the right, agree=0.873, adj=0.679, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.873, adj=0.679, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.873, adj=0.679, (0 split)  
## Age < 48.5 to the right, agree=0.634, adj=0.071, (0 split)  
## Flight.Distance < 211 to the left, agree=0.620, adj=0.036, (0 split)  
##   
## Node number 4989: 26 observations  
## predicted class=0 expected loss=0.2692308 P(node) =0.0002629982  
## class counts: 19 7  
## probabilities: 0.731 0.269   
##   
## Node number 5062: 24 observations  
## predicted class=0 expected loss=0.04166667 P(node) =0.0002427676  
## class counts: 23 1  
## probabilities: 0.958 0.042   
##   
## Node number 5063: 34 observations, complexity param=5.998225e-05  
## predicted class=1 expected loss=0.4411765 P(node) =0.0003439207  
## class counts: 15 19  
## probabilities: 0.441 0.559   
## left son=10126 (8 obs) right son=10127 (26 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=3.937783, (0 missing)  
## Flight.Distance < 1665.5 to the right, improve=3.475329, (0 missing)  
## Inflight.wifi.service < 2.5 to the right, improve=2.450420, (0 missing)  
## Cleanliness < 3.5 to the left, improve=2.091629, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.898039, (0 missing)  
## Surrogate splits:  
## Age < 30 to the left, agree=0.853, adj=0.375, (0 split)  
##   
## Node number 5284: 20 observations  
## predicted class=0 expected loss=0.05 P(node) =0.0002023063  
## class counts: 19 1  
## probabilities: 0.950 0.050   
##   
## Node number 5285: 67 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.2686567 P(node) =0.0006777261  
## class counts: 49 18  
## probabilities: 0.731 0.269   
## left son=10570 (9 obs) right son=10571 (58 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=1.5007720, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=1.1283580, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.9472330, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.6908582, (0 missing)  
## EcoClass < 0.5 to the right, improve=0.6404794, (0 missing)  
##   
## Node number 5286: 17 observations  
## predicted class=0 expected loss=0.2352941 P(node) =0.0001719603  
## class counts: 13 4  
## probabilities: 0.765 0.235   
##   
## Node number 5287: 21 observations, complexity param=4.198757e-05  
## predicted class=1 expected loss=0.4285714 P(node) =0.0002124216  
## class counts: 9 12  
## probabilities: 0.429 0.571   
## left son=10574 (12 obs) right son=10575 (9 obs)  
## Primary splits:  
## Gate.location < 2.5 to the left, improve=3.1746030, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=1.7857140, (0 missing)  
## Online.boarding < 1.5 to the left, improve=0.9972527, (0 missing)  
## Age < 65.5 to the right, improve=0.8241758, (0 missing)  
## Flight.Distance < 548 to the right, improve=0.8241758, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2544.5 to the left, agree=0.714, adj=0.333, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.714, adj=0.333, (0 split)  
## On.board.service < 4.5 to the left, agree=0.714, adj=0.333, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.667, adj=0.222, (0 split)  
##   
## Node number 5302: 14 observations  
## predicted class=0 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 8 6  
## probabilities: 0.571 0.429   
##   
## Node number 5303: 15 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001517297  
## class counts: 3 12  
## probabilities: 0.200 0.800   
##   
## Node number 5322: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 5323: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 5344: 68 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.2941176 P(node) =0.0006878414  
## class counts: 48 20  
## probabilities: 0.706 0.294   
## left son=10688 (52 obs) right son=10689 (16 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 49.5 to the left, improve=3.014140, (0 missing)  
## Departure.Delay.in.Minutes < 44.5 to the left, improve=2.075294, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=2.028398, (0 missing)  
## Inflight.service < 3.5 to the left, improve=2.028398, (0 missing)  
## Age < 64 to the right, improve=1.794616, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 54 to the left, agree=0.941, adj=0.75, (0 split)  
##   
## Node number 5345: 101 observations, complexity param=0.0001139663  
## predicted class=1 expected loss=0.4554455 P(node) =0.001021647  
## class counts: 46 55  
## probabilities: 0.455 0.545   
## left son=10690 (89 obs) right son=10691 (12 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the right, improve=5.6495720, (0 missing)  
## Flight.Distance < 968.5 to the right, improve=4.5514860, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.2151150, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.0748550, (0 missing)  
## Departure.Delay.in.Minutes < 5.5 to the right, improve=0.7633456, (0 missing)  
##   
## Node number 5484: 16 observations  
## predicted class=0 expected loss=0.125 P(node) =0.000161845  
## class counts: 14 2  
## probabilities: 0.875 0.125   
##   
## Node number 5485: 80 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3375 P(node) =0.0008092252  
## class counts: 53 27  
## probabilities: 0.662 0.338   
## left son=10970 (25 obs) right son=10971 (55 obs)  
## Primary splits:  
## Flight.Distance < 549 to the left, improve=1.3750000, (0 missing)  
## Male < 0.5 to the left, improve=1.0954200, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the left, improve=0.8395793, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=0.7647292, (0 missing)  
## Age < 40.5 to the right, improve=0.6160256, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 2.5 to the left, agree=0.738, adj=0.16, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.700, adj=0.04, (0 split)  
##   
## Node number 5536: 48 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1666667 P(node) =0.0004855351  
## class counts: 40 8  
## probabilities: 0.833 0.167   
## left son=11072 (26 obs) right son=11073 (22 obs)  
## Primary splits:  
## Age < 51.5 to the left, improve=0.9137529, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the left, improve=0.5856019, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.5611594, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=0.5333333, (0 missing)  
## Flight.Distance < 712.5 to the right, improve=0.4363636, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 298 to the right, agree=0.646, adj=0.227, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.604, adj=0.136, (0 split)  
## Departure.Delay.in.Minutes < 5.5 to the left, agree=0.604, adj=0.136, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.583, adj=0.091, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.583, adj=0.091, (0 split)  
##   
## Node number 5537: 11 observations  
## predicted class=0 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 6 5  
## probabilities: 0.545 0.455   
##   
## Node number 5600: 29 observations  
## predicted class=0 expected loss=0.2413793 P(node) =0.0002933441  
## class counts: 22 7  
## probabilities: 0.759 0.241   
##   
## Node number 5601: 146 observations, complexity param=5.278438e-05  
## predicted class=1 expected loss=0.3287671 P(node) =0.001476836  
## class counts: 48 98  
## probabilities: 0.329 0.671   
## left son=11202 (125 obs) right son=11203 (21 obs)  
## Primary splits:  
## Cleanliness < 4.5 to the left, improve=5.302356, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=3.613929, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=3.347447, (0 missing)  
## Checkin.service < 4.5 to the left, improve=3.347447, (0 missing)  
## Arrival.Delay.in.Minutes < 55.5 to the left, improve=2.320709, (0 missing)  
##   
## Node number 5604: 8 observations  
## predicted class=0 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 6 2  
## probabilities: 0.750 0.250   
##   
## Node number 5605: 17 observations  
## predicted class=1 expected loss=0.2352941 P(node) =0.0001719603  
## class counts: 4 13  
## probabilities: 0.235 0.765   
##   
## Node number 5608: 28 observations, complexity param=5.998225e-06  
## predicted class=1 expected loss=0.3571429 P(node) =0.0002832288  
## class counts: 10 18  
## probabilities: 0.357 0.643   
## left son=11216 (9 obs) right son=11217 (19 obs)  
## Primary splits:  
## Age < 52.5 to the right, improve=1.0442770, (0 missing)  
## Departure.Delay.in.Minutes < 3 to the right, improve=0.8571429, (0 missing)  
## Checkin.service < 1.5 to the left, improve=0.6349206, (0 missing)  
## Arrival.Delay.in.Minutes < 16.5 to the right, improve=0.6349206, (0 missing)  
## Cleanliness < 3.5 to the left, improve=0.4828739, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1932 to the right, agree=0.786, adj=0.333, (0 split)  
##   
## Node number 5609: 30 observations  
## predicted class=1 expected loss=0.1 P(node) =0.0003034594  
## class counts: 3 27  
## probabilities: 0.100 0.900   
##   
## Node number 6488: 88 observations  
## predicted class=0 expected loss=0.06818182 P(node) =0.0008901477  
## class counts: 82 6  
## probabilities: 0.932 0.068   
##   
## Node number 6489: 47 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.1702128 P(node) =0.0004754198  
## class counts: 39 8  
## probabilities: 0.830 0.170   
## left son=12978 (40 obs) right son=12979 (7 obs)  
## Primary splits:  
## Flight.Distance < 1015.5 to the left, improve=2.6480240, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=1.0980240, (0 missing)  
## Arrival.Delay.in.Minutes < 29.5 to the right, improve=0.8086470, (0 missing)  
## Departure.Delay.in.Minutes < 39.5 to the right, improve=0.5923852, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.5628861, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 17.5 to the right, agree=0.894, adj=0.286, (0 split)  
##   
## Node number 6490: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 6491: 84 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.25 P(node) =0.0008496864  
## class counts: 63 21  
## probabilities: 0.750 0.250   
## left son=12982 (63 obs) right son=12983 (21 obs)  
## Primary splits:  
## On.board.service < 3.5 to the left, improve=1.7857140, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.4037430, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.1052630, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=0.6176471, (0 missing)  
## Arrival.Delay.in.Minutes < 20 to the left, improve=0.5952381, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2287.5 to the left, agree=0.774, adj=0.095, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.762, adj=0.048, (0 split)  
##   
## Node number 6494: 72 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2222222 P(node) =0.0007283027  
## class counts: 56 16  
## probabilities: 0.778 0.222   
## left son=12988 (19 obs) right son=12989 (53 obs)  
## Primary splits:  
## Flight.Distance < 839 to the left, improve=1.4847180, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.2367150, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.9169591, (0 missing)  
## Age < 46.5 to the right, improve=0.8888889, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.8888889, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.778, adj=0.158, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.750, adj=0.053, (0 split)  
## Gate.location < 4.5 to the right, agree=0.750, adj=0.053, (0 split)  
##   
## Node number 6495: 21 observations, complexity param=1.599527e-05  
## predicted class=1 expected loss=0.4761905 P(node) =0.0002124216  
## class counts: 10 11  
## probabilities: 0.476 0.524   
## left son=12990 (14 obs) right son=12991 (7 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 5 to the right, improve=2.333333, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=1.190476, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.190476, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.190476, (0 missing)  
## Age < 40.5 to the right, improve=1.185281, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 13.5 to the right, agree=0.810, adj=0.429, (0 split)  
## Age < 46.5 to the left, agree=0.762, adj=0.286, (0 split)  
## Flight.Distance < 661.5 to the left, agree=0.714, adj=0.143, (0 split)  
## On.board.service < 1.5 to the right, agree=0.714, adj=0.143, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.714, adj=0.143, (0 split)  
##   
## Node number 6534: 795 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2553459 P(node) =0.008041675  
## class counts: 592 203  
## probabilities: 0.745 0.255   
## left son=13068 (244 obs) right son=13069 (551 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.5113010, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.1870660, (0 missing)  
## Checkin.service < 4.5 to the right, improve=1.1628930, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=0.9939332, (0 missing)  
## Flight.Distance < 695.5 to the left, improve=0.9674251, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the left, agree=0.696, adj=0.008, (0 split)  
##   
## Node number 6535: 14 observations  
## predicted class=1 expected loss=0.3571429 P(node) =0.0001416144  
## class counts: 5 9  
## probabilities: 0.357 0.643   
##   
## Node number 6536: 52 observations  
## predicted class=0 expected loss=0.1346154 P(node) =0.0005259964  
## class counts: 45 7  
## probabilities: 0.865 0.135   
##   
## Node number 6537: 42 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.2857143 P(node) =0.0004248432  
## class counts: 30 12  
## probabilities: 0.714 0.286   
## left son=13074 (35 obs) right son=13075 (7 obs)  
## Primary splits:  
## Flight.Distance < 1007 to the left, improve=5.4857140, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.9075630, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.5772006, (0 missing)  
## Male < 0.5 to the right, improve=0.5610390, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.3922851, (0 missing)  
##   
## Node number 6538: 250 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.292 P(node) =0.002528829  
## class counts: 177 73  
## probabilities: 0.708 0.292   
## left son=13076 (237 obs) right son=13077 (13 obs)  
## Primary splits:  
## Flight.Distance < 770.5 to the right, improve=1.6659550, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.1699200, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.9205732, (0 missing)  
## Age < 44.5 to the right, improve=0.8340767, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=0.8340767, (0 missing)  
##   
## Node number 6539: 82 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.402439 P(node) =0.0008294558  
## class counts: 49 33  
## probabilities: 0.598 0.402   
## left son=13078 (21 obs) right son=13079 (61 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the right, improve=2.536604, (0 missing)  
## Flight.Distance < 945 to the left, improve=2.168057, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.962834, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.909481, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.836752, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the right, agree=0.780, adj=0.143, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.768, adj=0.095, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.768, adj=0.095, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.768, adj=0.095, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.756, adj=0.048, (0 split)  
##   
## Node number 6542: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 6543: 152 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.4210526 P(node) =0.001537528  
## class counts: 88 64  
## probabilities: 0.579 0.421   
## left son=13086 (128 obs) right son=13087 (24 obs)  
## Primary splits:  
## Age < 56.5 to the left, improve=2.370888, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=2.233197, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.977289, (0 missing)  
## Flight.Distance < 1850.5 to the left, improve=1.501096, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=1.154214, (0 missing)  
## Surrogate splits:  
## Cleanliness < 1.5 to the left, agree=0.849, adj=0.042, (0 split)  
##   
## Node number 6566: 14 observations  
## predicted class=0 expected loss=0.2142857 P(node) =0.0001416144  
## class counts: 11 3  
## probabilities: 0.786 0.214   
##   
## Node number 6567: 11 observations  
## predicted class=1 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 5 6  
## probabilities: 0.455 0.545   
##   
## Node number 6570: 853 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3141852 P(node) =0.008628363  
## class counts: 585 268  
## probabilities: 0.686 0.314   
## left son=13140 (37 obs) right son=13141 (816 obs)  
## Primary splits:  
## Food.and.drink < 2.5 to the left, improve=1.787761, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.468303, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=1.385011, (0 missing)  
## Inflight.entertainment < 3.5 to the left, improve=1.246864, (0 missing)  
## Online.boarding < 4.5 to the right, improve=1.150606, (0 missing)  
##   
## Node number 6571: 206 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3834951 P(node) =0.002083755  
## class counts: 127 79  
## probabilities: 0.617 0.383   
## left son=13142 (12 obs) right son=13143 (194 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the left, improve=2.296083, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.855600, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.740182, (0 missing)  
## Flight.Distance < 1090 to the right, improve=1.509290, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=1.154958, (0 missing)  
##   
## Node number 6586: 15 observations  
## predicted class=0 expected loss=0.4 P(node) =0.0001517297  
## class counts: 9 6  
## probabilities: 0.600 0.400   
##   
## Node number 6587: 12 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001213838  
## class counts: 4 8  
## probabilities: 0.333 0.667   
##   
## Node number 6616: 82 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.2804878 P(node) =0.0008294558  
## class counts: 59 23  
## probabilities: 0.720 0.280   
## left son=13232 (61 obs) right son=13233 (21 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.2380760, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.1373800, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.9611973, (0 missing)  
## Flight.Distance < 674 to the left, improve=0.8791702, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=0.7950734, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 4.5 to the left, agree=0.756, adj=0.048, (0 split)  
## Departure.Delay.in.Minutes < 18.5 to the left, agree=0.756, adj=0.048, (0 split)  
##   
## Node number 6617: 27 observations, complexity param=3.998816e-05  
## predicted class=1 expected loss=0.4814815 P(node) =0.0002731135  
## class counts: 13 14  
## probabilities: 0.481 0.519   
## left son=13234 (15 obs) right son=13235 (12 obs)  
## Primary splits:  
## Age < 34 to the left, improve=4.281481, (0 missing)  
## Inflight.entertainment < 3.5 to the left, improve=4.208754, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=3.151811, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.514449, (0 missing)  
## Flight.Distance < 965.5 to the left, improve=1.481481, (0 missing)  
## Surrogate splits:  
## Checkin.service < 1.5 to the right, agree=0.778, adj=0.500, (0 split)  
## Flight.Distance < 1449.5 to the left, agree=0.741, adj=0.417, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.704, adj=0.333, (0 split)  
## Gate.location < 3.5 to the right, agree=0.667, adj=0.250, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.630, adj=0.167, (0 split)  
##   
## Node number 7314: 62 observations  
## predicted class=0 expected loss=0.06451613 P(node) =0.0006271495  
## class counts: 58 4  
## probabilities: 0.935 0.065   
##   
## Node number 7315: 35 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.2857143 P(node) =0.000354036  
## class counts: 25 10  
## probabilities: 0.714 0.286   
## left son=14630 (23 obs) right son=14631 (12 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=10.952380, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 7.619048, (0 missing)  
## Cleanliness < 3.5 to the right, improve= 6.050420, (0 missing)  
## Gate.location < 4.5 to the left, improve= 5.714286, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 4.515977, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.914, adj=0.750, (0 split)  
## Gate.location < 4.5 to the left, agree=0.857, adj=0.583, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.857, adj=0.583, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.829, adj=0.500, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.800, adj=0.417, (0 split)  
##   
## Node number 7320: 586 observations, complexity param=0.001055688  
## predicted class=0 expected loss=0.3703072 P(node) =0.005927574  
## class counts: 369 217  
## probabilities: 0.630 0.370   
## left son=14640 (504 obs) right son=14641 (82 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=36.01075, (0 missing)  
## Inflight.service < 3.5 to the left, improve=29.58546, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=24.47165, (0 missing)  
## BusinessClass < 0.5 to the left, improve=21.08166, (0 missing)  
## Flight.Distance < 1301 to the left, improve=18.66636, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.925, adj=0.463, (0 split)  
## Age < 32.5 to the right, agree=0.922, adj=0.439, (0 split)  
## On.board.service < 3.5 to the left, agree=0.899, adj=0.280, (0 split)  
## Arrival.Delay.in.Minutes < 143.5 to the left, agree=0.869, adj=0.061, (0 split)  
## Departure.Delay.in.Minutes < 130 to the left, agree=0.867, adj=0.049, (0 split)  
##   
## Node number 7321: 64 observations  
## predicted class=1 expected loss=0 P(node) =0.0006473801  
## class counts: 0 64  
## probabilities: 0.000 1.000   
##   
## Node number 7322: 23 observations  
## predicted class=0 expected loss=0 P(node) =0.0002326522  
## class counts: 23 0  
## probabilities: 1.000 0.000   
##   
## Node number 7323: 180 observations  
## predicted class=1 expected loss=0.06111111 P(node) =0.001820757  
## class counts: 11 169  
## probabilities: 0.061 0.939   
##   
## Node number 7328: 164 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1036585 P(node) =0.001658912  
## class counts: 147 17  
## probabilities: 0.896 0.104   
## left son=14656 (117 obs) right son=14657 (47 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=2.239931, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.877479, (0 missing)  
## Cleanliness < 2.5 to the right, improve=1.877479, (0 missing)  
## Age < 38.5 to the left, improve=1.850283, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.730155, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.787, adj=0.255, (0 split)  
## On.board.service < 4.5 to the left, agree=0.756, adj=0.149, (0 split)  
## Gate.location < 4.5 to the left, agree=0.732, adj=0.064, (0 split)  
## EcoClass < 0.5 to the right, agree=0.726, adj=0.043, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.720, adj=0.021, (0 split)  
##   
## Node number 7329: 251 observations, complexity param=0.0001559538  
## predicted class=0 expected loss=0.3346614 P(node) =0.002538944  
## class counts: 167 84  
## probabilities: 0.665 0.335   
## left son=14658 (208 obs) right son=14659 (43 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=10.395850, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve= 5.448327, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve= 4.418324, (0 missing)  
## On.board.service < 4.5 to the left, improve= 3.678888, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve= 3.182833, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 108.5 to the right, agree=0.833, adj=0.023, (0 split)  
##   
## Node number 7330: 71 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.4084507 P(node) =0.0007181873  
## class counts: 42 29  
## probabilities: 0.592 0.408   
## left son=14660 (46 obs) right son=14661 (25 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the right, improve=4.137685, (0 missing)  
## Cleanliness < 3.5 to the right, improve=3.513278, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=3.485939, (0 missing)  
## Flight.Distance < 323 to the right, improve=2.545153, (0 missing)  
## Arrival.Delay.in.Minutes < 17 to the right, improve=2.271582, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the right, agree=0.986, adj=0.96, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.944, adj=0.84, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.803, adj=0.44, (0 split)  
## Arrival.Delay.in.Minutes < 14.5 to the right, agree=0.761, adj=0.32, (0 split)  
## Departure.Delay.in.Minutes < 15 to the right, agree=0.746, adj=0.28, (0 split)  
##   
## Node number 7331: 14 observations  
## predicted class=1 expected loss=0 P(node) =0.0001416144  
## class counts: 0 14  
## probabilities: 0.000 1.000   
##   
## Node number 7332: 59 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.4745763 P(node) =0.0005968036  
## class counts: 28 31  
## probabilities: 0.475 0.525   
## left son=14664 (10 obs) right son=14665 (49 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=4.358423, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=2.214426, (0 missing)  
## Departure.Delay.in.Minutes < 19.5 to the right, improve=1.952618, (0 missing)  
## Flight.Distance < 553 to the left, improve=1.830872, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=1.580919, (0 missing)  
##   
## Node number 7333: 9 observations  
## predicted class=1 expected loss=0 P(node) =9.103783e-05  
## class counts: 0 9  
## probabilities: 0.000 1.000   
##   
## Node number 7336: 17 observations  
## predicted class=0 expected loss=0.1764706 P(node) =0.0001719603  
## class counts: 14 3  
## probabilities: 0.824 0.176   
##   
## Node number 7337: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 7338: 62 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.3709677 P(node) =0.0006271495  
## class counts: 23 39  
## probabilities: 0.371 0.629   
## left son=14676 (7 obs) right son=14677 (55 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.8601590, (0 missing)  
## Flight.Distance < 872.5 to the right, improve=1.3222650, (0 missing)  
## Departure.Delay.in.Minutes < 2.5 to the right, improve=0.9831029, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.5780787, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=0.5780787, (0 missing)  
##   
## Node number 7339: 64 observations  
## predicted class=1 expected loss=0.1875 P(node) =0.0006473801  
## class counts: 12 52  
## probabilities: 0.187 0.812   
##   
## Node number 7344: 40 observations  
## predicted class=0 expected loss=0 P(node) =0.0004046126  
## class counts: 40 0  
## probabilities: 1.000 0.000   
##   
## Node number 7345: 397 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.4206549 P(node) =0.00401578  
## class counts: 167 230  
## probabilities: 0.421 0.579   
## left son=14690 (23 obs) right son=14691 (374 obs)  
## Primary splits:  
## Flight.Distance < 1638.5 to the right, improve=6.397098, (0 missing)  
## Inflight.service < 3.5 to the left, improve=4.228024, (0 missing)  
## Age < 27.5 to the right, improve=4.029389, (0 missing)  
## On.board.service < 2.5 to the left, improve=3.177138, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=2.590895, (0 missing)  
##   
## Node number 7346: 81 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.4320988 P(node) =0.0008193405  
## class counts: 46 35  
## probabilities: 0.568 0.432   
## left son=14692 (19 obs) right son=14693 (62 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the right, improve=9.269215, (0 missing)  
## Flight.Distance < 1597.5 to the right, improve=8.381658, (0 missing)  
## Cleanliness < 3.5 to the right, improve=7.445394, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=6.562610, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=6.562610, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2089.5 to the right, agree=0.963, adj=0.842, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.963, adj=0.842, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.963, adj=0.842, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.963, adj=0.842, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.951, adj=0.789, (0 split)  
##   
## Node number 7347: 326 observations, complexity param=8.797396e-05  
## predicted class=1 expected loss=0.1809816 P(node) =0.003297593  
## class counts: 59 267  
## probabilities: 0.181 0.819   
## left son=14694 (112 obs) right son=14695 (214 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=20.917870, (0 missing)  
## Cleanliness < 2.5 to the left, improve=16.001630, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=15.997670, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=11.060770, (0 missing)  
## Inflight.service < 3.5 to the right, improve= 9.486495, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.893, adj=0.687, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.883, adj=0.661, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.874, adj=0.634, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.801, adj=0.420, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.779, adj=0.357, (0 split)  
##   
## Node number 7348: 12 observations  
## predicted class=0 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 7 5  
## probabilities: 0.583 0.417   
##   
## Node number 7349: 9 observations  
## predicted class=1 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 2 7  
## probabilities: 0.222 0.778   
##   
## Node number 7732: 53 observations  
## predicted class=0 expected loss=0.1509434 P(node) =0.0005361117  
## class counts: 45 8  
## probabilities: 0.849 0.151   
##   
## Node number 7733: 20 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4 P(node) =0.0002023063  
## class counts: 8 12  
## probabilities: 0.400 0.600   
## left son=15466 (7 obs) right son=15467 (13 obs)  
## Primary splits:  
## Flight.Distance < 818.5 to the right, improve=2.1274730, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.4241760, (0 missing)  
## Age < 20.5 to the left, improve=0.6329670, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.4000000, (0 missing)  
## On.board.service < 4.5 to the left, improve=0.2813187, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.85, adj=0.571, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.80, adj=0.429, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.70, adj=0.143, (0 split)  
## Checkin.service < 4.5 to the right, agree=0.70, adj=0.143, (0 split)  
##   
## Node number 7734: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 7735: 132 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.3787879 P(node) =0.001335222  
## class counts: 50 82  
## probabilities: 0.379 0.621   
## left son=15470 (125 obs) right son=15471 (7 obs)  
## Primary splits:  
## Flight.Distance < 1252.5 to the left, improve=2.121212, (0 missing)  
## Inflight.service < 3.5 to the left, improve=2.025511, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=1.988981, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=1.988871, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.889064, (0 missing)  
##   
## Node number 7738: 31 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.483871 P(node) =0.0003135748  
## class counts: 15 16  
## probabilities: 0.484 0.516   
## left son=15476 (24 obs) right son=15477 (7 obs)  
## Primary splits:  
## Age < 23.5 to the left, improve=2.1029190, (0 missing)  
## Flight.Distance < 314.5 to the left, improve=1.2905940, (0 missing)  
## Arrival.Delay.in.Minutes < 14 to the right, improve=0.9600614, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.8873797, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=0.8873797, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 94.5 to the left, agree=0.839, adj=0.286, (0 split)  
## Arrival.Delay.in.Minutes < 83 to the left, agree=0.839, adj=0.286, (0 split)  
##   
## Node number 7739: 52 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.2884615 P(node) =0.0005259964  
## class counts: 15 37  
## probabilities: 0.288 0.712   
## left son=15478 (10 obs) right son=15479 (42 obs)  
## Primary splits:  
## Age < 23.5 to the right, improve=2.403297, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=2.403297, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the left, improve=1.804800, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.714575, (0 missing)  
## Departure.Delay.in.Minutes < 7.5 to the left, improve=1.088948, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 76.5 to the right, agree=0.846, adj=0.2, (0 split)  
## Arrival.Delay.in.Minutes < 75 to the right, agree=0.846, adj=0.2, (0 split)  
##   
## Node number 7786: 13 observations  
## predicted class=0 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 10 3  
## probabilities: 0.769 0.231   
##   
## Node number 7787: 179 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.2905028 P(node) =0.001810641  
## class counts: 52 127  
## probabilities: 0.291 0.709   
## left son=15574 (7 obs) right son=15575 (172 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the left, improve=2.616613, (0 missing)  
## Departure.Delay.in.Minutes < 18 to the left, improve=2.210474, (0 missing)  
## Arrival.Delay.in.Minutes < 27.5 to the left, improve=2.134648, (0 missing)  
## Age < 27.5 to the left, improve=1.376927, (0 missing)  
## Flight.Distance < 1061.5 to the left, improve=1.229101, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the left, agree=0.972, adj=0.286, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.966, adj=0.143, (0 split)  
##   
## Node number 7788: 28 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3928571 P(node) =0.0002832288  
## class counts: 17 11  
## probabilities: 0.607 0.393   
## left son=15576 (11 obs) right son=15577 (17 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the right, improve=1.613827, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.334921, (0 missing)  
## Departure.Delay.in.Minutes < 9.5 to the left, improve=1.275092, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.207143, (0 missing)  
## Flight.Distance < 924.5 to the right, improve=1.157143, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.714, adj=0.273, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.714, adj=0.273, (0 split)  
## Departure.Delay.in.Minutes < 9.5 to the left, agree=0.714, adj=0.273, (0 split)  
## Age < 39.5 to the right, agree=0.679, adj=0.182, (0 split)  
## Flight.Distance < 924.5 to the right, agree=0.679, adj=0.182, (0 split)  
##   
## Node number 7789: 25 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0002528829  
## class counts: 5 20  
## probabilities: 0.200 0.800   
##   
## Node number 7790: 164 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2804878 P(node) =0.001658912  
## class counts: 46 118  
## probabilities: 0.280 0.720   
## left son=15580 (13 obs) right son=15581 (151 obs)  
## Primary splits:  
## Flight.Distance < 1835.5 to the right, improve=1.879279, (0 missing)  
## Male < 0.5 to the right, improve=1.756098, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.441000, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.309940, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.225891, (0 missing)  
##   
## Node number 7791: 13 observations  
## predicted class=1 expected loss=0 P(node) =0.0001314991  
## class counts: 0 13  
## probabilities: 0.000 1.000   
##   
## Node number 7936: 741 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.2887989 P(node) =0.007495448  
## class counts: 527 214  
## probabilities: 0.711 0.289   
## left son=15872 (260 obs) right son=15873 (481 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the right, improve=20.00570, (0 missing)  
## On.board.service < 4.5 to the left, improve=19.72647, (0 missing)  
## Flight.Distance < 1139 to the right, improve=17.00074, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=14.51015, (0 missing)  
## Age < 33.5 to the left, improve=12.65110, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.846, adj=0.562, (0 split)  
## Flight.Distance < 1439 to the right, agree=0.842, adj=0.550, (0 split)  
## Age < 31.5 to the left, agree=0.699, adj=0.142, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.671, adj=0.062, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.664, adj=0.042, (0 split)  
##   
## Node number 7937: 80 observations, complexity param=0.0004318722  
## predicted class=1 expected loss=0.2875 P(node) =0.0008092252  
## class counts: 23 57  
## probabilities: 0.288 0.713   
## left son=15874 (28 obs) right son=15875 (52 obs)  
## Primary splits:  
## Inflight.entertainment < 4.5 to the right, improve=24.56071, (0 missing)  
## Gate.location < 4.5 to the left, improve=17.42976, (0 missing)  
## Cleanliness < 4.5 to the right, improve=16.16389, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=15.36959, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=14.66786, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.925, adj=0.786, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.900, adj=0.714, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.900, adj=0.714, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.887, adj=0.679, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.863, adj=0.607, (0 split)  
##   
## Node number 7950: 22 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3636364 P(node) =0.0002225369  
## class counts: 8 14  
## probabilities: 0.364 0.636   
## left son=15900 (8 obs) right son=15901 (14 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=3.7532470, (0 missing)  
## Inflight.wifi.service < 2.5 to the right, improve=1.7175320, (0 missing)  
## Age < 32.5 to the right, improve=1.0008660, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.8865801, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.8865801, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 0.5 to the right, agree=0.864, adj=0.625, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.773, adj=0.375, (0 split)  
## Flight.Distance < 132 to the left, agree=0.727, adj=0.250, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.727, adj=0.250, (0 split)  
## Ease.of.Online.booking < 1.5 to the left, agree=0.682, adj=0.125, (0 split)  
##   
## Node number 7951: 193 observations  
## predicted class=1 expected loss=0.03626943 P(node) =0.001952256  
## class counts: 7 186  
## probabilities: 0.036 0.964   
##   
## Node number 7960: 121 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3719008 P(node) =0.001223953  
## class counts: 45 76  
## probabilities: 0.372 0.628   
## left son=15920 (86 obs) right son=15921 (35 obs)  
## Primary splits:  
## Flight.Distance < 485.5 to the right, improve=6.536235, (0 missing)  
## On.board.service < 4.5 to the left, improve=6.234808, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=5.349202, (0 missing)  
## Age < 40.5 to the right, improve=4.929543, (0 missing)  
## Arrival.Delay.in.Minutes < 7 to the right, improve=4.749598, (0 missing)  
##   
## Node number 7961: 42 observations  
## predicted class=1 expected loss=0.04761905 P(node) =0.0004248432  
## class counts: 2 40  
## probabilities: 0.048 0.952   
##   
## Node number 8064: 461 observations, complexity param=0.0003187628  
## predicted class=0 expected loss=0.3991323 P(node) =0.00466316  
## class counts: 277 184  
## probabilities: 0.601 0.399   
## left son=16128 (431 obs) right son=16129 (30 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=20.670890, (0 missing)  
## Age < 25.5 to the left, improve=10.760550, (0 missing)  
## Flight.Distance < 146 to the right, improve= 5.545958, (0 missing)  
## Seat.comfort < 1.5 to the right, improve= 4.370605, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve= 3.976376, (0 missing)  
##   
## Node number 8065: 66 observations  
## predicted class=1 expected loss=0 P(node) =0.0006676108  
## class counts: 0 66  
## probabilities: 0.000 1.000   
##   
## Node number 8066: 30 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4 P(node) =0.0003034594  
## class counts: 12 18  
## probabilities: 0.400 0.600   
## left son=16132 (8 obs) right son=16133 (22 obs)  
## Primary splits:  
## Flight.Distance < 753 to the right, improve=4.922727, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=3.318660, (0 missing)  
## Inflight.service < 1.5 to the right, improve=2.177778, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.542857, (0 missing)  
## Age < 42 to the left, improve=1.344444, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.800, adj=0.250, (0 split)  
## On.board.service < 3.5 to the right, agree=0.800, adj=0.250, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.767, adj=0.125, (0 split)  
## Gate.location < 3.5 to the right, agree=0.767, adj=0.125, (0 split)  
##   
## Node number 8067: 105 observations  
## predicted class=1 expected loss=0.05714286 P(node) =0.001062108  
## class counts: 6 99  
## probabilities: 0.057 0.943   
##   
## Node number 8070: 184 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.1793478 P(node) =0.001861218  
## class counts: 33 151  
## probabilities: 0.179 0.821   
## left son=16140 (143 obs) right son=16141 (41 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=3.393813, (0 missing)  
## Flight.Distance < 324 to the right, improve=2.902129, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=2.883138, (0 missing)  
## Arrival.Delay.in.Minutes < 33.5 to the right, improve=1.308877, (0 missing)  
## Inflight.service < 1.5 to the right, improve=1.075905, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 101.5 to the right, agree=0.783, adj=0.024, (0 split)  
##   
## Node number 8071: 117 observations  
## predicted class=1 expected loss=0 P(node) =0.001183492  
## class counts: 0 117  
## probabilities: 0.000 1.000   
##   
## Node number 8132: 23 observations  
## predicted class=0 expected loss=0 P(node) =0.0002326522  
## class counts: 23 0  
## probabilities: 1.000 0.000   
##   
## Node number 8133: 99 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.1919192 P(node) =0.001001416  
## class counts: 19 80  
## probabilities: 0.192 0.808   
## left son=16266 (55 obs) right son=16267 (44 obs)  
## Primary splits:  
## Baggage.handling < 2.5 to the right, improve=4.534343, (0 missing)  
## On.board.service < 4.5 to the left, improve=2.463827, (0 missing)  
## Inflight.service < 4.5 to the left, improve=2.333737, (0 missing)  
## Flight.Distance < 1619 to the right, improve=1.583936, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.511949, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the right, agree=0.697, adj=0.318, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.626, adj=0.159, (0 split)  
## Flight.Distance < 2440 to the left, agree=0.616, adj=0.136, (0 split)  
## Age < 26.5 to the right, agree=0.596, adj=0.091, (0 split)  
## Departure.Delay.in.Minutes < 34 to the left, agree=0.576, adj=0.045, (0 split)  
##   
## Node number 8164: 55 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.4363636 P(node) =0.0005563423  
## class counts: 24 31  
## probabilities: 0.436 0.564   
## left son=16328 (40 obs) right son=16329 (15 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=7.854545, (0 missing)  
## Inflight.wifi.service < 4.5 to the left, improve=5.637879, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=4.654545, (0 missing)  
## Age < 50.5 to the right, improve=2.184576, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.783040, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 4.5 to the left, agree=0.836, adj=0.400, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.818, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 20.5 to the left, agree=0.745, adj=0.067, (0 split)  
##   
## Node number 8165: 29 observations  
## predicted class=1 expected loss=0 P(node) =0.0002933441  
## class counts: 0 29  
## probabilities: 0.000 1.000   
##   
## Node number 8178: 63 observations, complexity param=4.198757e-05  
## predicted class=1 expected loss=0.1904762 P(node) =0.0006372648  
## class counts: 12 51  
## probabilities: 0.190 0.810   
## left son=16356 (32 obs) right son=16357 (31 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=4.428571, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=3.657143, (0 missing)  
## Checkin.service < 3.5 to the left, improve=3.653635, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=3.007519, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=3.007519, (0 missing)  
## Surrogate splits:  
## Checkin.service < 3.5 to the left, agree=0.667, adj=0.323, (0 split)  
## Departure.Delay.in.Minutes < 84 to the left, agree=0.651, adj=0.290, (0 split)  
## Arrival.Delay.in.Minutes < 74 to the left, agree=0.651, adj=0.290, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.635, adj=0.258, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.635, adj=0.258, (0 split)  
##   
## Node number 8179: 69 observations  
## predicted class=1 expected loss=0 P(node) =0.0006979567  
## class counts: 0 69  
## probabilities: 0.000 1.000   
##   
## Node number 8184: 82 observations, complexity param=0.0001559538  
## predicted class=1 expected loss=0.4390244 P(node) =0.0008294558  
## class counts: 36 46  
## probabilities: 0.439 0.561   
## left son=16368 (26 obs) right son=16369 (56 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=23.96167, (0 missing)  
## Gate.location < 3.5 to the left, improve=21.35576, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=14.67596, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=13.54834, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=11.45270, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the left, agree=0.976, adj=0.923, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.890, adj=0.654, (0 split)  
## Flight.Distance < 2964.5 to the right, agree=0.707, adj=0.077, (0 split)  
##   
## Node number 8185: 73 observations  
## predicted class=1 expected loss=0 P(node) =0.000738418  
## class counts: 0 73  
## probabilities: 0.000 1.000   
##   
## Node number 8188: 145 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.1862069 P(node) =0.001466721  
## class counts: 27 118  
## probabilities: 0.186 0.814   
## left son=16376 (13 obs) right son=16377 (132 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=18.914520, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=12.889680, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve= 7.267830, (0 missing)  
## Baggage.handling < 4.5 to the left, improve= 6.898316, (0 missing)  
## Online.boarding < 4.5 to the left, improve= 6.513009, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.972, adj=0.692, (0 split)  
##   
## Node number 8189: 180 observations  
## predicted class=1 expected loss=0 P(node) =0.001820757  
## class counts: 0 180  
## probabilities: 0.000 1.000   
##   
## Node number 8190: 45 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.2 P(node) =0.0004551892  
## class counts: 9 36  
## probabilities: 0.200 0.800   
## left son=16380 (24 obs) right son=16381 (21 obs)  
## Primary splits:  
## Inflight.entertainment < 4.5 to the left, improve=3.15, (0 missing)  
## On.board.service < 4.5 to the left, improve=3.15, (0 missing)  
## Inflight.service < 4.5 to the left, improve=3.15, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=2.88, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=2.88, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Inflight.service < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.933, adj=0.857, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.933, adj=0.857, (0 split)  
## Inflight.wifi.service < 3.5 to the right, agree=0.711, adj=0.381, (0 split)  
##   
## Node number 8191: 19198 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.001979373 P(node) =0.1941938  
## class counts: 38 19160  
## probabilities: 0.002 0.998   
## left son=16382 (24 obs) right son=16383 (19174 obs)  
## Primary splits:  
## Leg.room.service < 1.5 to the left, improve=0.7273449, (0 missing)  
## Age < 78.5 to the right, improve=0.2779530, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=0.2251203, (0 missing)  
## Flight.Distance < 3999.5 to the right, improve=0.2144758, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.1440212, (0 missing)  
##   
## Node number 8576: 2213 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.02214189 P(node) =0.02238519  
## class counts: 2164 49  
## probabilities: 0.978 0.022   
## left son=17152 (2069 obs) right son=17153 (144 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=3.2590460, (0 missing)  
## Age < 38.5 to the left, improve=1.0704300, (0 missing)  
## Flight.Distance < 229.5 to the right, improve=0.9286575, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=0.8886819, (0 missing)  
## Cleanliness < 3.5 to the left, improve=0.8667580, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 140 to the left, agree=0.938, adj=0.049, (0 split)  
## Departure.Delay.in.Minutes < 130.5 to the left, agree=0.938, adj=0.042, (0 split)  
##   
## Node number 8577: 811 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.08138101 P(node) =0.00820352  
## class counts: 745 66  
## probabilities: 0.919 0.081   
## left son=17154 (762 obs) right son=17155 (49 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=4.354819, (0 missing)  
## Arrival.Delay.in.Minutes < 187.5 to the left, improve=3.105661, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=3.007748, (0 missing)  
## Flight.Distance < 1211.5 to the right, improve=2.305080, (0 missing)  
## Male < 0.5 to the left, improve=2.282247, (0 missing)  
##   
## Node number 8582: 11 observations  
## predicted class=0 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 8 3  
## probabilities: 0.727 0.273   
##   
## Node number 8583: 16 observations  
## predicted class=1 expected loss=0 P(node) =0.000161845  
## class counts: 0 16  
## probabilities: 0.000 1.000   
##   
## Node number 8710: 73 observations  
## predicted class=0 expected loss=0.05479452 P(node) =0.000738418  
## class counts: 69 4  
## probabilities: 0.945 0.055   
##   
## Node number 8711: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 8736: 331 observations  
## predicted class=0 expected loss=0.04531722 P(node) =0.003348169  
## class counts: 316 15  
## probabilities: 0.955 0.045   
##   
## Node number 8737: 160 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.1375 P(node) =0.00161845  
## class counts: 138 22  
## probabilities: 0.862 0.137   
## left son=17474 (120 obs) right son=17475 (40 obs)  
## Primary splits:  
## Inflight.service < 1.5 to the right, improve=6.016667, (0 missing)  
## Flight.Distance < 501.5 to the right, improve=3.194528, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=1.950000, (0 missing)  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=1.346606, (0 missing)  
## Age < 34.5 to the left, improve=1.283333, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.775, adj=0.10, (0 split)  
## Flight.Distance < 2485.5 to the left, agree=0.762, adj=0.05, (0 split)  
##   
## Node number 9408: 2841 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.04012672 P(node) =0.02873761  
## class counts: 2727 114  
## probabilities: 0.960 0.040   
## left son=18816 (2793 obs) right son=18817 (48 obs)  
## Primary splits:  
## Baggage.handling < 1.5 to the right, improve=3.489625, (0 missing)  
## Online.boarding < 1.5 to the right, improve=3.229518, (0 missing)  
## Gate.location < 1.5 to the left, improve=3.129130, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=2.982532, (0 missing)  
## Inflight.service < 1.5 to the right, improve=2.601736, (0 missing)  
##   
## Node number 9409: 113 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.2654867 P(node) =0.001143031  
## class counts: 83 30  
## probabilities: 0.735 0.265   
## left son=18818 (74 obs) right son=18819 (39 obs)  
## Primary splits:  
## LoyalCustomer < 0.5 to the left, improve=24.384030, (0 missing)  
## Flight.Distance < 2205 to the left, improve=15.188380, (0 missing)  
## Checkin.service < 2.5 to the right, improve= 8.658255, (0 missing)  
## Age < 33.5 to the right, improve= 5.537463, (0 missing)  
## Gate.location < 1.5 to the left, improve= 4.163572, (0 missing)  
## Surrogate splits:  
## Age < 24.5 to the right, agree=0.796, adj=0.410, (0 split)  
## Flight.Distance < 2132 to the left, agree=0.770, adj=0.333, (0 split)  
## BusinessTravel < 0.5 to the right, agree=0.752, adj=0.282, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.743, adj=0.256, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.708, adj=0.154, (0 split)  
##   
## Node number 9410: 73 observations  
## predicted class=0 expected loss=0.05479452 P(node) =0.000738418  
## class counts: 69 4  
## probabilities: 0.945 0.055   
##   
## Node number 9411: 69 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.4492754 P(node) =0.0006979567  
## class counts: 31 38  
## probabilities: 0.449 0.551   
## left son=18822 (11 obs) right son=18823 (58 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 114 to the right, improve=7.938031, (0 missing)  
## BusinessTravel < 0.5 to the left, improve=7.938031, (0 missing)  
## Age < 39.5 to the right, improve=7.191631, (0 missing)  
## Inflight.service < 2.5 to the left, improve=7.184143, (0 missing)  
## Arrival.Delay.in.Minutes < 123 to the right, improve=6.346682, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 123 to the right, agree=0.986, adj=0.909, (0 split)  
##   
## Node number 9412: 13 observations  
## predicted class=0 expected loss=0 P(node) =0.0001314991  
## class counts: 13 0  
## probabilities: 1.000 0.000   
##   
## Node number 9413: 22 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3636364 P(node) =0.0002225369  
## class counts: 14 8  
## probabilities: 0.636 0.364   
## left son=18826 (11 obs) right son=18827 (11 obs)  
## Primary splits:  
## Male < 0.5 to the right, improve=3.272727, (0 missing)  
## Flight.Distance < 746 to the right, improve=2.548485, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=1.454545, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=1.431818, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.121989, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the right, agree=0.727, adj=0.455, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.682, adj=0.364, (0 split)  
## Departure.Delay.in.Minutes < 4.5 to the right, agree=0.682, adj=0.364, (0 split)  
## Flight.Distance < 420.5 to the right, agree=0.636, adj=0.273, (0 split)  
## Ease.of.Online.booking < 2.5 to the left, agree=0.636, adj=0.273, (0 split)  
##   
## Node number 9468: 17 observations  
## predicted class=0 expected loss=0 P(node) =0.0001719603  
## class counts: 17 0  
## probabilities: 1.000 0.000   
##   
## Node number 9469: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 9470: 17 observations  
## predicted class=0 expected loss=0.4705882 P(node) =0.0001719603  
## class counts: 9 8  
## probabilities: 0.529 0.471   
##   
## Node number 9471: 161 observations  
## predicted class=1 expected loss=0 P(node) =0.001628566  
## class counts: 0 161  
## probabilities: 0.000 1.000   
##   
## Node number 9976: 56 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0005664576  
## class counts: 52 4  
## probabilities: 0.929 0.071   
##   
## Node number 9977: 86 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.1744186 P(node) =0.0008699171  
## class counts: 71 15  
## probabilities: 0.826 0.174   
## left son=19954 (64 obs) right son=19955 (22 obs)  
## Primary splits:  
## Flight.Distance < 308.5 to the right, improve=1.2219870, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.9844401, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.6071691, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.5366726, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.4636444, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the right, agree=0.767, adj=0.091, (0 split)  
##   
## Node number 10126: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 10127: 26 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3076923 P(node) =0.0002629982  
## class counts: 8 18  
## probabilities: 0.308 0.692   
## left son=20254 (15 obs) right son=20255 (11 obs)  
## Primary splits:  
## Flight.Distance < 1665.5 to the right, improve=3.6102560, (0 missing)  
## Inflight.wifi.service < 2.5 to the right, improve=2.2435900, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.3325620, (0 missing)  
## Male < 0.5 to the left, improve=1.2307690, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=0.8864469, (0 missing)  
## Surrogate splits:  
## Age < 47.5 to the left, agree=0.654, adj=0.182, (0 split)  
## Inflight.wifi.service < 2.5 to the right, agree=0.654, adj=0.182, (0 split)  
## Food.and.drink < 1.5 to the right, agree=0.654, adj=0.182, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.654, adj=0.182, (0 split)  
## Departure.Delay.in.Minutes < 3 to the left, agree=0.654, adj=0.182, (0 split)  
##   
## Node number 10570: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 10571: 58 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.3103448 P(node) =0.0005866882  
## class counts: 40 18  
## probabilities: 0.690 0.310   
## left son=21142 (27 obs) right son=21143 (31 obs)  
## Primary splits:  
## On.board.service < 3.5 to the left, improve=1.5826640, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.1977790, (0 missing)  
## EcoClass < 0.5 to the right, improve=0.8692529, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.7371100, (0 missing)  
## Cleanliness < 1.5 to the left, improve=0.6375862, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the left, agree=0.948, adj=0.889, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.948, adj=0.889, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.879, adj=0.741, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.638, adj=0.222, (0 split)  
## Age < 57.5 to the right, agree=0.603, adj=0.148, (0 split)  
##   
## Node number 10574: 12 observations  
## predicted class=0 expected loss=0.3333333 P(node) =0.0001213838  
## class counts: 8 4  
## probabilities: 0.667 0.333   
##   
## Node number 10575: 9 observations  
## predicted class=1 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 1 8  
## probabilities: 0.111 0.889   
##   
## Node number 10688: 52 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2115385 P(node) =0.0005259964  
## class counts: 41 11  
## probabilities: 0.788 0.212   
## left son=21376 (32 obs) right son=21377 (20 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=2.3086540, (0 missing)  
## Age < 50.5 to the right, improve=1.5320610, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=1.0450790, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.9740608, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.8461538, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 235 to the right, agree=0.692, adj=0.20, (0 split)  
## Online.boarding < 2.5 to the right, agree=0.692, adj=0.20, (0 split)  
## On.board.service < 2.5 to the right, agree=0.673, adj=0.15, (0 split)  
## Arrival.Delay.in.Minutes < 10.5 to the right, agree=0.673, adj=0.15, (0 split)  
## Age < 46.5 to the right, agree=0.654, adj=0.10, (0 split)  
##   
## Node number 10689: 16 observations  
## predicted class=1 expected loss=0.4375 P(node) =0.000161845  
## class counts: 7 9  
## probabilities: 0.437 0.562   
##   
## Node number 10690: 89 observations, complexity param=0.0001139663  
## predicted class=0 expected loss=0.4831461 P(node) =0.000900263  
## class counts: 46 43  
## probabilities: 0.517 0.483   
## left son=21380 (16 obs) right son=21381 (73 obs)  
## Primary splits:  
## Flight.Distance < 968.5 to the right, improve=5.0042330, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=2.0840990, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.8064000, (0 missing)  
## Checkin.service < 2.5 to the right, improve=1.0045400, (0 missing)  
## EcoClass < 0.5 to the left, improve=0.9372925, (0 missing)  
##   
## Node number 10691: 12 observations  
## predicted class=1 expected loss=0 P(node) =0.0001213838  
## class counts: 0 12  
## probabilities: 0.000 1.000   
##   
## Node number 10970: 25 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0002528829  
## class counts: 20 5  
## probabilities: 0.800 0.200   
##   
## Node number 10971: 55 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0005563423  
## class counts: 33 22  
## probabilities: 0.600 0.400   
## left son=21942 (41 obs) right son=21943 (14 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=1.1038330, (0 missing)  
## Age < 36 to the right, improve=0.9478723, (0 missing)  
## Flight.Distance < 1465.5 to the right, improve=0.8873950, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.5351351, (0 missing)  
## Cleanliness < 1.5 to the right, improve=0.5207729, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=0.818, adj=0.286, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.800, adj=0.214, (0 split)  
## Flight.Distance < 2559 to the left, agree=0.764, adj=0.071, (0 split)  
##   
## Node number 11072: 26 observations  
## predicted class=0 expected loss=0.07692308 P(node) =0.0002629982  
## class counts: 24 2  
## probabilities: 0.923 0.077   
##   
## Node number 11073: 22 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2727273 P(node) =0.0002225369  
## class counts: 16 6  
## probabilities: 0.727 0.273   
## left son=22146 (14 obs) right son=22147 (8 obs)  
## Primary splits:  
## Age < 59.5 to the right, improve=3.1201300, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=0.7956488, (0 missing)  
## Flight.Distance < 401 to the right, improve=0.5939394, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.5939394, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.2629870, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 442.5 to the right, agree=0.682, adj=0.125, (0 split)  
## Checkin.service < 1.5 to the right, agree=0.682, adj=0.125, (0 split)  
##   
## Node number 11202: 125 observations, complexity param=5.278438e-05  
## predicted class=1 expected loss=0.384 P(node) =0.001264414  
## class counts: 48 77  
## probabilities: 0.384 0.616   
## left son=22404 (111 obs) right son=22405 (14 obs)  
## Primary splits:  
## Seat.comfort < 1.5 to the right, improve=4.649514, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=4.278857, (0 missing)  
## Checkin.service < 4.5 to the left, improve=2.860138, (0 missing)  
## Arrival.Delay.in.Minutes < 55.5 to the left, improve=2.520615, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=2.400012, (0 missing)  
##   
## Node number 11203: 21 observations  
## predicted class=1 expected loss=0 P(node) =0.0002124216  
## class counts: 0 21  
## probabilities: 0.000 1.000   
##   
## Node number 11216: 9 observations  
## predicted class=0 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 5 4  
## probabilities: 0.556 0.444   
##   
## Node number 11217: 19 observations  
## predicted class=1 expected loss=0.2631579 P(node) =0.000192191  
## class counts: 5 14  
## probabilities: 0.263 0.737   
##   
## Node number 12978: 40 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0004046126  
## class counts: 36 4  
## probabilities: 0.900 0.100   
##   
## Node number 12979: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 12982: 63 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.1904762 P(node) =0.0006372648  
## class counts: 51 12  
## probabilities: 0.810 0.190   
## left son=25964 (39 obs) right son=25965 (24 obs)  
## Primary splits:  
## Flight.Distance < 1025.5 to the left, improve=1.5824180, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.5824180, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.7992008, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=0.5714286, (0 missing)  
## Male < 0.5 to the right, improve=0.4608295, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.683, adj=0.167, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.667, adj=0.125, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.651, adj=0.083, (0 split)  
## Gate.location < 4.5 to the left, agree=0.651, adj=0.083, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.651, adj=0.083, (0 split)  
##   
## Node number 12983: 21 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.4285714 P(node) =0.0002124216  
## class counts: 12 9  
## probabilities: 0.571 0.429   
## left son=25966 (9 obs) right son=25967 (12 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=3.174603, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=2.670330, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.994805, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.714286, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.714286, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Age < 29 to the right, agree=0.667, adj=0.222, (0 split)  
## Flight.Distance < 1017.5 to the right, agree=0.667, adj=0.222, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.667, adj=0.222, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.667, adj=0.222, (0 split)  
##   
## Node number 12988: 19 observations  
## predicted class=0 expected loss=0.05263158 P(node) =0.000192191  
## class counts: 18 1  
## probabilities: 0.947 0.053   
##   
## Node number 12989: 53 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2830189 P(node) =0.0005361117  
## class counts: 38 15  
## probabilities: 0.717 0.283   
## left son=25978 (9 obs) right son=25979 (44 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=1.7367070, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.5094340, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.4322910, (0 missing)  
## Gate.location < 3.5 to the right, improve=1.1367070, (0 missing)  
## Flight.Distance < 1317.5 to the right, improve=0.8399183, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1814 to the right, agree=0.849, adj=0.111, (0 split)  
##   
## Node number 12990: 14 observations  
## predicted class=0 expected loss=0.3571429 P(node) =0.0001416144  
## class counts: 9 5  
## probabilities: 0.643 0.357   
##   
## Node number 12991: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 13068: 244 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2090164 P(node) =0.002468137  
## class counts: 193 51  
## probabilities: 0.791 0.209   
## left son=26136 (223 obs) right son=26137 (21 obs)  
## Primary splits:  
## On.board.service < 1.5 to the right, improve=3.280371, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=2.298866, (0 missing)  
## Flight.Distance < 283.5 to the right, improve=1.985956, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.846995, (0 missing)  
## Male < 0.5 to the right, improve=1.832289, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the right, agree=0.922, adj=0.095, (0 split)  
##   
## Node number 13069: 551 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.2758621 P(node) =0.005573538  
## class counts: 399 152  
## probabilities: 0.724 0.276   
## left son=26138 (39 obs) right son=26139 (512 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the right, improve=1.830139, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=1.392544, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.192591, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.053415, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.005331, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.936, adj=0.103, (0 split)  
## Ease.of.Online.booking < 2.5 to the left, agree=0.935, adj=0.077, (0 split)  
##   
## Node number 13074: 35 observations  
## predicted class=0 expected loss=0.1714286 P(node) =0.000354036  
## class counts: 29 6  
## probabilities: 0.829 0.171   
##   
## Node number 13075: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 13076: 237 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.278481 P(node) =0.00239733  
## class counts: 171 66  
## probabilities: 0.722 0.278   
## left son=26152 (9 obs) right son=26153 (228 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the right, improve=1.4510330, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.3161480, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.1121420, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.0614020, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.7205822, (0 missing)  
##   
## Node number 13077: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 13078: 21 observations  
## predicted class=0 expected loss=0.1904762 P(node) =0.0002124216  
## class counts: 17 4  
## probabilities: 0.810 0.190   
##   
## Node number 13079: 61 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.4754098 P(node) =0.0006170342  
## class counts: 32 29  
## probabilities: 0.525 0.475   
## left son=26158 (13 obs) right son=26159 (48 obs)  
## Primary splits:  
## Gate.location < 1.5 to the left, improve=3.416614, (0 missing)  
## On.board.service < 3.5 to the right, improve=2.454368, (0 missing)  
## Flight.Distance < 943.5 to the left, improve=1.977512, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.330369, (0 missing)  
## Inflight.service < 3.5 to the right, improve=1.311813, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2088.5 to the right, agree=0.82, adj=0.154, (0 split)  
##   
## Node number 13086: 128 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.3828125 P(node) =0.00129476  
## class counts: 79 49  
## probabilities: 0.617 0.383   
## left son=26172 (38 obs) right son=26173 (90 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the right, improve=2.303088, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=2.148944, (0 missing)  
## Age < 46 to the right, improve=1.957102, (0 missing)  
## Flight.Distance < 1850.5 to the left, improve=1.865741, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=1.001042, (0 missing)  
## Surrogate splits:  
## Age < 52.5 to the right, agree=0.719, adj=0.053, (0 split)  
## Gate.location < 1.5 to the left, agree=0.719, adj=0.053, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.719, adj=0.053, (0 split)  
## Inflight.entertainment < 3.5 to the right, agree=0.719, adj=0.053, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.711, adj=0.026, (0 split)  
##   
## Node number 13087: 24 observations  
## predicted class=1 expected loss=0.375 P(node) =0.0002427676  
## class counts: 9 15  
## probabilities: 0.375 0.625   
##   
## Node number 13140: 37 observations  
## predicted class=0 expected loss=0.1621622 P(node) =0.0003742666  
## class counts: 31 6  
## probabilities: 0.838 0.162   
##   
## Node number 13141: 816 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3210784 P(node) =0.008254097  
## class counts: 554 262  
## probabilities: 0.679 0.321   
## left son=26282 (46 obs) right son=26283 (770 obs)  
## Primary splits:  
## Ease.of.Online.booking < 4.5 to the right, improve=1.5337840, (0 missing)  
## Flight.Distance < 522.5 to the right, improve=1.2485100, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.0894950, (0 missing)  
## Age < 8.5 to the right, improve=0.9729715, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.8602172, (0 missing)  
##   
## Node number 13142: 12 observations  
## predicted class=0 expected loss=0.08333333 P(node) =0.0001213838  
## class counts: 11 1  
## probabilities: 0.917 0.083   
##   
## Node number 13143: 194 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.4020619 P(node) =0.001962371  
## class counts: 116 78  
## probabilities: 0.598 0.402   
## left son=26286 (187 obs) right son=26287 (7 obs)  
## Primary splits:  
## Flight.Distance < 1092.5 to the right, improve=3.007915, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.796192, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.761867, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.064065, (0 missing)  
## Age < 61.5 to the right, improve=1.064065, (0 missing)  
##   
## Node number 13232: 61 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2295082 P(node) =0.0006170342  
## class counts: 47 14  
## probabilities: 0.770 0.230   
## left son=26464 (28 obs) right son=26465 (33 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=0.7772337, (0 missing)  
## Age < 14.5 to the right, improve=0.6953391, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=0.6383963, (0 missing)  
## Male < 0.5 to the left, improve=0.5188254, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.5155887, (0 missing)  
## Surrogate splits:  
## On.board.service < 3.5 to the left, agree=0.803, adj=0.571, (0 split)  
## Flight.Distance < 864.5 to the right, agree=0.738, adj=0.429, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.721, adj=0.393, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.656, adj=0.250, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.623, adj=0.179, (0 split)  
##   
## Node number 13233: 21 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.4285714 P(node) =0.0002124216  
## class counts: 12 9  
## probabilities: 0.571 0.429   
## left son=26466 (9 obs) right son=26467 (12 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the right, improve=3.1746030, (0 missing)  
## Age < 18.5 to the left, improve=0.8241758, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=0.8241758, (0 missing)  
## Departure.Delay.in.Minutes < 14 to the right, improve=0.5079365, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.4285714, (0 missing)  
## Surrogate splits:  
## Age < 18.5 to the left, agree=0.762, adj=0.444, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 2.5 to the right, agree=0.714, adj=0.333, (0 split)  
## Flight.Distance < 647.5 to the left, agree=0.667, adj=0.222, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.667, adj=0.222, (0 split)  
##   
## Node number 13234: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 13235: 12 observations  
## predicted class=1 expected loss=0.1666667 P(node) =0.0001213838  
## class counts: 2 10  
## probabilities: 0.167 0.833   
##   
## Node number 14630: 23 observations  
## predicted class=0 expected loss=0 P(node) =0.0002326522  
## class counts: 23 0  
## probabilities: 1.000 0.000   
##   
## Node number 14631: 12 observations  
## predicted class=1 expected loss=0.1666667 P(node) =0.0001213838  
## class counts: 2 10  
## probabilities: 0.167 0.833   
##   
## Node number 14640: 504 observations, complexity param=0.0003678911  
## predicted class=0 expected loss=0.2996032 P(node) =0.005098119  
## class counts: 353 151  
## probabilities: 0.700 0.300   
## left son=29280 (203 obs) right son=29281 (301 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the left, improve=37.72307, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=15.28353, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=13.33357, (0 missing)  
## On.board.service < 1.5 to the left, improve=12.18773, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=11.13276, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.631, adj=0.084, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.617, adj=0.049, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.615, adj=0.044, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.609, adj=0.030, (0 split)  
## On.board.service < 1.5 to the left, agree=0.609, adj=0.030, (0 split)  
##   
## Node number 14641: 82 observations, complexity param=0.0003119077  
## predicted class=1 expected loss=0.195122 P(node) =0.0008294558  
## class counts: 16 66  
## probabilities: 0.195 0.805   
## left son=29282 (17 obs) right son=29283 (65 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=20.257460, (0 missing)  
## LoyalCustomer < 0.5 to the left, improve=20.016970, (0 missing)  
## EcoClass < 0.5 to the right, improve=14.798110, (0 missing)  
## Age < 20.5 to the left, improve= 8.333875, (0 missing)  
## Flight.Distance < 1395 to the left, improve= 7.424282, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.963, adj=0.824, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.927, adj=0.647, (0 split)  
## Age < 20.5 to the left, agree=0.866, adj=0.353, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.854, adj=0.294, (0 split)  
## Flight.Distance < 343 to the left, agree=0.829, adj=0.176, (0 split)  
##   
## Node number 14656: 117 observations  
## predicted class=0 expected loss=0.05128205 P(node) =0.001183492  
## class counts: 111 6  
## probabilities: 0.949 0.051   
##   
## Node number 14657: 47 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.2340426 P(node) =0.0004754198  
## class counts: 36 11  
## probabilities: 0.766 0.234   
## left son=29314 (22 obs) right son=29315 (25 obs)  
## Primary splits:  
## Age < 38.5 to the left, improve=2.941973, (0 missing)  
## Checkin.service < 4.5 to the left, improve=2.384397, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=2.184397, (0 missing)  
## Cleanliness < 2.5 to the right, improve=2.184397, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.968711, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 3.5 to the right, agree=0.638, adj=0.227, (0 split)  
## Flight.Distance < 451 to the right, agree=0.617, adj=0.182, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.617, adj=0.182, (0 split)  
## On.board.service < 2.5 to the right, agree=0.617, adj=0.182, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.617, adj=0.182, (0 split)  
##   
## Node number 14658: 208 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.2692308 P(node) =0.002103985  
## class counts: 152 56  
## probabilities: 0.731 0.269   
## left son=29316 (73 obs) right son=29317 (135 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=4.791258, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=4.088508, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=3.944255, (0 missing)  
## On.board.service < 4.5 to the left, improve=3.164835, (0 missing)  
## Gate.location < 2.5 to the right, improve=2.136823, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 12.5 to the right, agree=0.861, adj=0.603, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.678, adj=0.082, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.678, adj=0.082, (0 split)  
## Flight.Distance < 2295.5 to the right, agree=0.663, adj=0.041, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.663, adj=0.041, (0 split)  
##   
## Node number 14659: 43 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3488372 P(node) =0.0004349585  
## class counts: 15 28  
## probabilities: 0.349 0.651   
## left son=29318 (29 obs) right son=29319 (14 obs)  
## Primary splits:  
## Age < 21.5 to the right, improve=3.1949820, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.1428380, (0 missing)  
## Flight.Distance < 275.5 to the left, improve=0.9727922, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=0.5773080, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.4978467, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the right, agree=0.721, adj=0.143, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.698, adj=0.071, (0 split)  
##   
## Node number 14660: 46 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2826087 P(node) =0.0004653045  
## class counts: 33 13  
## probabilities: 0.717 0.283   
## left son=29320 (33 obs) right son=29321 (13 obs)  
## Primary splits:  
## Ease.of.Online.booking < 3.5 to the left, improve=2.3724540, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=2.2705950, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.9021740, (0 missing)  
## Gate.location < 3.5 to the left, improve=1.9021740, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=0.7861025, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.978, adj=0.923, (0 split)  
## Gate.location < 3.5 to the left, agree=0.978, adj=0.923, (0 split)  
## On.board.service < 1.5 to the right, agree=0.761, adj=0.154, (0 split)  
## Flight.Distance < 213.5 to the right, agree=0.739, adj=0.077, (0 split)  
## Arrival.Delay.in.Minutes < 1 to the right, agree=0.739, adj=0.077, (0 split)  
##   
## Node number 14661: 25 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.36 P(node) =0.0002528829  
## class counts: 9 16  
## probabilities: 0.360 0.640   
## left son=29322 (7 obs) right son=29323 (18 obs)  
## Primary splits:  
## Leg.room.service < 2.5 to the left, improve=2.440635, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.742222, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.742222, (0 missing)  
## Flight.Distance < 393 to the right, improve=1.725128, (0 missing)  
## Age < 51.5 to the right, improve=1.351169, (0 missing)  
## Surrogate splits:  
## Age < 52.5 to the right, agree=0.80, adj=0.286, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.76, adj=0.143, (0 split)  
## Gate.location < 4.5 to the right, agree=0.76, adj=0.143, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.76, adj=0.143, (0 split)  
##   
## Node number 14664: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 14665: 49 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.3877551 P(node) =0.0004956504  
## class counts: 19 30  
## probabilities: 0.388 0.612   
## left son=29330 (40 obs) right son=29331 (9 obs)  
## Primary splits:  
## Age < 21.5 to the right, improve=3.315306, (0 missing)  
## Departure.Delay.in.Minutes < 19.5 to the right, improve=2.509209, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=2.472513, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.556276, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.179592, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.837, adj=0.111, (0 split)  
##   
## Node number 14676: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 14677: 55 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3272727 P(node) =0.0005563423  
## class counts: 18 37  
## probabilities: 0.327 0.673   
## left son=29354 (19 obs) right son=29355 (36 obs)  
## Primary splits:  
## Flight.Distance < 872.5 to the right, improve=2.300053, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.244498, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.244498, (0 missing)  
## Cleanliness < 2.5 to the right, improve=1.244498, (0 missing)  
## Departure.Delay.in.Minutes < 2.5 to the right, improve=1.244498, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 58 to the right, agree=0.745, adj=0.263, (0 split)  
## Arrival.Delay.in.Minutes < 49 to the right, agree=0.727, adj=0.211, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.691, adj=0.105, (0 split)  
##   
## Node number 14690: 23 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2173913 P(node) =0.0002326522  
## class counts: 18 5  
## probabilities: 0.783 0.217   
## left son=29380 (16 obs) right son=29381 (7 obs)  
## Primary splits:  
## Flight.Distance < 2464.5 to the left, improve=2.5225160, (0 missing)  
## Age < 37.5 to the left, improve=1.5245000, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.3975160, (0 missing)  
## Arrival.Delay.in.Minutes < 1 to the right, improve=0.9510870, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.4876254, (0 missing)  
## Surrogate splits:  
## Age < 43.5 to the left, agree=0.826, adj=0.429, (0 split)  
## On.board.service < 4.5 to the left, agree=0.739, adj=0.143, (0 split)  
##   
## Node number 14691: 374 observations, complexity param=0.000239929  
## predicted class=1 expected loss=0.3983957 P(node) =0.003783128  
## class counts: 149 225  
## probabilities: 0.398 0.602   
## left son=29382 (133 obs) right son=29383 (241 obs)  
## Primary splits:  
## Flight.Distance < 416.5 to the left, improve=6.754817, (0 missing)  
## Age < 29.5 to the right, improve=3.935736, (0 missing)  
## Inflight.service < 3.5 to the left, improve=3.755348, (0 missing)  
## On.board.service < 2.5 to the left, improve=3.202532, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.755534, (0 missing)  
## Surrogate splits:  
## Age < 54.5 to the right, agree=0.676, adj=0.090, (0 split)  
## On.board.service < 2.5 to the left, agree=0.658, adj=0.038, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.655, adj=0.030, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.647, adj=0.008, (0 split)  
##   
## Node number 14692: 19 observations  
## predicted class=0 expected loss=0 P(node) =0.000192191  
## class counts: 19 0  
## probabilities: 1.000 0.000   
##   
## Node number 14693: 62 observations, complexity param=0.0001319609  
## predicted class=1 expected loss=0.4354839 P(node) =0.0006271495  
## class counts: 27 35  
## probabilities: 0.435 0.565   
## left son=29386 (36 obs) right son=29387 (26 obs)  
## Primary splits:  
## Age < 31 to the right, improve=2.4753240, (0 missing)  
## Departure.Delay.in.Minutes < 50 to the right, improve=1.2267280, (0 missing)  
## Arrival.Delay.in.Minutes < 48.5 to the right, improve=1.2267280, (0 missing)  
## Flight.Distance < 358 to the right, improve=1.1278430, (0 missing)  
## Checkin.service < 3.5 to the right, improve=0.7146402, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 482.5 to the left, agree=0.629, adj=0.115, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.629, adj=0.115, (0 split)  
## Arrival.Delay.in.Minutes < 43.5 to the left, agree=0.613, adj=0.077, (0 split)  
## Departure.Delay.in.Minutes < 69.5 to the left, agree=0.597, adj=0.038, (0 split)  
##   
## Node number 14694: 112 observations, complexity param=8.797396e-05  
## predicted class=1 expected loss=0.4285714 P(node) =0.001132915  
## class counts: 48 64  
## probabilities: 0.429 0.571   
## left son=29388 (70 obs) right son=29389 (42 obs)  
## Primary splits:  
## Age < 31 to the right, improve=2.742857, (0 missing)  
## Arrival.Delay.in.Minutes < 56 to the left, improve=2.742857, (0 missing)  
## On.board.service < 3.5 to the right, improve=2.698778, (0 missing)  
## Departure.Delay.in.Minutes < 7.5 to the left, improve=1.825153, (0 missing)  
## Flight.Distance < 476 to the left, improve=1.651173, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.679, adj=0.143, (0 split)  
## Flight.Distance < 833.5 to the left, agree=0.661, adj=0.095, (0 split)  
## Departure.Delay.in.Minutes < 22.5 to the left, agree=0.643, adj=0.048, (0 split)  
## Arrival.Delay.in.Minutes < 16 to the left, agree=0.643, adj=0.048, (0 split)  
##   
## Node number 14695: 214 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.05140187 P(node) =0.002164677  
## class counts: 11 203  
## probabilities: 0.051 0.949   
## left son=29390 (9 obs) right son=29391 (205 obs)  
## Primary splits:  
## Inflight.service < 1.5 to the left, improve=4.7759340, (0 missing)  
## Age < 59.5 to the right, improve=1.8182600, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.8182600, (0 missing)  
## Arrival.Delay.in.Minutes < 137.5 to the right, improve=1.1752150, (0 missing)  
## Departure.Delay.in.Minutes < 40.5 to the right, improve=0.8359751, (0 missing)  
## Surrogate splits:  
## Age < 63.5 to the right, agree=0.963, adj=0.111, (0 split)  
##   
## Node number 15466: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 15467: 13 observations  
## predicted class=1 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 3 10  
## probabilities: 0.231 0.769   
##   
## Node number 15470: 125 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4 P(node) =0.001264414  
## class counts: 50 75  
## probabilities: 0.400 0.600   
## left son=30940 (90 obs) right son=30941 (35 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=1.984127, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=1.956522, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.956522, (0 missing)  
## Arrival.Delay.in.Minutes < 18.5 to the right, improve=1.859717, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.452569, (0 missing)  
## Surrogate splits:  
## Age < 16.5 to the right, agree=0.736, adj=0.057, (0 split)  
##   
## Node number 15471: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 15476: 24 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4166667 P(node) =0.0002427676  
## class counts: 14 10  
## probabilities: 0.583 0.417   
## left son=30952 (15 obs) right son=30953 (9 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.8000000, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.4817930, (0 missing)  
## Inflight.service < 3.5 to the right, improve=1.3333330, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.5555556, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=0.5555556, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.708, adj=0.222, (0 split)  
## On.board.service < 4.5 to the left, agree=0.667, adj=0.111, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.667, adj=0.111, (0 split)  
## Departure.Delay.in.Minutes < 13.5 to the left, agree=0.667, adj=0.111, (0 split)  
##   
## Node number 15477: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 15478: 10 observations  
## predicted class=0 expected loss=0.4 P(node) =0.0001011531  
## class counts: 6 4  
## probabilities: 0.600 0.400   
##   
## Node number 15479: 42 observations  
## predicted class=1 expected loss=0.2142857 P(node) =0.0004248432  
## class counts: 9 33  
## probabilities: 0.214 0.786   
##   
## Node number 15574: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 15575: 172 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.2732558 P(node) =0.001739834  
## class counts: 47 125  
## probabilities: 0.273 0.727   
## left son=31150 (121 obs) right son=31151 (51 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 10.5 to the left, improve=1.9642530, (0 missing)  
## Arrival.Delay.in.Minutes < 27.5 to the left, improve=1.7282390, (0 missing)  
## Age < 27.5 to the left, improve=1.4901440, (0 missing)  
## Flight.Distance < 867.5 to the left, improve=1.1214300, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.8689826, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 10 to the left, agree=0.924, adj=0.745, (0 split)  
##   
## Node number 15576: 11 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 9 2  
## probabilities: 0.818 0.182   
##   
## Node number 15577: 17 observations  
## predicted class=1 expected loss=0.4705882 P(node) =0.0001719603  
## class counts: 8 9  
## probabilities: 0.471 0.529   
##   
## Node number 15580: 13 observations  
## predicted class=0 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 7 6  
## probabilities: 0.538 0.462   
##   
## Node number 15581: 151 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2582781 P(node) =0.001527413  
## class counts: 39 112  
## probabilities: 0.258 0.742   
## left son=31162 (9 obs) right son=31163 (142 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=1.691550, (0 missing)  
## Age < 60 to the right, improve=1.691550, (0 missing)  
## Male < 0.5 to the right, improve=1.550507, (0 missing)  
## Gate.location < 3.5 to the right, improve=1.080720, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.058478, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 2.5 to the left, agree=0.960, adj=0.333, (0 split)  
## Checkin.service < 2 to the left, agree=0.960, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 7.5 to the right, agree=0.947, adj=0.111, (0 split)  
##   
## Node number 15872: 260 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.1307692 P(node) =0.002629982  
## class counts: 226 34  
## probabilities: 0.869 0.131   
## left son=31744 (252 obs) right son=31745 (8 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=12.472770, (0 missing)  
## Gate.location < 3.5 to the left, improve= 9.170192, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 7.682645, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve= 7.377297, (0 missing)  
## Flight.Distance < 508.5 to the right, improve= 4.321636, (0 missing)  
##   
## Node number 15873: 481 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.3742204 P(node) =0.004865466  
## class counts: 301 180  
## probabilities: 0.626 0.374   
## left son=31746 (285 obs) right son=31747 (196 obs)  
## Primary splits:  
## On.board.service < 3.5 to the left, improve=14.138670, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=10.149210, (0 missing)  
## Food.and.drink < 3.5 to the right, improve= 8.570139, (0 missing)  
## Age < 38.5 to the left, improve= 8.565911, (0 missing)  
## Cleanliness < 3.5 to the right, improve= 8.356527, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the right, agree=0.765, adj=0.423, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.751, adj=0.388, (0 split)  
## Male < 0.5 to the right, agree=0.682, adj=0.219, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.674, adj=0.199, (0 split)  
## Age < 41.5 to the left, agree=0.667, adj=0.184, (0 split)  
##   
## Node number 15874: 28 observations  
## predicted class=0 expected loss=0.1785714 P(node) =0.0002832288  
## class counts: 23 5  
## probabilities: 0.821 0.179   
##   
## Node number 15875: 52 observations  
## predicted class=1 expected loss=0 P(node) =0.0005259964  
## class counts: 0 52  
## probabilities: 0.000 1.000   
##   
## Node number 15900: 8 observations  
## predicted class=0 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 6 2  
## probabilities: 0.750 0.250   
##   
## Node number 15901: 14 observations  
## predicted class=1 expected loss=0.1428571 P(node) =0.0001416144  
## class counts: 2 12  
## probabilities: 0.143 0.857   
##   
## Node number 15920: 86 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4767442 P(node) =0.0008699171  
## class counts: 41 45  
## probabilities: 0.477 0.523   
## left son=31840 (72 obs) right son=31841 (14 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=7.601421, (0 missing)  
## On.board.service < 4.5 to the left, improve=6.961771, (0 missing)  
## Age < 40.5 to the right, improve=6.376208, (0 missing)  
## Departure.Delay.in.Minutes < 11 to the right, improve=5.446371, (0 missing)  
## BusinessClass < 0.5 to the left, improve=3.629199, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2759 to the left, agree=0.884, adj=0.286, (0 split)  
##   
## Node number 15921: 35 observations  
## predicted class=1 expected loss=0.1142857 P(node) =0.000354036  
## class counts: 4 31  
## probabilities: 0.114 0.886   
##   
## Node number 16128: 431 observations, complexity param=0.0002879148  
## predicted class=0 expected loss=0.3596288 P(node) =0.004359701  
## class counts: 276 155  
## probabilities: 0.640 0.360   
## left son=32256 (215 obs) right son=32257 (216 obs)  
## Primary splits:  
## Age < 43.5 to the left, improve=11.900050, (0 missing)  
## Food.and.drink < 3.5 to the right, improve= 6.186743, (0 missing)  
## On.board.service < 3.5 to the left, improve= 6.126739, (0 missing)  
## Flight.Distance < 157 to the right, improve= 5.669553, (0 missing)  
## Seat.comfort < 1.5 to the right, improve= 5.553409, (0 missing)  
## Surrogate splits:  
## On.board.service < 3.5 to the left, agree=0.668, adj=0.335, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.647, adj=0.293, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.638, adj=0.274, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.631, adj=0.260, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.624, adj=0.247, (0 split)  
##   
## Node number 16129: 30 observations  
## predicted class=1 expected loss=0.03333333 P(node) =0.0003034594  
## class counts: 1 29  
## probabilities: 0.033 0.967   
##   
## Node number 16132: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 16133: 22 observations  
## predicted class=1 expected loss=0.2272727 P(node) =0.0002225369  
## class counts: 5 17  
## probabilities: 0.227 0.773   
##   
## Node number 16140: 143 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.2307692 P(node) =0.00144649  
## class counts: 33 110  
## probabilities: 0.231 0.769   
## left son=32280 (94 obs) right son=32281 (49 obs)  
## Primary splits:  
## Flight.Distance < 324 to the right, improve=3.315909, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=2.592016, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.762821, (0 missing)  
## Inflight.service < 1.5 to the right, improve=1.361292, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.228490, (0 missing)  
## Surrogate splits:  
## Age < 62 to the left, agree=0.678, adj=0.061, (0 split)  
##   
## Node number 16141: 41 observations  
## predicted class=1 expected loss=0 P(node) =0.0004147279  
## class counts: 0 41  
## probabilities: 0.000 1.000   
##   
## Node number 16266: 55 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.3272727 P(node) =0.0005563423  
## class counts: 18 37  
## probabilities: 0.327 0.673   
## left son=32532 (38 obs) right son=32533 (17 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=5.2708130, (0 missing)  
## On.board.service < 4.5 to the left, improve=4.0230600, (0 missing)  
## Flight.Distance < 1619 to the right, improve=1.8463870, (0 missing)  
## Arrival.Delay.in.Minutes < 22.5 to the right, improve=0.9562771, (0 missing)  
## Age < 30.5 to the left, improve=0.9545949, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.800, adj=0.353, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.782, adj=0.294, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.745, adj=0.176, (0 split)  
## Age < 36.5 to the left, agree=0.727, adj=0.118, (0 split)  
## Flight.Distance < 214.5 to the right, agree=0.727, adj=0.118, (0 split)  
##   
## Node number 16267: 44 observations  
## predicted class=1 expected loss=0.02272727 P(node) =0.0004450738  
## class counts: 1 43  
## probabilities: 0.023 0.977   
##   
## Node number 16328: 40 observations, complexity param=5.998225e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0004046126  
## class counts: 24 16  
## probabilities: 0.600 0.400   
## left son=32656 (9 obs) right son=32657 (31 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=3.716129, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=3.546320, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=2.899060, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.408333, (0 missing)  
## Age < 47.5 to the right, improve=1.200000, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.95, adj=0.778, (0 split)  
##   
## Node number 16329: 15 observations  
## predicted class=1 expected loss=0 P(node) =0.0001517297  
## class counts: 0 15  
## probabilities: 0.000 1.000   
##   
## Node number 16356: 32 observations, complexity param=4.198757e-05  
## predicted class=1 expected loss=0.375 P(node) =0.0003236901  
## class counts: 12 20  
## probabilities: 0.375 0.625   
## left son=32712 (22 obs) right son=32713 (10 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the left, improve=4.090909, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=4.090909, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=4.090909, (0 missing)  
## Cleanliness < 4.5 to the left, improve=3.521739, (0 missing)  
## Online.boarding < 4.5 to the left, improve=2.520000, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the left, agree=0.969, adj=0.9, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.938, adj=0.8, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.938, adj=0.8, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.906, adj=0.7, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.750, adj=0.2, (0 split)  
##   
## Node number 16357: 31 observations  
## predicted class=1 expected loss=0 P(node) =0.0003135748  
## class counts: 0 31  
## probabilities: 0.000 1.000   
##   
## Node number 16368: 26 observations  
## predicted class=0 expected loss=0 P(node) =0.0002629982  
## class counts: 26 0  
## probabilities: 1.000 0.000   
##   
## Node number 16369: 56 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.1785714 P(node) =0.0005664576  
## class counts: 10 46  
## probabilities: 0.179 0.821   
## left son=32738 (30 obs) right son=32739 (26 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=3.095238, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=2.678571, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=2.489177, (0 missing)  
## On.board.service < 4.5 to the left, improve=2.310924, (0 missing)  
## Inflight.service < 4.5 to the left, improve=2.310924, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the left, agree=0.929, adj=0.846, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.929, adj=0.846, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.911, adj=0.808, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.857, adj=0.692, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.696, adj=0.346, (0 split)  
##   
## Node number 16376: 13 observations  
## predicted class=0 expected loss=0 P(node) =0.0001314991  
## class counts: 13 0  
## probabilities: 1.000 0.000   
##   
## Node number 16377: 132 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.1060606 P(node) =0.001335222  
## class counts: 14 118  
## probabilities: 0.106 0.894   
## left son=32754 (11 obs) right son=32755 (121 obs)  
## Primary splits:  
## Age < 20.5 to the left, improve=4.633609, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=2.400166, (0 missing)  
## Online.boarding < 4.5 to the left, improve=2.256970, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.869809, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.291173, (0 missing)  
##   
## Node number 16380: 24 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.375 P(node) =0.0002427676  
## class counts: 9 15  
## probabilities: 0.375 0.625   
## left son=32760 (15 obs) right son=32761 (9 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=4.050000, (0 missing)  
## Flight.Distance < 2186.5 to the left, improve=2.592857, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.515734, (0 missing)  
## Age < 48.5 to the right, improve=1.050000, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.762605, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 2.5 to the right, agree=0.750, adj=0.333, (0 split)  
## Flight.Distance < 2186.5 to the left, agree=0.708, adj=0.222, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.708, adj=0.222, (0 split)  
## Gate.location < 1.5 to the right, agree=0.708, adj=0.222, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.708, adj=0.222, (0 split)  
##   
## Node number 16381: 21 observations  
## predicted class=1 expected loss=0 P(node) =0.0002124216  
## class counts: 0 21  
## probabilities: 0.000 1.000   
##   
## Node number 16382: 24 observations  
## predicted class=1 expected loss=0.125 P(node) =0.0002427676  
## class counts: 3 21  
## probabilities: 0.125 0.875   
##   
## Node number 16383: 19174 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.001825389 P(node) =0.193951  
## class counts: 35 19139  
## probabilities: 0.002 0.998   
## left son=32766 (7 obs) right son=32767 (19167 obs)  
## Primary splits:  
## Age < 78.5 to the right, improve=0.2785611, (0 missing)  
## Inflight.wifi.service < 3.5 to the right, improve=0.1912332, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.1310725, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.1223504, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.1115232, (0 missing)  
##   
## Node number 17152: 2069 observations  
## predicted class=0 expected loss=0.01498308 P(node) =0.02092859  
## class counts: 2038 31  
## probabilities: 0.985 0.015   
##   
## Node number 17153: 144 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.125 P(node) =0.001456605  
## class counts: 126 18  
## probabilities: 0.875 0.125   
## left son=34306 (83 obs) right son=34307 (61 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 6 to the right, improve=4.999506, (0 missing)  
## Departure.Delay.in.Minutes < 13.5 to the right, improve=3.600000, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=3.509595, (0 missing)  
## Age < 34.5 to the left, improve=1.556075, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.453488, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 4.5 to the right, agree=0.868, adj=0.689, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.618, adj=0.098, (0 split)  
## Gate.location < 2.5 to the left, agree=0.618, adj=0.098, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.611, adj=0.082, (0 split)  
## Flight.Distance < 734.5 to the right, agree=0.604, adj=0.066, (0 split)  
##   
## Node number 17154: 762 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.06824147 P(node) =0.00770787  
## class counts: 710 52  
## probabilities: 0.932 0.068   
## left son=34308 (752 obs) right son=34309 (10 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 168.5 to the left, improve=3.777887, (0 missing)  
## Departure.Delay.in.Minutes < 183 to the left, improve=3.014293, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=2.007819, (0 missing)  
## Flight.Distance < 1211.5 to the right, improve=1.416220, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.221076, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 170.5 to the left, agree=0.999, adj=0.9, (0 split)  
##   
## Node number 17155: 49 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.2857143 P(node) =0.0004956504  
## class counts: 35 14  
## probabilities: 0.714 0.286   
## left son=34310 (31 obs) right son=34311 (18 obs)  
## Primary splits:  
## Flight.Distance < 1312.5 to the right, improve=10.842290, (0 missing)  
## Age < 37 to the left, improve= 5.603333, (0 missing)  
## Baggage.handling < 1.5 to the right, improve= 3.200000, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve= 2.666667, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve= 2.090301, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.816, adj=0.500, (0 split)  
## Age < 45.5 to the left, agree=0.735, adj=0.278, (0 split)  
## Ease.of.Online.booking < 2.5 to the left, agree=0.735, adj=0.278, (0 split)  
## Arrival.Delay.in.Minutes < 64.5 to the left, agree=0.714, adj=0.222, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.694, adj=0.167, (0 split)  
##   
## Node number 17474: 120 observations  
## predicted class=0 expected loss=0.05833333 P(node) =0.001213838  
## class counts: 113 7  
## probabilities: 0.942 0.058   
##   
## Node number 17475: 40 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.375 P(node) =0.0004046126  
## class counts: 25 15  
## probabilities: 0.625 0.375   
## left son=34950 (13 obs) right son=34951 (27 obs)  
## Primary splits:  
## Flight.Distance < 579 to the right, improve=3.422365, (0 missing)  
## Gate.location < 4.5 to the left, improve=1.958020, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.657268, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=1.250000, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the right, improve=1.250000, (0 missing)  
## Surrogate splits:  
## Age < 32 to the left, agree=0.775, adj=0.308, (0 split)  
## Inflight.wifi.service < 1.5 to the left, agree=0.725, adj=0.154, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.725, adj=0.154, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.725, adj=0.154, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.725, adj=0.154, (0 split)  
##   
## Node number 18816: 2793 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.03687791 P(node) =0.02825207  
## class counts: 2690 103  
## probabilities: 0.963 0.037   
## left son=37632 (2669 obs) right son=37633 (124 obs)  
## Primary splits:  
## Online.boarding < 1.5 to the right, improve=3.513105, (0 missing)  
## Gate.location < 1.5 to the left, improve=2.568656, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=2.445776, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.716293, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=1.628823, (0 missing)  
##   
## Node number 18817: 48 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.2291667 P(node) =0.0004855351  
## class counts: 37 11  
## probabilities: 0.771 0.229   
## left son=37634 (38 obs) right son=37635 (10 obs)  
## Primary splits:  
## Flight.Distance < 2686.5 to the left, improve=3.474123, (0 missing)  
## Inflight.service < 2.5 to the left, improve=2.899510, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=2.360043, (0 missing)  
## Inflight.wifi.service < 2.5 to the left, improve=1.755297, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.680556, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=0.812, adj=0.1, (0 split)  
##   
## Node number 18818: 74 observations  
## predicted class=0 expected loss=0.02702703 P(node) =0.0007485333  
## class counts: 72 2  
## probabilities: 0.973 0.027   
##   
## Node number 18819: 39 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.2820513 P(node) =0.0003944973  
## class counts: 11 28  
## probabilities: 0.282 0.718   
## left son=37638 (11 obs) right son=37639 (28 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=15.794870, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=12.048120, (0 missing)  
## Flight.Distance < 1561 to the left, improve= 4.421188, (0 missing)  
## Age < 26.5 to the left, improve= 2.721188, (0 missing)  
## Checkin.service < 3.5 to the right, improve= 2.074872, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.949, adj=0.818, (0 split)  
## Gate.location < 1.5 to the left, agree=0.846, adj=0.455, (0 split)  
## Age < 14 to the left, agree=0.795, adj=0.273, (0 split)  
## Flight.Distance < 365.5 to the left, agree=0.795, adj=0.273, (0 split)  
##   
## Node number 18822: 11 observations  
## predicted class=0 expected loss=0 P(node) =0.0001112685  
## class counts: 11 0  
## probabilities: 1.000 0.000   
##   
## Node number 18823: 58 observations, complexity param=0.0001679503  
## predicted class=1 expected loss=0.3448276 P(node) =0.0005866882  
## class counts: 20 38  
## probabilities: 0.345 0.655   
## left son=37646 (10 obs) right son=37647 (48 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=10.373560, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve= 7.966897, (0 missing)  
## Age < 41 to the right, improve= 4.178885, (0 missing)  
## Inflight.service < 2.5 to the left, improve= 3.970920, (0 missing)  
## Flight.Distance < 1503 to the left, improve= 2.318008, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.966, adj=0.8, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.862, adj=0.2, (0 split)  
## Age < 18.5 to the left, agree=0.845, adj=0.1, (0 split)  
## Flight.Distance < 536 to the left, agree=0.845, adj=0.1, (0 split)  
## Gate.location < 1.5 to the left, agree=0.845, adj=0.1, (0 split)  
##   
## Node number 18826: 11 observations  
## predicted class=0 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 10 1  
## probabilities: 0.909 0.091   
##   
## Node number 18827: 11 observations  
## predicted class=1 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 4 7  
## probabilities: 0.364 0.636   
##   
## Node number 19954: 64 observations  
## predicted class=0 expected loss=0.125 P(node) =0.0006473801  
## class counts: 56 8  
## probabilities: 0.875 0.125   
##   
## Node number 19955: 22 observations, complexity param=2.39929e-06  
## predicted class=0 expected loss=0.3181818 P(node) =0.0002225369  
## class counts: 15 7  
## probabilities: 0.682 0.318   
## left son=39910 (15 obs) right son=39911 (7 obs)  
## Primary splits:  
## Gate.location < 2.5 to the right, improve=1.3168830, (0 missing)  
## Age < 39.5 to the right, improve=0.8181818, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.5121212, (0 missing)  
## Male < 0.5 to the left, improve=0.5121212, (0 missing)  
## Flight.Distance < 243.5 to the left, improve=0.4856255, (0 missing)  
## Surrogate splits:  
## Inflight.service < 2.5 to the right, agree=0.773, adj=0.286, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.727, adj=0.143, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.727, adj=0.143, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.727, adj=0.143, (0 split)  
##   
## Node number 20254: 15 observations  
## predicted class=0 expected loss=0.4666667 P(node) =0.0001517297  
## class counts: 8 7  
## probabilities: 0.533 0.467   
##   
## Node number 20255: 11 observations  
## predicted class=1 expected loss=0 P(node) =0.0001112685  
## class counts: 0 11  
## probabilities: 0.000 1.000   
##   
## Node number 21142: 27 observations  
## predicted class=0 expected loss=0.1851852 P(node) =0.0002731135  
## class counts: 22 5  
## probabilities: 0.815 0.185   
##   
## Node number 21143: 31 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.4193548 P(node) =0.0003135748  
## class counts: 18 13  
## probabilities: 0.581 0.419   
## left son=42286 (10 obs) right son=42287 (21 obs)  
## Primary splits:  
## Age < 46.5 to the left, improve=1.4205840, (0 missing)  
## Flight.Distance < 441.5 to the left, improve=0.9856631, (0 missing)  
## Checkin.service < 2.5 to the right, improve=0.6352357, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=0.4182028, (0 missing)  
## Cleanliness < 2.5 to the right, improve=0.2546689, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2279.5 to the right, agree=0.774, adj=0.3, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.774, adj=0.3, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.742, adj=0.2, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.742, adj=0.2, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.742, adj=0.2, (0 split)  
##   
## Node number 21376: 32 observations  
## predicted class=0 expected loss=0.09375 P(node) =0.0003236901  
## class counts: 29 3  
## probabilities: 0.906 0.094   
##   
## Node number 21377: 20 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0002023063  
## class counts: 12 8  
## probabilities: 0.600 0.400   
## left son=42754 (10 obs) right son=42755 (10 obs)  
## Primary splits:  
## Food.and.drink < 2.5 to the left, improve=1.600000, (0 missing)  
## Flight.Distance < 450.5 to the left, improve=1.034343, (0 missing)  
## Checkin.service < 2.5 to the left, improve=0.600000, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.400000, (0 missing)  
## Cleanliness < 2.5 to the left, improve=0.400000, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 294 to the left, agree=0.70, adj=0.4, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.70, adj=0.4, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.70, adj=0.4, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.70, adj=0.4, (0 split)  
## Age < 48 to the right, agree=0.65, adj=0.3, (0 split)  
##   
## Node number 21380: 16 observations  
## predicted class=0 expected loss=0.125 P(node) =0.000161845  
## class counts: 14 2  
## probabilities: 0.875 0.125   
##   
## Node number 21381: 73 observations, complexity param=0.000107968  
## predicted class=1 expected loss=0.4383562 P(node) =0.000738418  
## class counts: 32 41  
## probabilities: 0.438 0.562   
## left son=42762 (46 obs) right son=42763 (27 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=1.729424, (0 missing)  
## Flight.Distance < 593 to the left, improve=1.727737, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.538743, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.178972, (0 missing)  
## Checkin.service < 2.5 to the right, improve=1.055311, (0 missing)  
## Surrogate splits:  
## Age < 64.5 to the left, agree=0.658, adj=0.074, (0 split)  
## Flight.Distance < 490.5 to the left, agree=0.644, adj=0.037, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.644, adj=0.037, (0 split)  
##   
## Node number 21942: 41 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3414634 P(node) =0.0004147279  
## class counts: 27 14  
## probabilities: 0.659 0.341   
## left son=43884 (16 obs) right son=43885 (25 obs)  
## Primary splits:  
## Flight.Distance < 1465.5 to the right, improve=1.2440240, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.0367260, (0 missing)  
## BusinessClass < 0.5 to the right, improve=0.9314486, (0 missing)  
## Age < 42.5 to the right, improve=0.8928059, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the left, improve=0.8928059, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 1.5 to the right, agree=0.683, adj=0.188, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.659, adj=0.125, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.659, adj=0.125, (0 split)  
## Age < 37.5 to the left, agree=0.634, adj=0.063, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.634, adj=0.063, (0 split)  
##   
## Node number 21943: 14 observations  
## predicted class=1 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 6 8  
## probabilities: 0.429 0.571   
##   
## Node number 22146: 14 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0001416144  
## class counts: 13 1  
## probabilities: 0.929 0.071   
##   
## Node number 22147: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 22404: 111 observations, complexity param=5.278438e-05  
## predicted class=1 expected loss=0.4324324 P(node) =0.0011228  
## class counts: 48 63  
## probabilities: 0.432 0.568   
## left son=44808 (100 obs) right son=44809 (11 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the left, improve=4.566486, (0 missing)  
## Checkin.service < 4.5 to the left, improve=3.224351, (0 missing)  
## Arrival.Delay.in.Minutes < 55.5 to the left, improve=3.224351, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=2.429061, (0 missing)  
## Departure.Delay.in.Minutes < 43 to the left, improve=2.429061, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 101.5 to the left, agree=0.946, adj=0.455, (0 split)  
## Arrival.Delay.in.Minutes < 101 to the left, agree=0.946, adj=0.455, (0 split)  
## Flight.Distance < 206.5 to the right, agree=0.928, adj=0.273, (0 split)  
## On.board.service < 3.5 to the right, agree=0.919, adj=0.182, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.919, adj=0.182, (0 split)  
##   
## Node number 22405: 14 observations  
## predicted class=1 expected loss=0 P(node) =0.0001416144  
## class counts: 0 14  
## probabilities: 0.000 1.000   
##   
## Node number 25964: 39 observations  
## predicted class=0 expected loss=0.1025641 P(node) =0.0003944973  
## class counts: 35 4  
## probabilities: 0.897 0.103   
##   
## Node number 25965: 24 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3333333 P(node) =0.0002427676  
## class counts: 16 8  
## probabilities: 0.667 0.333   
## left son=51930 (14 obs) right son=51931 (10 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the left, improve=2.438095, (0 missing)  
## Gate.location < 3.5 to the left, improve=1.827506, (0 missing)  
## Arrival.Delay.in.Minutes < 25.5 to the left, improve=1.422222, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.120448, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=0.952381, (0 missing)  
## Surrogate splits:  
## Age < 29.5 to the left, agree=0.750, adj=0.4, (0 split)  
## Departure.Delay.in.Minutes < 35.5 to the left, agree=0.750, adj=0.4, (0 split)  
## Arrival.Delay.in.Minutes < 30 to the left, agree=0.750, adj=0.4, (0 split)  
## Gate.location < 4.5 to the left, agree=0.708, adj=0.3, (0 split)  
## Flight.Distance < 1804.5 to the left, agree=0.667, adj=0.2, (0 split)  
##   
## Node number 25966: 9 observations  
## predicted class=0 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 8 1  
## probabilities: 0.889 0.111   
##   
## Node number 25967: 12 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001213838  
## class counts: 4 8  
## probabilities: 0.333 0.667   
##   
## Node number 25978: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 25979: 44 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3409091 P(node) =0.0004450738  
## class counts: 29 15  
## probabilities: 0.659 0.341   
## left son=51958 (8 obs) right son=51959 (36 obs)  
## Primary splits:  
## On.board.service < 4.5 to the right, improve=2.2727270, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.2913380, (0 missing)  
## Flight.Distance < 1317.5 to the right, improve=1.1363640, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.8581974, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the left, improve=0.7424242, (0 missing)  
## Surrogate splits:  
## Gate.location < 1.5 to the left, agree=0.841, adj=0.125, (0 split)  
##   
## Node number 26136: 223 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.1838565 P(node) =0.002255715  
## class counts: 182 41  
## probabilities: 0.816 0.184   
## left son=52272 (215 obs) right son=52273 (8 obs)  
## Primary splits:  
## Inflight.entertainment < 4.5 to the left, improve=1.658651, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=1.273715, (0 missing)  
## On.board.service < 4.5 to the left, improve=1.200300, (0 missing)  
## Flight.Distance < 283.5 to the right, improve=1.191512, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.189915, (0 missing)  
##   
## Node number 26137: 21 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.4761905 P(node) =0.0002124216  
## class counts: 11 10  
## probabilities: 0.524 0.476   
## left son=52274 (14 obs) right son=52275 (7 obs)  
## Primary splits:  
## Flight.Distance < 363 to the right, improve=3.0476190, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.9377290, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=1.1904760, (0 missing)  
## Cleanliness < 2.5 to the right, improve=0.5852814, (0 missing)  
## Age < 23 to the left, improve=0.2646520, (0 missing)  
## Surrogate splits:  
## Age < 15 to the right, agree=0.714, adj=0.143, (0 split)  
## Checkin.service < 1.5 to the right, agree=0.714, adj=0.143, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.714, adj=0.143, (0 split)  
##   
## Node number 26138: 39 observations  
## predicted class=0 expected loss=0.1282051 P(node) =0.0003944973  
## class counts: 34 5  
## probabilities: 0.872 0.128   
##   
## Node number 26139: 512 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.2871094 P(node) =0.005179041  
## class counts: 365 147  
## probabilities: 0.713 0.287   
## left son=52278 (178 obs) right son=52279 (334 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=1.1315920, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the right, improve=1.0054770, (0 missing)  
## Checkin.service < 4.5 to the right, improve=0.9053804, (0 missing)  
## Flight.Distance < 687 to the left, improve=0.7366691, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.6187262, (0 missing)  
##   
## Node number 26152: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 26153: 228 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2894737 P(node) =0.002306292  
## class counts: 162 66  
## probabilities: 0.711 0.289   
## left son=52306 (202 obs) right son=52307 (26 obs)  
## Primary splits:  
## EcoClass < 0.5 to the right, improve=1.0476610, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.0205230, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.0205230, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.9981570, (0 missing)  
## Flight.Distance < 1071.5 to the left, improve=0.9246088, (0 missing)  
##   
## Node number 26158: 13 observations  
## predicted class=0 expected loss=0.1538462 P(node) =0.0001314991  
## class counts: 11 2  
## probabilities: 0.846 0.154   
##   
## Node number 26159: 48 observations, complexity param=3.707993e-05  
## predicted class=1 expected loss=0.4375 P(node) =0.0004855351  
## class counts: 21 27  
## probabilities: 0.437 0.562   
## left son=52318 (10 obs) right son=52319 (38 obs)  
## Primary splits:  
## Flight.Distance < 937 to the left, improve=1.7407890, (0 missing)  
## Age < 61.5 to the right, improve=1.3392860, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.2556620, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.4776316, (0 missing)  
## On.board.service < 1.5 to the right, improve=0.3776132, (0 missing)  
##   
## Node number 26172: 38 observations  
## predicted class=0 expected loss=0.2368421 P(node) =0.000384382  
## class counts: 29 9  
## probabilities: 0.763 0.237   
##   
## Node number 26173: 90 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.4444444 P(node) =0.0009103783  
## class counts: 50 40  
## probabilities: 0.556 0.444   
## left son=52346 (73 obs) right son=52347 (17 obs)  
## Primary splits:  
## Flight.Distance < 1850.5 to the left, improve=2.865073, (0 missing)  
## Age < 27.5 to the right, improve=1.756697, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.404532, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.384100, (0 missing)  
## Male < 0.5 to the right, improve=1.063264, (0 missing)  
##   
## Node number 26282: 46 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.1956522 P(node) =0.0004653045  
## class counts: 37 9  
## probabilities: 0.804 0.196   
## left son=52564 (37 obs) right son=52565 (9 obs)  
## Primary splits:  
## Age < 16.5 to the right, improve=4.9647470, (0 missing)  
## Flight.Distance < 518 to the right, improve=2.5621770, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.2941120, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.8438523, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.4227053, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the right, agree=0.826, adj=0.111, (0 split)  
##   
## Node number 26283: 770 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3285714 P(node) =0.007788792  
## class counts: 517 253  
## probabilities: 0.671 0.329   
## left son=52566 (657 obs) right son=52567 (113 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=0.9794245, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.8968593, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.8553314, (0 missing)  
## Flight.Distance < 1026 to the right, improve=0.8234090, (0 missing)  
## Age < 8.5 to the right, improve=0.7513811, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 4.5 to the left, agree=0.856, adj=0.018, (0 split)  
## Flight.Distance < 1048.5 to the left, agree=0.855, adj=0.009, (0 split)  
##   
## Node number 26286: 187 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3850267 P(node) =0.001891564  
## class counts: 115 72  
## probabilities: 0.615 0.385   
## left son=52572 (113 obs) right son=52573 (74 obs)  
## Primary splits:  
## Gate.location < 2.5 to the right, improve=1.894346, (0 missing)  
## Age < 61.5 to the right, improve=1.493373, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=1.213928, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.213928, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.203209, (0 missing)  
## Surrogate splits:  
## Age < 57.5 to the left, agree=0.620, adj=0.041, (0 split)  
## Flight.Distance < 1119.5 to the right, agree=0.620, adj=0.041, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.615, adj=0.027, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.610, adj=0.014, (0 split)  
## Departure.Delay.in.Minutes < 1.5 to the left, agree=0.610, adj=0.014, (0 split)  
##   
## Node number 26287: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 26464: 28 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.0002832288  
## class counts: 24 4  
## probabilities: 0.857 0.143   
##   
## Node number 26465: 33 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3030303 P(node) =0.0003338054  
## class counts: 23 10  
## probabilities: 0.697 0.303   
## left son=52930 (13 obs) right son=52931 (20 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the right, improve=2.1932400, (0 missing)  
## Age < 18.5 to the right, improve=1.5782830, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.4632030, (0 missing)  
## Flight.Distance < 674 to the left, improve=0.8290998, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=0.7575758, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 242.5 to the left, agree=0.667, adj=0.154, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.667, adj=0.154, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.667, adj=0.154, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.667, adj=0.154, (0 split)  
## Departure.Delay.in.Minutes < 11.5 to the left, agree=0.667, adj=0.154, (0 split)  
##   
## Node number 26466: 9 observations  
## predicted class=0 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 8 1  
## probabilities: 0.889 0.111   
##   
## Node number 26467: 12 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001213838  
## class counts: 4 8  
## probabilities: 0.333 0.667   
##   
## Node number 29280: 203 observations  
## predicted class=0 expected loss=0.06403941 P(node) =0.002053409  
## class counts: 190 13  
## probabilities: 0.936 0.064   
##   
## Node number 29281: 301 observations, complexity param=0.0003678911  
## predicted class=0 expected loss=0.4584718 P(node) =0.00304471  
## class counts: 163 138  
## probabilities: 0.542 0.458   
## left son=58562 (44 obs) right son=58563 (257 obs)  
## Primary splits:  
## BusinessClass < 0.5 to the left, improve=19.56951, (0 missing)  
## EcoClass < 0.5 to the right, improve=16.78789, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=15.17018, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=13.49121, (0 missing)  
## Flight.Distance < 1280.5 to the left, improve=12.08007, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.983, adj=0.886, (0 split)  
## LoyalCustomer < 0.5 to the left, agree=0.880, adj=0.182, (0 split)  
## Departure.Delay.in.Minutes < 130 to the right, agree=0.870, adj=0.114, (0 split)  
## Age < 25.5 to the left, agree=0.867, adj=0.091, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.864, adj=0.068, (0 split)  
##   
## Node number 29282: 17 observations  
## predicted class=0 expected loss=0.1176471 P(node) =0.0001719603  
## class counts: 15 2  
## probabilities: 0.882 0.118   
##   
## Node number 29283: 65 observations  
## predicted class=1 expected loss=0.01538462 P(node) =0.0006574954  
## class counts: 1 64  
## probabilities: 0.015 0.985   
##   
## Node number 29314: 22 observations  
## predicted class=0 expected loss=0.04545455 P(node) =0.0002225369  
## class counts: 21 1  
## probabilities: 0.955 0.045   
##   
## Node number 29315: 25 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0002528829  
## class counts: 15 10  
## probabilities: 0.600 0.400   
## left son=58630 (15 obs) right son=58631 (10 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=1.3333330, (0 missing)  
## Flight.Distance < 485 to the right, improve=1.2857140, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.2857140, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.0384620, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.6805556, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 211 to the right, agree=0.72, adj=0.3, (0 split)  
## Food.and.drink < 1.5 to the right, agree=0.72, adj=0.3, (0 split)  
## Inflight.entertainment < 1.5 to the right, agree=0.72, adj=0.3, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.72, adj=0.3, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.68, adj=0.2, (0 split)  
##   
## Node number 29316: 73 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.1232877 P(node) =0.000738418  
## class counts: 64 9  
## probabilities: 0.877 0.123   
## left son=58632 (39 obs) right son=58633 (34 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 23 to the left, improve=2.5455280, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=1.4963640, (0 missing)  
## Arrival.Delay.in.Minutes < 16 to the left, improve=1.2276300, (0 missing)  
## Age < 20.5 to the left, improve=1.0869440, (0 missing)  
## On.board.service < 4.5 to the left, improve=0.7236791, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 25 to the left, agree=0.808, adj=0.588, (0 split)  
## Flight.Distance < 354.5 to the right, agree=0.630, adj=0.206, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.575, adj=0.088, (0 split)  
## Leg.room.service < 1.5 to the right, agree=0.575, adj=0.088, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.575, adj=0.088, (0 split)  
##   
## Node number 29317: 135 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3481481 P(node) =0.001365567  
## class counts: 88 47  
## probabilities: 0.652 0.348   
## left son=58634 (119 obs) right son=58635 (16 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=2.782477, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the right, improve=2.392138, (0 missing)  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=2.186236, (0 missing)  
## Age < 14.5 to the left, improve=2.066696, (0 missing)  
## Flight.Distance < 177 to the right, improve=1.979431, (0 missing)  
##   
## Node number 29318: 29 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4827586 P(node) =0.0002933441  
## class counts: 14 15  
## probabilities: 0.483 0.517   
## left son=58636 (7 obs) right son=58637 (22 obs)  
## Primary splits:  
## Flight.Distance < 968.5 to the right, improve=0.9892521, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.9141312, (0 missing)  
## Age < 24.5 to the right, improve=0.8827586, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.2565681, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the left, improve=0.2565681, (0 missing)  
##   
## Node number 29319: 14 observations  
## predicted class=1 expected loss=0.07142857 P(node) =0.0001416144  
## class counts: 1 13  
## probabilities: 0.071 0.929   
##   
## Node number 29320: 33 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0003338054  
## class counts: 27 6  
## probabilities: 0.818 0.182   
##   
## Node number 29321: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 29322: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 29323: 18 observations  
## predicted class=1 expected loss=0.2222222 P(node) =0.0001820757  
## class counts: 4 14  
## probabilities: 0.222 0.778   
##   
## Node number 29330: 40 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.475 P(node) =0.0004046126  
## class counts: 19 21  
## probabilities: 0.475 0.525   
## left son=58660 (10 obs) right son=58661 (30 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=2.816667, (0 missing)  
## On.board.service < 4.5 to the right, improve=2.478139, (0 missing)  
## Departure.Delay.in.Minutes < 19.5 to the right, improve=2.478139, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.834712, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=1.078205, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 21.5 to the right, agree=0.9, adj=0.6, (0 split)  
##   
## Node number 29331: 9 observations  
## predicted class=1 expected loss=0 P(node) =9.103783e-05  
## class counts: 0 9  
## probabilities: 0.000 1.000   
##   
## Node number 29354: 19 observations  
## predicted class=0 expected loss=0.4736842 P(node) =0.000192191  
## class counts: 10 9  
## probabilities: 0.526 0.474   
##   
## Node number 29355: 36 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2222222 P(node) =0.0003641513  
## class counts: 8 28  
## probabilities: 0.222 0.778   
## left son=58710 (7 obs) right son=58711 (29 obs)  
## Primary splits:  
## Flight.Distance < 255 to the left, improve=2.1193210, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.0732070, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.0732070, (0 missing)  
## Cleanliness < 2.5 to the right, improve=1.0732070, (0 missing)  
## Age < 20.5 to the left, improve=0.8752137, (0 missing)  
##   
## Node number 29380: 16 observations  
## predicted class=0 expected loss=0.0625 P(node) =0.000161845  
## class counts: 15 1  
## probabilities: 0.938 0.062   
##   
## Node number 29381: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 29382: 133 observations, complexity param=0.000239929  
## predicted class=0 expected loss=0.4736842 P(node) =0.001345337  
## class counts: 70 63  
## probabilities: 0.526 0.474   
## left son=58764 (90 obs) right son=58765 (43 obs)  
## Primary splits:  
## Food.and.drink < 1.5 to the right, improve=6.376255, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=6.376255, (0 missing)  
## Cleanliness < 1.5 to the right, improve=6.376255, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=5.770002, (0 missing)  
## Flight.Distance < 402.5 to the right, improve=3.514001, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 1.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.977, adj=0.930, (0 split)  
## Age < 25.5 to the right, agree=0.692, adj=0.047, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.684, adj=0.023, (0 split)  
##   
## Node number 29383: 241 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.3278008 P(node) =0.002437791  
## class counts: 79 162  
## probabilities: 0.328 0.672   
## left son=58766 (9 obs) right son=58767 (232 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=3.786013, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=3.269738, (0 missing)  
## On.board.service < 2.5 to the left, improve=2.949958, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=2.801646, (0 missing)  
## Age < 27.5 to the right, improve=1.791154, (0 missing)  
## Surrogate splits:  
## On.board.service < 2.5 to the left, agree=0.988, adj=0.667, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.983, adj=0.556, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.975, adj=0.333, (0 split)  
##   
## Node number 29386: 36 observations, complexity param=0.0001319609  
## predicted class=0 expected loss=0.4444444 P(node) =0.0003641513  
## class counts: 20 16  
## probabilities: 0.556 0.444   
## left son=58772 (11 obs) right son=58773 (25 obs)  
## Primary splits:  
## Age < 36.5 to the left, improve=6.257778, (0 missing)  
## Flight.Distance < 358 to the right, improve=4.292828, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.654701, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.654701, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.654701, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 57 to the right, agree=0.778, adj=0.273, (0 split)  
## Arrival.Delay.in.Minutes < 17 to the right, agree=0.750, adj=0.182, (0 split)  
## Flight.Distance < 1620 to the right, agree=0.722, adj=0.091, (0 split)  
##   
## Node number 29387: 26 observations  
## predicted class=1 expected loss=0.2692308 P(node) =0.0002629982  
## class counts: 7 19  
## probabilities: 0.269 0.731   
##   
## Node number 29388: 70 observations, complexity param=8.797396e-05  
## predicted class=0 expected loss=0.4857143 P(node) =0.000708072  
## class counts: 36 34  
## probabilities: 0.514 0.486   
## left son=58776 (11 obs) right son=58777 (59 obs)  
## Primary splits:  
## Age < 36.5 to the left, improve=6.157869, (0 missing)  
## Departure.Delay.in.Minutes < 2 to the left, improve=2.878405, (0 missing)  
## Flight.Distance < 534.5 to the left, improve=1.808447, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.800213, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the left, improve=1.511429, (0 missing)  
##   
## Node number 29389: 42 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2857143 P(node) =0.0004248432  
## class counts: 12 30  
## probabilities: 0.286 0.714   
## left son=58778 (35 obs) right son=58779 (7 obs)  
## Primary splits:  
## Flight.Distance < 427 to the right, improve=1.3714290, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.9053571, (0 missing)  
## Arrival.Delay.in.Minutes < 5 to the right, improve=0.6095238, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.4986264, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.4746649, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 56 to the left, agree=0.857, adj=0.143, (0 split)  
##   
## Node number 29390: 9 observations  
## predicted class=0 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 5 4  
## probabilities: 0.556 0.444   
##   
## Node number 29391: 205 observations  
## predicted class=1 expected loss=0.02926829 P(node) =0.002073639  
## class counts: 6 199  
## probabilities: 0.029 0.971   
##   
## Node number 30940: 90 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4555556 P(node) =0.0009103783  
## class counts: 41 49  
## probabilities: 0.456 0.544   
## left son=61880 (83 obs) right son=61881 (7 obs)  
## Primary splits:  
## Seat.comfort < 3.5 to the right, improve=3.150469, (0 missing)  
## On.board.service < 4.5 to the left, improve=2.972487, (0 missing)  
## Arrival.Delay.in.Minutes < 22 to the right, improve=2.448231, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.918835, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.460725, (0 missing)  
##   
## Node number 30941: 35 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.2571429 P(node) =0.000354036  
## class counts: 9 26  
## probabilities: 0.257 0.743   
## left son=61882 (20 obs) right son=61883 (15 obs)  
## Primary splits:  
## Flight.Distance < 499.5 to the right, improve=1.9047620, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=1.2232800, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.8187970, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.8047619, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=0.8047619, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the left, agree=0.771, adj=0.467, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.743, adj=0.400, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Leg.room.service < 1.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.600, adj=0.067, (0 split)  
##   
## Node number 30952: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 30953: 9 observations  
## predicted class=1 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 3 6  
## probabilities: 0.333 0.667   
##   
## Node number 31150: 121 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.322314 P(node) =0.001223953  
## class counts: 39 82  
## probabilities: 0.322 0.678   
## left son=62300 (56 obs) right son=62301 (65 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=1.629284, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.629284, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.629284, (0 missing)  
## Age < 27.5 to the left, improve=1.435528, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.430264, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 4.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.893, adj=0.768, (0 split)  
## Age < 27.5 to the left, agree=0.603, adj=0.143, (0 split)  
## Flight.Distance < 844 to the left, agree=0.595, adj=0.125, (0 split)  
##   
## Node number 31151: 51 observations  
## predicted class=1 expected loss=0.1568627 P(node) =0.000515881  
## class counts: 8 43  
## probabilities: 0.157 0.843   
##   
## Node number 31162: 9 observations  
## predicted class=0 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 5 4  
## probabilities: 0.556 0.444   
##   
## Node number 31163: 142 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2394366 P(node) =0.001436375  
## class counts: 34 108  
## probabilities: 0.239 0.761   
## left son=62326 (66 obs) right son=62327 (76 obs)  
## Primary splits:  
## Male < 0.5 to the right, improve=1.5293150, (0 missing)  
## Age < 60 to the right, improve=1.1511460, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.0362450, (0 missing)  
## Flight.Distance < 987.5 to the left, improve=0.9667841, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.5556690, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 239.5 to the left, agree=0.585, adj=0.106, (0 split)  
## Age < 60 to the right, agree=0.563, adj=0.061, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.556, adj=0.045, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.556, adj=0.045, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.556, adj=0.045, (0 split)  
##   
## Node number 31744: 252 observations, complexity param=0.0001679503  
## predicted class=0 expected loss=0.1031746 P(node) =0.002549059  
## class counts: 226 26  
## probabilities: 0.897 0.103   
## left son=63488 (245 obs) right son=63489 (7 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=11.581860, (0 missing)  
## Gate.location < 3.5 to the left, improve= 5.901587, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve= 5.280590, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 4.624779, (0 missing)  
## Flight.Distance < 498 to the right, improve= 2.560847, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the left, agree=0.98, adj=0.286, (0 split)  
##   
## Node number 31745: 8 observations  
## predicted class=1 expected loss=0 P(node) =8.092252e-05  
## class counts: 0 8  
## probabilities: 0.000 1.000   
##   
## Node number 31746: 285 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.2736842 P(node) =0.002882865  
## class counts: 207 78  
## probabilities: 0.726 0.274   
## left son=63492 (115 obs) right son=63493 (170 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 1.5 to the right, improve=5.292987, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=5.282585, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=3.571423, (0 missing)  
## Flight.Distance < 179.5 to the right, improve=3.078911, (0 missing)  
## Age < 20 to the left, improve=1.443791, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 3.5 to the right, agree=0.853, adj=0.635, (0 split)  
## Age < 21.5 to the left, agree=0.611, adj=0.035, (0 split)  
## Male < 0.5 to the left, agree=0.611, adj=0.035, (0 split)  
##   
## Node number 31747: 196 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.4795918 P(node) =0.001982602  
## class counts: 94 102  
## probabilities: 0.480 0.520   
## left son=63494 (164 obs) right son=63495 (32 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=9.617222, (0 missing)  
## On.board.service < 4.5 to the left, improve=7.472094, (0 missing)  
## Age < 36.5 to the left, improve=5.883518, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=4.928591, (0 missing)  
## Flight.Distance < 1099 to the right, improve=4.258887, (0 missing)  
## Surrogate splits:  
## Age < 23.5 to the right, agree=0.842, adj=0.031, (0 split)  
##   
## Node number 31840: 72 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4305556 P(node) =0.0007283027  
## class counts: 41 31  
## probabilities: 0.569 0.431   
## left son=63680 (64 obs) right son=63681 (8 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=5.836806, (0 missing)  
## Age < 40.5 to the right, improve=3.248699, (0 missing)  
## Departure.Delay.in.Minutes < 10 to the right, improve=2.944017, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=2.667094, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=2.667094, (0 missing)  
##   
## Node number 31841: 14 observations  
## predicted class=1 expected loss=0 P(node) =0.0001416144  
## class counts: 0 14  
## probabilities: 0.000 1.000   
##   
## Node number 32256: 215 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.2418605 P(node) =0.002174793  
## class counts: 163 52  
## probabilities: 0.758 0.242   
## left son=64512 (78 obs) right son=64513 (137 obs)  
## Primary splits:  
## Age < 29.5 to the left, improve=3.162439, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=2.521153, (0 missing)  
## Departure.Delay.in.Minutes < 36.5 to the right, improve=2.447244, (0 missing)  
## Arrival.Delay.in.Minutes < 32.5 to the right, improve=2.310526, (0 missing)  
## Flight.Distance < 517.5 to the right, improve=1.864101, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the left, agree=0.805, adj=0.462, (0 split)  
## Flight.Distance < 504 to the right, agree=0.684, adj=0.128, (0 split)  
##   
## Node number 32257: 216 observations, complexity param=0.0002879148  
## predicted class=0 expected loss=0.4768519 P(node) =0.002184908  
## class counts: 113 103  
## probabilities: 0.523 0.477   
## left son=64514 (192 obs) right son=64515 (24 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=14.778940, (0 missing)  
## Male < 0.5 to the right, improve= 6.060646, (0 missing)  
## Flight.Distance < 161 to the right, improve= 5.707600, (0 missing)  
## On.board.service < 3.5 to the left, improve= 4.303768, (0 missing)  
## Leg.room.service < 3.5 to the left, improve= 3.811497, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 4.5 to the left, agree=0.894, adj=0.042, (0 split)  
##   
## Node number 32280: 94 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.3085106 P(node) =0.0009508396  
## class counts: 29 65  
## probabilities: 0.309 0.691   
## left son=64560 (67 obs) right son=64561 (27 obs)  
## Primary splits:  
## Inflight.service < 1.5 to the right, improve=1.948285, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.754883, (0 missing)  
## Age < 46.5 to the right, improve=1.683306, (0 missing)  
## Flight.Distance < 1197.5 to the left, improve=1.664523, (0 missing)  
## Departure.Delay.in.Minutes < 13.5 to the right, improve=1.520603, (0 missing)  
##   
## Node number 32281: 49 observations  
## predicted class=1 expected loss=0.08163265 P(node) =0.0004956504  
## class counts: 4 45  
## probabilities: 0.082 0.918   
##   
## Node number 32532: 38 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.4736842 P(node) =0.000384382  
## class counts: 18 20  
## probabilities: 0.474 0.526   
## left son=65064 (28 obs) right son=65065 (10 obs)  
## Primary splits:  
## Inflight.service < 2.5 to the right, improve=2.0330830, (0 missing)  
## Flight.Distance < 2742.5 to the left, improve=1.4914300, (0 missing)  
## Age < 32.5 to the right, improve=0.9934514, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.8969483, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=0.4646098, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 3151.5 to the left, agree=0.816, adj=0.3, (0 split)  
##   
## Node number 32533: 17 observations  
## predicted class=1 expected loss=0 P(node) =0.0001719603  
## class counts: 0 17  
## probabilities: 0.000 1.000   
##   
## Node number 32656: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 32657: 31 observations, complexity param=5.998225e-05  
## predicted class=1 expected loss=0.483871 P(node) =0.0003135748  
## class counts: 15 16  
## probabilities: 0.484 0.516   
## left son=65314 (24 obs) right son=65315 (7 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=2.1029190, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.2905940, (0 missing)  
## Age < 49 to the right, improve=0.7929619, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=0.7929619, (0 missing)  
## Cleanliness < 1.5 to the left, improve=0.4088710, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 3490 to the left, agree=0.806, adj=0.143, (0 split)  
##   
## Node number 32712: 22 observations, complexity param=4.198757e-05  
## predicted class=0 expected loss=0.4545455 P(node) =0.0002225369  
## class counts: 12 10  
## probabilities: 0.545 0.455   
## left son=65424 (11 obs) right son=65425 (11 obs)  
## Primary splits:  
## Flight.Distance < 2294.5 to the left, improve=3.2727270, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.4545450, (0 missing)  
## On.board.service < 1.5 to the left, improve=1.0519480, (0 missing)  
## Arrival.Delay.in.Minutes < 3 to the left, improve=0.3636364, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.3108003, (0 missing)  
## Surrogate splits:  
## Age < 28 to the left, agree=0.682, adj=0.364, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.682, adj=0.364, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.636, adj=0.273, (0 split)  
## Gate.location < 4.5 to the right, agree=0.636, adj=0.273, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.636, adj=0.273, (0 split)  
##   
## Node number 32713: 10 observations  
## predicted class=1 expected loss=0 P(node) =0.0001011531  
## class counts: 0 10  
## probabilities: 0.000 1.000   
##   
## Node number 32738: 30 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.3333333 P(node) =0.0003034594  
## class counts: 10 20  
## probabilities: 0.333 0.667   
## left son=65476 (20 obs) right son=65477 (10 obs)  
## Primary splits:  
## Inflight.wifi.service < 4.5 to the left, improve=3.3333330, (0 missing)  
## Age < 40 to the right, improve=2.4242420, (0 missing)  
## Online.boarding < 4.5 to the left, improve=2.4242420, (0 missing)  
## Cleanliness < 4.5 to the left, improve=2.0289860, (0 missing)  
## Flight.Distance < 1714.5 to the left, improve=0.7440476, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.900, adj=0.7, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.867, adj=0.6, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.800, adj=0.4, (0 split)  
## Age < 40 to the right, agree=0.733, adj=0.2, (0 split)  
## Flight.Distance < 2888 to the left, agree=0.733, adj=0.2, (0 split)  
##   
## Node number 32739: 26 observations  
## predicted class=1 expected loss=0 P(node) =0.0002629982  
## class counts: 0 26  
## probabilities: 0.000 1.000   
##   
## Node number 32754: 11 observations  
## predicted class=0 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 6 5  
## probabilities: 0.545 0.455   
##   
## Node number 32755: 121 observations  
## predicted class=1 expected loss=0.0661157 P(node) =0.001223953  
## class counts: 8 113  
## probabilities: 0.066 0.934   
##   
## Node number 32760: 15 observations  
## predicted class=0 expected loss=0.4 P(node) =0.0001517297  
## class counts: 9 6  
## probabilities: 0.600 0.400   
##   
## Node number 32761: 9 observations  
## predicted class=1 expected loss=0 P(node) =9.103783e-05  
## class counts: 0 9  
## probabilities: 0.000 1.000   
##   
## Node number 32766: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 32767: 19167 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.001773882 P(node) =0.1938802  
## class counts: 34 19133  
## probabilities: 0.002 0.998   
## left son=65534 (7676 obs) right son=65535 (11491 obs)  
## Primary splits:  
## Inflight.wifi.service < 3.5 to the right, improve=0.1805746, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.1155836, (0 missing)  
## Age < 38.5 to the left, improve=0.1144140, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.1065499, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.1049124, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the right, agree=0.999, adj=0.997, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.966, adj=0.914, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.921, adj=0.803, (0 split)  
## Age < 8.5 to the left, agree=0.600, adj=0.000, (0 split)  
##   
## Node number 34306: 83 observations  
## predicted class=0 expected loss=0.01204819 P(node) =0.0008395711  
## class counts: 82 1  
## probabilities: 0.988 0.012   
##   
## Node number 34307: 61 observations, complexity param=6.398106e-05  
## predicted class=0 expected loss=0.2786885 P(node) =0.0006170342  
## class counts: 44 17  
## probabilities: 0.721 0.279   
## left son=68614 (51 obs) right son=68615 (10 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=9.234394, (0 missing)  
## Inflight.service < 1.5 to the right, improve=3.000781, (0 missing)  
## Cleanliness < 1.5 to the left, improve=2.084590, (0 missing)  
## Age < 34.5 to the left, improve=1.857923, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=1.857923, (0 missing)  
##   
## Node number 34308: 752 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.0625 P(node) =0.007606717  
## class counts: 705 47  
## probabilities: 0.938 0.062   
## left son=68616 (211 obs) right son=68617 (541 obs)  
## Primary splits:  
## Flight.Distance < 996.5 to the right, improve=1.649051, (0 missing)  
## Inflight.wifi.service < 1.5 to the left, improve=1.639184, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.361498, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=1.302583, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.156852, (0 missing)  
## Surrogate splits:  
## Age < 10 to the left, agree=0.722, adj=0.009, (0 split)  
## Departure.Delay.in.Minutes < 134.5 to the right, agree=0.721, adj=0.005, (0 split)  
##   
## Node number 34309: 10 observations  
## predicted class=0 expected loss=0.5 P(node) =0.0001011531  
## class counts: 5 5  
## probabilities: 0.500 0.500   
##   
## Node number 34310: 31 observations  
## predicted class=0 expected loss=0.03225806 P(node) =0.0003135748  
## class counts: 30 1  
## probabilities: 0.968 0.032   
##   
## Node number 34311: 18 observations  
## predicted class=1 expected loss=0.2777778 P(node) =0.0001820757  
## class counts: 5 13  
## probabilities: 0.278 0.722   
##   
## Node number 34950: 13 observations  
## predicted class=0 expected loss=0.07692308 P(node) =0.0001314991  
## class counts: 12 1  
## probabilities: 0.923 0.077   
##   
## Node number 34951: 27 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.4814815 P(node) =0.0002731135  
## class counts: 13 14  
## probabilities: 0.481 0.519   
## left son=69902 (13 obs) right son=69903 (14 obs)  
## Primary splits:  
## Food.and.drink < 2.5 to the right, improve=2.228734, (0 missing)  
## Online.boarding < 2.5 to the right, improve=2.228734, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=2.228734, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=2.228734, (0 missing)  
## Cleanliness < 2.5 to the right, improve=2.228734, (0 missing)  
## Surrogate splits:  
## Online.boarding < 2.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 2.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 2.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Inflight.wifi.service < 2.5 to the right, agree=0.963, adj=0.923, (0 split)  
##   
## Node number 37632: 2669 observations  
## predicted class=0 expected loss=0.03147246 P(node) =0.02699777  
## class counts: 2585 84  
## probabilities: 0.969 0.031   
##   
## Node number 37633: 124 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.1532258 P(node) =0.001254299  
## class counts: 105 19  
## probabilities: 0.847 0.153   
## left son=75266 (101 obs) right son=75267 (23 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the left, improve=3.201096, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=2.567490, (0 missing)  
## Cleanliness < 2.5 to the left, improve=2.549768, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=2.420889, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=2.368150, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.839, adj=0.130, (0 split)  
## Age < 11.5 to the right, agree=0.831, adj=0.087, (0 split)  
## BusinessTravel < 0.5 to the right, agree=0.831, adj=0.087, (0 split)  
## Flight.Distance < 175.5 to the right, agree=0.823, adj=0.043, (0 split)  
##   
## Node number 37634: 38 observations  
## predicted class=0 expected loss=0.1315789 P(node) =0.000384382  
## class counts: 33 5  
## probabilities: 0.868 0.132   
##   
## Node number 37635: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 37638: 11 observations  
## predicted class=0 expected loss=0 P(node) =0.0001112685  
## class counts: 11 0  
## probabilities: 1.000 0.000   
##   
## Node number 37639: 28 observations  
## predicted class=1 expected loss=0 P(node) =0.0002832288  
## class counts: 0 28  
## probabilities: 0.000 1.000   
##   
## Node number 37646: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 37647: 48 observations, complexity param=0.0001199645  
## predicted class=1 expected loss=0.2083333 P(node) =0.0004855351  
## class counts: 10 38  
## probabilities: 0.208 0.792   
## left son=75294 (7 obs) right son=75295 (41 obs)  
## Primary splits:  
## Age < 41 to the right, improve=6.899535, (0 missing)  
## Inflight.service < 2.5 to the left, improve=4.653846, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=1.917367, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=1.718551, (0 missing)  
## Flight.Distance < 2422.5 to the right, improve=1.500000, (0 missing)  
##   
## Node number 39910: 15 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001517297  
## class counts: 12 3  
## probabilities: 0.800 0.200   
##   
## Node number 39911: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 42286: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 42287: 21 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.4761905 P(node) =0.0002124216  
## class counts: 10 11  
## probabilities: 0.476 0.524   
## left son=84574 (13 obs) right son=84575 (8 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the right, improve=1.3223440, (0 missing)  
## Age < 52.5 to the right, improve=1.1852810, (0 missing)  
## Cleanliness < 3.5 to the left, improve=0.7619048, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.2646520, (0 missing)  
## Flight.Distance < 733 to the left, improve=0.2216450, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.762, adj=0.375, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.714, adj=0.250, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Age < 56.5 to the left, agree=0.667, adj=0.125, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.667, adj=0.125, (0 split)  
##   
## Node number 42754: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 42755: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 42762: 46 observations, complexity param=0.000107968  
## predicted class=0 expected loss=0.4782609 P(node) =0.0004653045  
## class counts: 24 22  
## probabilities: 0.522 0.478   
## left son=85524 (21 obs) right son=85525 (25 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the right, improve=2.8650930, (0 missing)  
## Flight.Distance < 207.5 to the right, improve=1.4302060, (0 missing)  
## Age < 45.5 to the left, improve=1.0544240, (0 missing)  
## Cleanliness < 1.5 to the right, improve=0.7943596, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.6597475, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.717, adj=0.381, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.652, adj=0.238, (0 split)  
## Gate.location < 1.5 to the right, agree=0.630, adj=0.190, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.630, adj=0.190, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.630, adj=0.190, (0 split)  
##   
## Node number 42763: 27 observations  
## predicted class=1 expected loss=0.2962963 P(node) =0.0002731135  
## class counts: 8 19  
## probabilities: 0.296 0.704   
##   
## Node number 43884: 16 observations  
## predicted class=0 expected loss=0.1875 P(node) =0.000161845  
## class counts: 13 3  
## probabilities: 0.812 0.187   
##   
## Node number 43885: 25 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.44 P(node) =0.0002528829  
## class counts: 14 11  
## probabilities: 0.560 0.440   
## left son=87770 (15 obs) right son=87771 (10 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the left, improve=2.2533330, (0 missing)  
## Flight.Distance < 934 to the left, improve=1.4628570, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.3338890, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.4368831, (0 missing)  
## Inflight.service < 2.5 to the right, improve=0.4368831, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.72, adj=0.3, (0 split)  
## Online.boarding < 1.5 to the right, agree=0.72, adj=0.3, (0 split)  
## EcoClass < 0.5 to the left, agree=0.72, adj=0.3, (0 split)  
## Age < 54.5 to the left, agree=0.68, adj=0.2, (0 split)  
## Flight.Distance < 735.5 to the right, agree=0.68, adj=0.2, (0 split)  
##   
## Node number 44808: 100 observations, complexity param=5.278438e-05  
## predicted class=1 expected loss=0.48 P(node) =0.001011531  
## class counts: 48 52  
## probabilities: 0.480 0.520   
## left son=89616 (92 obs) right son=89617 (8 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the left, improve=4.006957, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=3.167401, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the right, improve=2.778272, (0 missing)  
## Cleanliness < 2.5 to the left, improve=2.408467, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.711091, (0 missing)  
##   
## Node number 44809: 11 observations  
## predicted class=1 expected loss=0 P(node) =0.0001112685  
## class counts: 0 11  
## probabilities: 0.000 1.000   
##   
## Node number 51930: 14 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.0001416144  
## class counts: 12 2  
## probabilities: 0.857 0.143   
##   
## Node number 51931: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 51958: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 51959: 36 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.4166667 P(node) =0.0003641513  
## class counts: 21 15  
## probabilities: 0.583 0.417   
## left son=103918 (28 obs) right son=103919 (8 obs)  
## Primary splits:  
## Flight.Distance < 1012.5 to the right, improve=2.2857140, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.1571430, (0 missing)  
## Arrival.Delay.in.Minutes < 32 to the right, improve=1.0000000, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=0.8928571, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.6563636, (0 missing)  
## Surrogate splits:  
## Age < 36.5 to the right, agree=0.833, adj=0.25, (0 split)  
##   
## Node number 52272: 215 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.172093 P(node) =0.002174793  
## class counts: 178 37  
## probabilities: 0.828 0.172   
## left son=104544 (206 obs) right son=104545 (9 obs)  
## Primary splits:  
## Leg.room.service < 1.5 to the right, improve=1.3934870, (0 missing)  
## Flight.Distance < 225.5 to the right, improve=1.2377480, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.9049311, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.8420499, (0 missing)  
## Age < 13.5 to the right, improve=0.7725334, (0 missing)  
##   
## Node number 52273: 8 observations  
## predicted class=0 expected loss=0.5 P(node) =8.092252e-05  
## class counts: 4 4  
## probabilities: 0.500 0.500   
##   
## Node number 52274: 14 observations  
## predicted class=0 expected loss=0.2857143 P(node) =0.0001416144  
## class counts: 10 4  
## probabilities: 0.714 0.286   
##   
## Node number 52275: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 52278: 178 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.241573 P(node) =0.001800526  
## class counts: 135 43  
## probabilities: 0.758 0.242   
## left son=104556 (54 obs) right son=104557 (124 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=3.4409680, (0 missing)  
## Age < 51.5 to the right, improve=2.9637800, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.5924010, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=1.3858300, (0 missing)  
## Flight.Distance < 462.5 to the right, improve=0.9977132, (0 missing)  
## Surrogate splits:  
## Age < 50.5 to the right, agree=0.736, adj=0.130, (0 split)  
## On.board.service < 2.5 to the left, agree=0.730, adj=0.111, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.730, adj=0.111, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.708, adj=0.037, (0 split)  
## Flight.Distance < 643.5 to the right, agree=0.702, adj=0.019, (0 split)  
##   
## Node number 52279: 334 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3113772 P(node) =0.003378515  
## class counts: 230 104  
## probabilities: 0.689 0.311   
## left son=104558 (57 obs) right son=104559 (277 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the right, improve=2.540139, (0 missing)  
## Flight.Distance < 496.5 to the left, improve=1.228181, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=1.086356, (0 missing)  
## Age < 28.5 to the right, improve=1.030691, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.740280, (0 missing)  
##   
## Node number 52306: 202 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2722772 P(node) =0.002043294  
## class counts: 147 55  
## probabilities: 0.728 0.272   
## left son=104612 (33 obs) right son=104613 (169 obs)  
## Primary splits:  
## On.board.service < 4.5 to the right, improve=1.1504550, (0 missing)  
## Flight.Distance < 1071.5 to the left, improve=0.8019802, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.7910007, (0 missing)  
## Gate.location < 1.5 to the left, improve=0.6637907, (0 missing)  
## Age < 46.5 to the right, improve=0.6256190, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.847, adj=0.061, (0 split)  
##   
## Node number 52307: 26 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4230769 P(node) =0.0002629982  
## class counts: 15 11  
## probabilities: 0.577 0.423   
## left son=104614 (13 obs) right son=104615 (13 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the right, improve=1.923077, (0 missing)  
## Age < 30.5 to the right, improve=1.734732, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.617308, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.144689, (0 missing)  
## Cleanliness < 2.5 to the left, improve=1.144689, (0 missing)  
## Surrogate splits:  
## On.board.service < 2.5 to the right, agree=0.731, adj=0.462, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.731, adj=0.462, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.692, adj=0.385, (0 split)  
## Gate.location < 3.5 to the right, agree=0.654, adj=0.308, (0 split)  
## Age < 33.5 to the left, agree=0.615, adj=0.231, (0 split)  
##   
## Node number 52318: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 52319: 38 observations, complexity param=3.707993e-05  
## predicted class=1 expected loss=0.3684211 P(node) =0.000384382  
## class counts: 14 24  
## probabilities: 0.368 0.632   
## left son=104638 (27 obs) right son=104639 (11 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the left, improve=2.3845470, (0 missing)  
## Flight.Distance < 1148.5 to the right, improve=1.8092110, (0 missing)  
## Age < 58 to the right, improve=1.0532580, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.3508772, (0 missing)  
## Departure.Delay.in.Minutes < 2 to the left, improve=0.2842105, (0 missing)  
## Surrogate splits:  
## BusinessClass < 0.5 to the left, agree=0.763, adj=0.182, (0 split)  
## Age < 68.5 to the left, agree=0.737, adj=0.091, (0 split)  
## Departure.Delay.in.Minutes < 6.5 to the left, agree=0.737, adj=0.091, (0 split)  
##   
## Node number 52346: 73 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.3835616 P(node) =0.000738418  
## class counts: 45 28  
## probabilities: 0.616 0.384   
## left son=104692 (26 obs) right son=104693 (47 obs)  
## Primary splits:  
## Flight.Distance < 1202.5 to the right, improve=1.8855230, (0 missing)  
## Male < 0.5 to the right, improve=1.7196080, (0 missing)  
## Age < 22.5 to the right, improve=1.0842960, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.8155479, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.7808654, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 1.5 to the right, agree=0.726, adj=0.231, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.685, adj=0.115, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.671, adj=0.077, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.658, adj=0.038, (0 split)  
## BusinessClass < 0.5 to the right, agree=0.658, adj=0.038, (0 split)  
##   
## Node number 52347: 17 observations  
## predicted class=1 expected loss=0.2941176 P(node) =0.0001719603  
## class counts: 5 12  
## probabilities: 0.294 0.706   
##   
## Node number 52564: 37 observations  
## predicted class=0 expected loss=0.08108108 P(node) =0.0003742666  
## class counts: 34 3  
## probabilities: 0.919 0.081   
##   
## Node number 52565: 9 observations  
## predicted class=1 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 3 6  
## probabilities: 0.333 0.667   
##   
## Node number 52566: 657 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3181126 P(node) =0.006645762  
## class counts: 448 209  
## probabilities: 0.682 0.318   
## left son=105132 (577 obs) right son=105133 (80 obs)  
## Primary splits:  
## On.board.service < 1.5 to the right, improve=1.2216400, (0 missing)  
## Flight.Distance < 1039 to the right, improve=1.1550100, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=1.0819870, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.9474756, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.8380671, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the right, agree=0.906, adj=0.225, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.886, adj=0.062, (0 split)  
##   
## Node number 52567: 113 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3893805 P(node) =0.001143031  
## class counts: 69 44  
## probabilities: 0.611 0.389   
## left son=105134 (105 obs) right son=105135 (8 obs)  
## Primary splits:  
## Age < 12.5 to the right, improve=2.2392750, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.5825520, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=1.4867410, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.3160430, (0 missing)  
## Flight.Distance < 179.5 to the right, improve=0.9559418, (0 missing)  
##   
## Node number 52572: 113 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3274336 P(node) =0.001143031  
## class counts: 76 37  
## probabilities: 0.673 0.327   
## left son=105144 (21 obs) right son=105145 (92 obs)  
## Primary splits:  
## On.board.service < 4.5 to the right, improve=4.0390630, (0 missing)  
## Age < 55.5 to the right, improve=1.5276430, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.2751750, (0 missing)  
## Flight.Distance < 1182.5 to the left, improve=1.1067540, (0 missing)  
## Online.boarding < 4.5 to the left, improve=0.9770784, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.832, adj=0.095, (0 split)  
##   
## Node number 52573: 74 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.472973 P(node) =0.0007485333  
## class counts: 39 35  
## probabilities: 0.527 0.473   
## left son=105146 (66 obs) right son=105147 (8 obs)  
## Primary splits:  
## Age < 12.5 to the right, improve=2.8994680, (0 missing)  
## Flight.Distance < 1189.5 to the right, improve=1.7847490, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.1403770, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=1.0746880, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.9637286, (0 missing)  
##   
## Node number 52930: 13 observations  
## predicted class=0 expected loss=0.07692308 P(node) =0.0001314991  
## class counts: 12 1  
## probabilities: 0.923 0.077   
##   
## Node number 52931: 20 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.45 P(node) =0.0002023063  
## class counts: 11 9  
## probabilities: 0.550 0.450   
## left son=105862 (11 obs) right son=105863 (9 obs)  
## Primary splits:  
## Age < 28 to the right, improve=1.5363640, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.9000000, (0 missing)  
## Male < 0.5 to the left, improve=0.9000000, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=0.8166667, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.8166667, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the right, agree=0.75, adj=0.444, (0 split)  
## Flight.Distance < 650 to the left, agree=0.70, adj=0.333, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=0.70, adj=0.333, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.70, adj=0.333, (0 split)  
## Gate.location < 1.5 to the right, agree=0.65, adj=0.222, (0 split)  
##   
## Node number 58562: 44 observations  
## predicted class=0 expected loss=0.02272727 P(node) =0.0004450738  
## class counts: 43 1  
## probabilities: 0.977 0.023   
##   
## Node number 58563: 257 observations, complexity param=0.0003678911  
## predicted class=1 expected loss=0.4669261 P(node) =0.002599636  
## class counts: 120 137  
## probabilities: 0.467 0.533   
## left son=117126 (31 obs) right son=117127 (226 obs)  
## Primary splits:  
## Leg.room.service < 1.5 to the left, improve=17.68368, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=12.99707, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=12.55394, (0 missing)  
## Inflight.service < 1.5 to the left, improve=11.24091, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=10.59849, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.957, adj=0.645, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.953, adj=0.613, (0 split)  
## On.board.service < 1.5 to the left, agree=0.946, adj=0.548, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.926, adj=0.387, (0 split)  
## Flight.Distance < 141 to the left, agree=0.883, adj=0.032, (0 split)  
##   
## Node number 58630: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 58631: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 58632: 39 observations  
## predicted class=0 expected loss=0 P(node) =0.0003944973  
## class counts: 39 0  
## probabilities: 1.000 0.000   
##   
## Node number 58633: 34 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2647059 P(node) =0.0003439207  
## class counts: 25 9  
## probabilities: 0.735 0.265   
## left son=117266 (10 obs) right son=117267 (24 obs)  
## Primary splits:  
## Age < 20.5 to the left, improve=1.9852940, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.7781510, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=0.7686275, (0 missing)  
## Departure.Delay.in.Minutes < 43 to the right, improve=0.7352941, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.7067227, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.765, adj=0.2, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.735, adj=0.1, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.735, adj=0.1, (0 split)  
##   
## Node number 58634: 119 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3109244 P(node) =0.001203722  
## class counts: 82 37  
## probabilities: 0.689 0.311   
## left son=117268 (101 obs) right son=117269 (18 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, improve=2.538351, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=2.120168, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.875581, (0 missing)  
## Departure.Delay.in.Minutes < 1 to the right, improve=1.481793, (0 missing)  
## Gate.location < 1.5 to the right, improve=1.333347, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.866, adj=0.111, (0 split)  
##   
## Node number 58635: 16 observations  
## predicted class=1 expected loss=0.375 P(node) =0.000161845  
## class counts: 6 10  
## probabilities: 0.375 0.625   
##   
## Node number 58636: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 58637: 22 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4090909 P(node) =0.0002225369  
## class counts: 9 13  
## probabilities: 0.409 0.591   
## left son=117274 (7 obs) right son=117275 (15 obs)  
## Primary splits:  
## Age < 24.5 to the right, improve=1.9125540, (0 missing)  
## Flight.Distance < 489 to the left, improve=0.8181818, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the left, improve=0.6363636, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.4363636, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.3125541, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.773, adj=0.286, (0 split)  
## Departure.Delay.in.Minutes < 33 to the right, agree=0.773, adj=0.286, (0 split)  
## Flight.Distance < 259 to the left, agree=0.727, adj=0.143, (0 split)  
## On.board.service < 3.5 to the left, agree=0.727, adj=0.143, (0 split)  
## Arrival.Delay.in.Minutes < 27 to the right, agree=0.727, adj=0.143, (0 split)  
##   
## Node number 58660: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 58661: 30 observations, complexity param=6.398106e-05  
## predicted class=1 expected loss=0.3666667 P(node) =0.0003034594  
## class counts: 11 19  
## probabilities: 0.367 0.633   
## left son=117322 (7 obs) right son=117323 (23 obs)  
## Primary splits:  
## Flight.Distance < 504 to the left, improve=2.2066250, (0 missing)  
## Age < 23.5 to the right, improve=0.9146998, (0 missing)  
## Departure.Delay.in.Minutes < 2.5 to the left, improve=0.9146998, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=0.8333333, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.7111111, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.833, adj=0.286, (0 split)  
## On.board.service < 4.5 to the right, agree=0.833, adj=0.286, (0 split)  
## Gate.location < 4.5 to the right, agree=0.800, adj=0.143, (0 split)  
##   
## Node number 58710: 7 observations  
## predicted class=0 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 4 3  
## probabilities: 0.571 0.429   
##   
## Node number 58711: 29 observations  
## predicted class=1 expected loss=0.137931 P(node) =0.0002933441  
## class counts: 4 25  
## probabilities: 0.138 0.862   
##   
## Node number 58764: 90 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.3666667 P(node) =0.0009103783  
## class counts: 57 33  
## probabilities: 0.633 0.367   
## left son=117528 (10 obs) right son=117529 (80 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 21 to the right, improve=3.025000, (0 missing)  
## Flight.Distance < 221.5 to the right, improve=2.800000, (0 missing)  
## Arrival.Delay.in.Minutes < 11.5 to the right, improve=2.223077, (0 missing)  
## Age < 38.5 to the left, improve=2.106324, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.035294, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 18.5 to the right, agree=0.978, adj=0.8, (0 split)  
##   
## Node number 58765: 43 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.3023256 P(node) =0.0004349585  
## class counts: 13 30  
## probabilities: 0.302 0.698   
## left son=117530 (7 obs) right son=117531 (36 obs)  
## Primary splits:  
## Flight.Distance < 381 to the right, improve=2.8379480, (0 missing)  
## Age < 36.5 to the left, improve=1.9913870, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.7474890, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.2506460, (0 missing)  
## Arrival.Delay.in.Minutes < 10.5 to the right, improve=0.7681063, (0 missing)  
##   
## Node number 58766: 9 observations  
## predicted class=0 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 7 2  
## probabilities: 0.778 0.222   
##   
## Node number 58767: 232 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.3103448 P(node) =0.002346753  
## class counts: 72 160  
## probabilities: 0.310 0.690   
## left son=117534 (135 obs) right son=117535 (97 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 0.5 to the left, improve=3.617027, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=2.607344, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.630524, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.630524, (0 missing)  
## Cleanliness < 2.5 to the left, improve=1.630524, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 0.5 to the left, agree=0.763, adj=0.433, (0 split)  
## Flight.Distance < 1169.5 to the left, agree=0.621, adj=0.093, (0 split)  
## Gate.location < 2.5 to the left, agree=0.608, adj=0.062, (0 split)  
## Age < 53 to the left, agree=0.595, adj=0.031, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.595, adj=0.031, (0 split)  
##   
## Node number 58772: 11 observations  
## predicted class=0 expected loss=0 P(node) =0.0001112685  
## class counts: 11 0  
## probabilities: 1.000 0.000   
##   
## Node number 58773: 25 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.36 P(node) =0.0002528829  
## class counts: 9 16  
## probabilities: 0.360 0.640   
## left son=117546 (13 obs) right son=117547 (12 obs)  
## Primary splits:  
## Flight.Distance < 371.5 to the right, improve=1.7251280, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.0755560, (0 missing)  
## Age < 41.5 to the left, improve=0.8533333, (0 missing)  
## Arrival.Delay.in.Minutes < 4 to the left, improve=0.8533333, (0 missing)  
## Checkin.service < 3.5 to the right, improve=0.5584615, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 1.5 to the left, agree=0.64, adj=0.250, (0 split)  
## On.board.service < 3.5 to the left, agree=0.64, adj=0.250, (0 split)  
## Arrival.Delay.in.Minutes < 8 to the right, agree=0.64, adj=0.250, (0 split)  
## Age < 37.5 to the right, agree=0.60, adj=0.167, (0 split)  
## Leg.room.service < 2.5 to the right, agree=0.60, adj=0.167, (0 split)  
##   
## Node number 58776: 11 observations  
## predicted class=0 expected loss=0 P(node) =0.0001112685  
## class counts: 11 0  
## probabilities: 1.000 0.000   
##   
## Node number 58777: 59 observations, complexity param=8.797396e-05  
## predicted class=1 expected loss=0.4237288 P(node) =0.0005968036  
## class counts: 25 34  
## probabilities: 0.424 0.576   
## left son=117554 (30 obs) right son=117555 (29 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=2.494019, (0 missing)  
## Flight.Distance < 505.5 to the left, improve=2.030149, (0 missing)  
## Age < 46.5 to the right, improve=1.818979, (0 missing)  
## Departure.Delay.in.Minutes < 2 to the left, improve=1.792383, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.616800, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 388 to the left, agree=0.627, adj=0.241, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.559, adj=0.103, (0 split)  
## Departure.Delay.in.Minutes < 5.5 to the right, agree=0.559, adj=0.103, (0 split)  
## Age < 38.5 to the right, agree=0.542, adj=0.069, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.542, adj=0.069, (0 split)  
##   
## Node number 58778: 35 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3428571 P(node) =0.000354036  
## class counts: 12 23  
## probabilities: 0.343 0.657   
## left son=117556 (20 obs) right son=117557 (15 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=1.0714290, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.7000000, (0 missing)  
## Arrival.Delay.in.Minutes < 5 to the right, improve=0.5826174, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.5280075, (0 missing)  
## Flight.Distance < 588 to the left, improve=0.5121693, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the left, agree=0.657, adj=0.200, (0 split)  
## Age < 26.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Food.and.drink < 1.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Inflight.entertainment < 1.5 to the right, agree=0.629, adj=0.133, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.629, adj=0.133, (0 split)  
##   
## Node number 58779: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 61880: 83 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4939759 P(node) =0.0008395711  
## class counts: 41 42  
## probabilities: 0.494 0.506   
## left son=123760 (56 obs) right son=123761 (27 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=4.409320, (0 missing)  
## Male < 0.5 to the right, improve=2.192785, (0 missing)  
## Arrival.Delay.in.Minutes < 22 to the right, improve=2.016532, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.884953, (0 missing)  
## Flight.Distance < 247.5 to the left, improve=1.380340, (0 missing)  
## Surrogate splits:  
## Age < 23.5 to the left, agree=0.687, adj=0.037, (0 split)  
## Flight.Distance < 1073 to the left, agree=0.687, adj=0.037, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.687, adj=0.037, (0 split)  
##   
## Node number 61881: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 61882: 20 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.4 P(node) =0.0002023063  
## class counts: 8 12  
## probabilities: 0.400 0.600   
## left son=123764 (13 obs) right son=123765 (7 obs)  
## Primary splits:  
## Flight.Distance < 935.5 to the left, improve=3.4461540, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.0343430, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.0343430, (0 missing)  
## Cleanliness < 4.5 to the left, improve=1.0343430, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.7919192, (0 missing)  
## Surrogate splits:  
## Age < 16.5 to the right, agree=0.75, adj=0.286, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.70, adj=0.143, (0 split)  
##   
## Node number 61883: 15 observations  
## predicted class=1 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 1 14  
## probabilities: 0.067 0.933   
##   
## Node number 62300: 56 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.4107143 P(node) =0.0005664576  
## class counts: 23 33  
## probabilities: 0.411 0.589   
## left son=124600 (49 obs) right son=124601 (7 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 3.5 to the left, improve=2.6989800, (0 missing)  
## Male < 0.5 to the left, improve=1.0302200, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.9101732, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.8595238, (0 missing)  
## Age < 27.5 to the left, improve=0.5833333, (0 missing)  
##   
## Node number 62301: 65 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.2461538 P(node) =0.0006574954  
## class counts: 16 49  
## probabilities: 0.246 0.754   
## left son=124602 (7 obs) right son=124603 (58 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=3.4383480, (0 missing)  
## Departure.Delay.in.Minutes < 2.5 to the right, improve=2.9594410, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.9692310, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.9533047, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.5694371, (0 missing)  
## Surrogate splits:  
## Age < 29.5 to the right, agree=0.923, adj=0.286, (0 split)  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.923, adj=0.286, (0 split)  
##   
## Node number 62326: 66 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3181818 P(node) =0.0006676108  
## class counts: 21 45  
## probabilities: 0.318 0.682   
## left son=124652 (51 obs) right son=124653 (15 obs)  
## Primary splits:  
## Flight.Distance < 861.5 to the left, improve=2.4559710, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=1.0044020, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the left, improve=0.8936736, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.6794671, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.6555944, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 3.5 to the right, agree=0.803, adj=0.133, (0 split)  
##   
## Node number 62327: 76 observations  
## predicted class=1 expected loss=0.1710526 P(node) =0.0007687639  
## class counts: 13 63  
## probabilities: 0.171 0.829   
##   
## Node number 63488: 245 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.07755102 P(node) =0.002478252  
## class counts: 226 19  
## probabilities: 0.922 0.078   
## left son=126976 (132 obs) right son=126977 (113 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=3.4424420, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve=3.0697280, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=2.4146370, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.9101502, (0 missing)  
## Flight.Distance < 498 to the right, improve=0.8899157, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.951, adj=0.894, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.931, adj=0.850, (0 split)  
## Flight.Distance < 2417.5 to the left, agree=0.584, adj=0.097, (0 split)  
## Age < 59.5 to the left, agree=0.555, adj=0.035, (0 split)  
## On.board.service < 4.5 to the left, agree=0.555, adj=0.035, (0 split)  
##   
## Node number 63489: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 63492: 115 observations  
## predicted class=0 expected loss=0.1565217 P(node) =0.001163261  
## class counts: 97 18  
## probabilities: 0.843 0.157   
##   
## Node number 63493: 170 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3529412 P(node) =0.001719603  
## class counts: 110 60  
## probabilities: 0.647 0.353   
## left son=126986 (14 obs) right son=126987 (156 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the left, improve=3.800905, (0 missing)  
## Flight.Distance < 179.5 to the right, improve=2.614591, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the right, improve=1.627540, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.565101, (0 missing)  
## Age < 24.5 to the left, improve=1.397059, (0 missing)  
## Surrogate splits:  
## Age < 27 to the left, agree=0.935, adj=0.214, (0 split)  
##   
## Node number 63494: 164 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.4512195 P(node) =0.001658912  
## class counts: 90 74  
## probabilities: 0.549 0.451   
## left son=126988 (149 obs) right son=126989 (15 obs)  
## Primary splits:  
## On.board.service < 4.5 to the left, improve=9.944344, (0 missing)  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=5.933317, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=4.289642, (0 missing)  
## Departure.Delay.in.Minutes < 11.5 to the right, improve=3.883717, (0 missing)  
## Flight.Distance < 1099 to the right, improve=2.489930, (0 missing)  
##   
## Node number 63495: 32 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.125 P(node) =0.0003236901  
## class counts: 4 28  
## probabilities: 0.125 0.875   
## left son=126990 (7 obs) right son=126991 (25 obs)  
## Primary splits:  
## Age < 44 to the left, improve=3.5714290, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.9090910, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.1333330, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=0.6842105, (0 missing)  
## Flight.Distance < 319.5 to the right, improve=0.5238095, (0 missing)  
## Surrogate splits:  
## Male < 0.5 to the right, agree=0.906, adj=0.571, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.875, adj=0.429, (0 split)  
## Gate.location < 1.5 to the left, agree=0.844, adj=0.286, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.844, adj=0.286, (0 split)  
## Flight.Distance < 1098.5 to the right, agree=0.812, adj=0.143, (0 split)  
##   
## Node number 63680: 64 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.359375 P(node) =0.0006473801  
## class counts: 41 23  
## probabilities: 0.641 0.359   
## left son=127360 (23 obs) right son=127361 (41 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 3.5 to the right, improve=2.469810, (0 missing)  
## Age < 26.5 to the right, improve=2.138433, (0 missing)  
## Arrival.Delay.in.Minutes < 2 to the right, improve=1.476632, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=1.185757, (0 missing)  
## Ease.of.Online.booking < 4.5 to the left, improve=1.185757, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 8.5 to the right, agree=0.859, adj=0.609, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.703, adj=0.174, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.703, adj=0.174, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.703, adj=0.174, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.688, adj=0.130, (0 split)  
##   
## Node number 63681: 8 observations  
## predicted class=1 expected loss=0 P(node) =8.092252e-05  
## class counts: 0 8  
## probabilities: 0.000 1.000   
##   
## Node number 64512: 78 observations  
## predicted class=0 expected loss=0.1282051 P(node) =0.0007889945  
## class counts: 68 10  
## probabilities: 0.872 0.128   
##   
## Node number 64513: 137 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3065693 P(node) =0.001385798  
## class counts: 95 42  
## probabilities: 0.693 0.307   
## left son=129026 (52 obs) right son=129027 (85 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 6.5 to the right, improve=2.987089, (0 missing)  
## Departure.Delay.in.Minutes < 15.5 to the right, improve=2.525716, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.938886, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.514925, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.514925, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 10 to the right, agree=0.847, adj=0.596, (0 split)  
## Inflight.wifi.service < 4.5 to the right, agree=0.628, adj=0.019, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.628, adj=0.019, (0 split)  
##   
## Node number 64514: 192 observations, complexity param=0.0002879148  
## predicted class=0 expected loss=0.4114583 P(node) =0.00194214  
## class counts: 113 79  
## probabilities: 0.589 0.411   
## left son=129028 (176 obs) right son=129029 (16 obs)  
## Primary splits:  
## Seat.comfort < 4.5 to the left, improve=7.500947, (0 missing)  
## Flight.Distance < 161 to the right, improve=5.330580, (0 missing)  
## Cleanliness < 4.5 to the left, improve=3.185188, (0 missing)  
## Age < 68.5 to the right, improve=2.826540, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.583453, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=0.943, adj=0.313, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.938, adj=0.250, (0 split)  
##   
## Node number 64515: 24 observations  
## predicted class=1 expected loss=0 P(node) =0.0002427676  
## class counts: 0 24  
## probabilities: 0.000 1.000   
##   
## Node number 64560: 67 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.3731343 P(node) =0.0006777261  
## class counts: 25 42  
## probabilities: 0.373 0.627   
## left son=129120 (16 obs) right son=129121 (51 obs)  
## Primary splits:  
## On.board.service < 3.5 to the right, improve=2.666813, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=2.397829, (0 missing)  
## Age < 27.5 to the right, improve=1.551261, (0 missing)  
## EcoClass < 0.5 to the right, improve=1.448676, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=1.291768, (0 missing)  
##   
## Node number 64561: 27 observations  
## predicted class=1 expected loss=0.1481481 P(node) =0.0002731135  
## class counts: 4 23  
## probabilities: 0.148 0.852   
##   
## Node number 65064: 28 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4285714 P(node) =0.0002832288  
## class counts: 16 12  
## probabilities: 0.571 0.429   
## left son=130128 (9 obs) right son=130129 (19 obs)  
## Primary splits:  
## Age < 27.5 to the left, improve=1.1294900, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.9142857, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=0.8642857, (0 missing)  
## Flight.Distance < 1776 to the right, improve=0.4950344, (0 missing)  
## Arrival.Delay.in.Minutes < 1 to the left, improve=0.4277360, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 4.5 to the right, agree=0.786, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 3 to the right, agree=0.714, adj=0.111, (0 split)  
##   
## Node number 65065: 10 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001011531  
## class counts: 2 8  
## probabilities: 0.200 0.800   
##   
## Node number 65314: 24 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4166667 P(node) =0.0002427676  
## class counts: 14 10  
## probabilities: 0.583 0.417   
## left son=130628 (12 obs) right son=130629 (12 obs)  
## Primary splits:  
## Age < 43.5 to the right, improve=1.3333330, (0 missing)  
## Food.and.drink < 3.5 to the right, improve=1.3333330, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=1.0888890, (0 missing)  
## Cleanliness < 1.5 to the left, improve=0.8414918, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.6666667, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1637 to the left, agree=0.667, adj=0.333, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.625, adj=0.250, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the left, agree=0.625, adj=0.250, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.583, adj=0.167, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.583, adj=0.167, (0 split)  
##   
## Node number 65315: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 65424: 11 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 9 2  
## probabilities: 0.818 0.182   
##   
## Node number 65425: 11 observations  
## predicted class=1 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 3 8  
## probabilities: 0.273 0.727   
##   
## Node number 65476: 20 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0002023063  
## class counts: 10 10  
## probabilities: 0.500 0.500   
## left son=130952 (10 obs) right son=130953 (10 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the left, improve=1.6000000, (0 missing)  
## Flight.Distance < 569 to the left, improve=0.9890110, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the left, improve=0.9890110, (0 missing)  
## Age < 46.5 to the right, improve=0.4166667, (0 missing)  
## Checkin.service < 3.5 to the right, improve=0.4166667, (0 missing)  
## Surrogate splits:  
## Age < 45.5 to the right, agree=0.85, adj=0.7, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.70, adj=0.4, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.70, adj=0.4, (0 split)  
## Departure.Delay.in.Minutes < 12.5 to the right, agree=0.70, adj=0.4, (0 split)  
## Gate.location < 4.5 to the right, agree=0.65, adj=0.3, (0 split)  
##   
## Node number 65477: 10 observations  
## predicted class=1 expected loss=0 P(node) =0.0001011531  
## class counts: 0 10  
## probabilities: 0.000 1.000   
##   
## Node number 65534: 7676 observations, complexity param=0.0001109672  
## predicted class=1 expected loss=0.00442939 P(node) =0.07764515  
## class counts: 34 7642  
## probabilities: 0.004 0.996   
## left son=131068 (26 obs) right son=131069 (7650 obs)  
## Primary splits:  
## Gate.location < 3.5 to the left, improve=47.7969000, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve= 3.1362630, (0 missing)  
## Ease.of.Online.booking < 3.5 to the left, improve= 1.2244660, (0 missing)  
## Age < 27.5 to the left, improve= 0.2857193, (0 missing)  
## Online.boarding < 4.5 to the left, improve= 0.2734970, (0 missing)  
##   
## Node number 65535: 11491 observations  
## predicted class=1 expected loss=0 P(node) =0.1162351  
## class counts: 0 11491  
## probabilities: 0.000 1.000   
##   
## Node number 68614: 51 observations  
## predicted class=0 expected loss=0.1568627 P(node) =0.000515881  
## class counts: 43 8  
## probabilities: 0.843 0.157   
##   
## Node number 68615: 10 observations  
## predicted class=1 expected loss=0.1 P(node) =0.0001011531  
## class counts: 1 9  
## probabilities: 0.100 0.900   
##   
## Node number 68616: 211 observations  
## predicted class=0 expected loss=0.009478673 P(node) =0.002134331  
## class counts: 209 2  
## probabilities: 0.991 0.009   
##   
## Node number 68617: 541 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.0831793 P(node) =0.005472385  
## class counts: 496 45  
## probabilities: 0.917 0.083   
## left son=137234 (129 obs) right son=137235 (412 obs)  
## Primary splits:  
## Inflight.wifi.service < 1.5 to the left, improve=2.343960, (0 missing)  
## Arrival.Delay.in.Minutes < 8.5 to the right, improve=2.008596, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=1.698209, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.681497, (0 missing)  
## Online.boarding < 2.5 to the right, improve=1.523620, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.956, adj=0.814, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.839, adj=0.326, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.832, adj=0.295, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.824, adj=0.264, (0 split)  
## Online.boarding < 1.5 to the left, agree=0.821, adj=0.248, (0 split)  
##   
## Node number 69902: 13 observations  
## predicted class=0 expected loss=0.3076923 P(node) =0.0001314991  
## class counts: 9 4  
## probabilities: 0.692 0.308   
##   
## Node number 69903: 14 observations  
## predicted class=1 expected loss=0.2857143 P(node) =0.0001416144  
## class counts: 4 10  
## probabilities: 0.286 0.714   
##   
## Node number 75266: 101 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.0990099 P(node) =0.001021647  
## class counts: 91 10  
## probabilities: 0.901 0.099   
## left son=150532 (81 obs) right son=150533 (20 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=1.1370860, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.1344770, (0 missing)  
## Cleanliness < 2.5 to the left, improve=1.1344770, (0 missing)  
## Age < 41.5 to the left, improve=0.9073618, (0 missing)  
## Arrival.Delay.in.Minutes < 9 to the right, improve=0.7366647, (0 missing)  
## Surrogate splits:  
## Age < 30.5 to the right, agree=0.822, adj=0.10, (0 split)  
## On.board.service < 1.5 to the right, agree=0.812, adj=0.05, (0 split)  
##   
## Node number 75267: 23 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.3913043 P(node) =0.0002326522  
## class counts: 14 9  
## probabilities: 0.609 0.391   
## left son=150534 (8 obs) right son=150535 (15 obs)  
## Primary splits:  
## BusinessTravel < 0.5 to the left, improve=3.756522, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=3.081522, (0 missing)  
## Flight.Distance < 1391.5 to the left, improve=2.532279, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=2.532279, (0 missing)  
## Arrival.Delay.in.Minutes < 11 to the right, improve=1.850461, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.826, adj=0.500, (0 split)  
## Checkin.service < 3.5 to the right, agree=0.783, adj=0.375, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.739, adj=0.250, (0 split)  
## Age < 55 to the right, agree=0.696, adj=0.125, (0 split)  
## Flight.Distance < 177 to the left, agree=0.696, adj=0.125, (0 split)  
##   
## Node number 75294: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 75295: 41 observations  
## predicted class=1 expected loss=0.09756098 P(node) =0.0004147279  
## class counts: 4 37  
## probabilities: 0.098 0.902   
##   
## Node number 84574: 13 observations  
## predicted class=0 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 8 5  
## probabilities: 0.615 0.385   
##   
## Node number 84575: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 85524: 21 observations  
## predicted class=0 expected loss=0.2857143 P(node) =0.0002124216  
## class counts: 15 6  
## probabilities: 0.714 0.286   
##   
## Node number 85525: 25 observations  
## predicted class=1 expected loss=0.36 P(node) =0.0002528829  
## class counts: 9 16  
## probabilities: 0.360 0.640   
##   
## Node number 87770: 15 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 11 4  
## probabilities: 0.733 0.267   
##   
## Node number 87771: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 89616: 92 observations, complexity param=5.278438e-05  
## predicted class=0 expected loss=0.4782609 P(node) =0.0009306089  
## class counts: 48 44  
## probabilities: 0.522 0.478   
## left son=179232 (25 obs) right son=179233 (67 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=2.6987150, (0 missing)  
## Departure.Delay.in.Minutes < 6.5 to the right, improve=1.8550720, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.4142200, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=1.2723510, (0 missing)  
## Checkin.service < 2.5 to the left, improve=0.9032969, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 4.5 to the right, agree=0.87, adj=0.52, (0 split)  
##   
## Node number 89617: 8 observations  
## predicted class=1 expected loss=0 P(node) =8.092252e-05  
## class counts: 0 8  
## probabilities: 0.000 1.000   
##   
## Node number 103918: 28 observations, complexity param=1.599527e-05  
## predicted class=0 expected loss=0.3214286 P(node) =0.0002832288  
## class counts: 19 9  
## probabilities: 0.679 0.321   
## left son=207836 (15 obs) right son=207837 (13 obs)  
## Primary splits:  
## Age < 41.5 to the left, improve=2.2860810, (0 missing)  
## Flight.Distance < 1566.5 to the left, improve=1.4540520, (0 missing)  
## Male < 0.5 to the left, improve=0.9527473, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.7062643, (0 missing)  
## Inflight.entertainment < 3.5 to the left, improve=0.6420932, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the right, agree=0.714, adj=0.385, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.679, adj=0.308, (0 split)  
## Flight.Distance < 1736.5 to the left, agree=0.643, adj=0.231, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.643, adj=0.231, (0 split)  
## On.board.service < 3.5 to the right, agree=0.643, adj=0.231, (0 split)  
##   
## Node number 103919: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 104544: 206 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.1601942 P(node) =0.002083755  
## class counts: 173 33  
## probabilities: 0.840 0.160   
## left son=209088 (160 obs) right son=209089 (46 obs)  
## Primary splits:  
## Flight.Distance < 283.5 to the right, improve=1.7750110, (0 missing)  
## Age < 13.5 to the right, improve=0.9390892, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=0.8895648, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.5950416, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=0.5394294, (0 missing)  
## Surrogate splits:  
## LoyalCustomer < 0.5 to the right, agree=0.786, adj=0.043, (0 split)  
##   
## Node number 104545: 9 observations  
## predicted class=0 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 5 4  
## probabilities: 0.556 0.444   
##   
## Node number 104556: 54 observations  
## predicted class=0 expected loss=0.09259259 P(node) =0.000546227  
## class counts: 49 5  
## probabilities: 0.907 0.093   
##   
## Node number 104557: 124 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3064516 P(node) =0.001254299  
## class counts: 86 38  
## probabilities: 0.694 0.306   
## left son=209114 (10 obs) right son=209115 (114 obs)  
## Primary splits:  
## Leg.room.service < 1.5 to the left, improve=2.0430110, (0 missing)  
## Age < 51 to the right, improve=1.9622770, (0 missing)  
## On.board.service < 1.5 to the left, improve=1.5301900, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.9903792, (0 missing)  
## Gate.location < 4.5 to the right, improve=0.8969115, (0 missing)  
##   
## Node number 104558: 57 observations  
## predicted class=0 expected loss=0.1754386 P(node) =0.0005765729  
## class counts: 47 10  
## probabilities: 0.825 0.175   
##   
## Node number 104559: 277 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3393502 P(node) =0.002801942  
## class counts: 183 94  
## probabilities: 0.661 0.339   
## left son=209118 (251 obs) right son=209119 (26 obs)  
## Primary splits:  
## Flight.Distance < 636.5 to the left, improve=1.4810510, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.9117244, (0 missing)  
## Age < 67.5 to the left, improve=0.8696619, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.7683335, (0 missing)  
## Departure.Delay.in.Minutes < 7.5 to the right, improve=0.7569988, (0 missing)  
##   
## Node number 104612: 33 observations  
## predicted class=0 expected loss=0.1515152 P(node) =0.0003338054  
## class counts: 28 5  
## probabilities: 0.848 0.152   
##   
## Node number 104613: 169 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.295858 P(node) =0.001709488  
## class counts: 119 50  
## probabilities: 0.704 0.296   
## left son=209226 (37 obs) right son=209227 (132 obs)  
## Primary splits:  
## Flight.Distance < 1576 to the right, improve=1.0780010, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.0491570, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.9630384, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=0.6999155, (0 missing)  
## Baggage.handling < 2.5 to the left, improve=0.6891467, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.787, adj=0.027, (0 split)  
##   
## Node number 104614: 13 observations  
## predicted class=0 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 10 3  
## probabilities: 0.769 0.231   
##   
## Node number 104615: 13 observations  
## predicted class=1 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 5 8  
## probabilities: 0.385 0.615   
##   
## Node number 104638: 27 observations, complexity param=3.707993e-05  
## predicted class=1 expected loss=0.4814815 P(node) =0.0002731135  
## class counts: 13 14  
## probabilities: 0.481 0.519   
## left son=209276 (16 obs) right son=209277 (11 obs)  
## Primary splits:  
## Flight.Distance < 1148.5 to the right, improve=1.6178450, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.7243386, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.4683236, (0 missing)  
## Age < 61.5 to the right, improve=0.4481481, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=0.4461874, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.741, adj=0.364, (0 split)  
## Leg.room.service < 4.5 to the right, agree=0.704, adj=0.273, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.667, adj=0.182, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.667, adj=0.182, (0 split)  
## Checkin.service < 1.5 to the right, agree=0.667, adj=0.182, (0 split)  
##   
## Node number 104639: 11 observations  
## predicted class=1 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 1 10  
## probabilities: 0.091 0.909   
##   
## Node number 104692: 26 observations  
## predicted class=0 expected loss=0.2307692 P(node) =0.0002629982  
## class counts: 20 6  
## probabilities: 0.769 0.231   
##   
## Node number 104693: 47 observations, complexity param=3.707993e-05  
## predicted class=0 expected loss=0.4680851 P(node) =0.0004754198  
## class counts: 25 22  
## probabilities: 0.532 0.468   
## left son=209386 (7 obs) right son=209387 (40 obs)  
## Primary splits:  
## Age < 45 to the right, improve=1.7399700, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.5328270, (0 missing)  
## Male < 0.5 to the right, improve=1.1935270, (0 missing)  
## Flight.Distance < 1122.5 to the left, improve=0.9971125, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.5764165, (0 missing)  
##   
## Node number 105132: 577 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3067591 P(node) =0.005836537  
## class counts: 400 177  
## probabilities: 0.693 0.307   
## left son=210264 (14 obs) right son=210265 (563 obs)  
## Primary splits:  
## Flight.Distance < 1026 to the right, improve=1.589213, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.580133, (0 missing)  
## Age < 16.5 to the left, improve=1.524094, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=1.487102, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=1.129063, (0 missing)  
##   
## Node number 105133: 80 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0008092252  
## class counts: 48 32  
## probabilities: 0.600 0.400   
## left son=210266 (73 obs) right son=210267 (7 obs)  
## Primary splits:  
## Age < 14.5 to the right, improve=3.206262, (0 missing)  
## Checkin.service < 2.5 to the right, improve=1.837500, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.029793, (0 missing)  
## Flight.Distance < 141.5 to the left, improve=1.014481, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.900000, (0 missing)  
##   
## Node number 105134: 105 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3619048 P(node) =0.001062108  
## class counts: 67 38  
## probabilities: 0.638 0.362   
## left son=210268 (90 obs) right son=210269 (15 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=3.2507940, (0 missing)  
## Gate.location < 2.5 to the left, improve=2.8000330, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=1.8511380, (0 missing)  
## Online.boarding < 4.5 to the left, improve=1.1988460, (0 missing)  
## Age < 15.5 to the left, improve=0.9720422, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the right, agree=0.867, adj=0.067, (0 split)  
##   
## Node number 105135: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 105144: 21 observations  
## predicted class=0 expected loss=0.04761905 P(node) =0.0002124216  
## class counts: 20 1  
## probabilities: 0.952 0.048   
##   
## Node number 105145: 92 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3913043 P(node) =0.0009306089  
## class counts: 56 36  
## probabilities: 0.609 0.391   
## left son=210290 (14 obs) right son=210291 (78 obs)  
## Primary splits:  
## Age < 55.5 to the right, improve=2.0385410, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.2465420, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.2369130, (0 missing)  
## Flight.Distance < 1520.5 to the right, improve=1.1329430, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=0.8212089, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 1.5 to the left, agree=0.870, adj=0.143, (0 split)  
## Inflight.service < 1.5 to the left, agree=0.870, adj=0.143, (0 split)  
## Flight.Distance < 1106 to the left, agree=0.859, adj=0.071, (0 split)  
##   
## Node number 105146: 66 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.4242424 P(node) =0.0006676108  
## class counts: 38 28  
## probabilities: 0.576 0.424   
## left son=210292 (33 obs) right son=210293 (33 obs)  
## Primary splits:  
## Age < 39.5 to the left, improve=3.030303, (0 missing)  
## Flight.Distance < 1191 to the right, improve=1.728535, (0 missing)  
## Inflight.entertainment < 3.5 to the right, improve=1.723906, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.165501, (0 missing)  
## Inflight.service < 3.5 to the right, improve=0.969697, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.682, adj=0.364, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.682, adj=0.364, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.682, adj=0.364, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.636, adj=0.273, (0 split)  
## On.board.service < 2.5 to the right, agree=0.621, adj=0.242, (0 split)  
##   
## Node number 105147: 8 observations  
## predicted class=1 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 1 7  
## probabilities: 0.125 0.875   
##   
## Node number 105862: 11 observations  
## predicted class=0 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 8 3  
## probabilities: 0.727 0.273   
##   
## Node number 105863: 9 observations  
## predicted class=1 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 3 6  
## probabilities: 0.333 0.667   
##   
## Node number 117126: 31 observations  
## predicted class=0 expected loss=0.03225806 P(node) =0.0003135748  
## class counts: 30 1  
## probabilities: 0.968 0.032   
##   
## Node number 117127: 226 observations, complexity param=0.0003678911  
## predicted class=1 expected loss=0.3982301 P(node) =0.002286061  
## class counts: 90 136  
## probabilities: 0.398 0.602   
## left son=234254 (18 obs) right son=234255 (208 obs)  
## Primary splits:  
## Food.and.drink < 1.5 to the left, improve=14.164740, (0 missing)  
## Age < 60.5 to the right, improve= 9.416875, (0 missing)  
## Inflight.wifi.service < 1.5 to the right, improve= 8.067479, (0 missing)  
## Flight.Distance < 347 to the left, improve= 7.577843, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve= 3.172576, (0 missing)  
##   
## Node number 117266: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 117267: 24 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.375 P(node) =0.0002427676  
## class counts: 15 9  
## probabilities: 0.625 0.375   
## left son=234534 (16 obs) right son=234535 (8 obs)  
## Primary splits:  
## Age < 22.5 to the right, improve=3.3750000, (0 missing)  
## Inflight.service < 3.5 to the left, improve=2.0055560, (0 missing)  
## Departure.Delay.in.Minutes < 43.5 to the right, improve=0.7500000, (0 missing)  
## Male < 0.5 to the left, improve=0.4248252, (0 missing)  
## Flight.Distance < 338.5 to the left, improve=0.3750000, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the right, agree=0.750, adj=0.250, (0 split)  
## Departure.Delay.in.Minutes < 43.5 to the right, agree=0.750, adj=0.250, (0 split)  
## Flight.Distance < 1093 to the left, agree=0.708, adj=0.125, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.708, adj=0.125, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.708, adj=0.125, (0 split)  
##   
## Node number 117268: 101 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.2673267 P(node) =0.001021647  
## class counts: 74 27  
## probabilities: 0.733 0.267   
## left son=234536 (30 obs) right son=234537 (71 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=3.436657, (0 missing)  
## Flight.Distance < 670 to the left, improve=2.245225, (0 missing)  
## Gate.location < 1.5 to the right, improve=1.641651, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.565932, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.169620, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 670 to the left, agree=0.881, adj=0.600, (0 split)  
## Age < 23.5 to the right, agree=0.723, adj=0.067, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.723, adj=0.067, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.723, adj=0.067, (0 split)  
## Arrival.Delay.in.Minutes < 4.5 to the right, agree=0.713, adj=0.033, (0 split)  
##   
## Node number 117269: 18 observations  
## predicted class=1 expected loss=0.4444444 P(node) =0.0001820757  
## class counts: 8 10  
## probabilities: 0.444 0.556   
##   
## Node number 117274: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 117275: 15 observations  
## predicted class=1 expected loss=0.2666667 P(node) =0.0001517297  
## class counts: 4 11  
## probabilities: 0.267 0.733   
##   
## Node number 117322: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 117323: 23 observations  
## predicted class=1 expected loss=0.2608696 P(node) =0.0002326522  
## class counts: 6 17  
## probabilities: 0.261 0.739   
##   
## Node number 117528: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 117529: 80 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.4125 P(node) =0.0008092252  
## class counts: 47 33  
## probabilities: 0.588 0.412   
## left son=235058 (40 obs) right son=235059 (40 obs)  
## Primary splits:  
## Age < 38.5 to the left, improve=2.0250000, (0 missing)  
## Flight.Distance < 191 to the right, improve=1.8892860, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the left, improve=1.8009740, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.0083330, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.6670635, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 3.5 to the left, agree=0.588, adj=0.175, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.562, adj=0.125, (0 split)  
## Gate.location < 1.5 to the left, agree=0.562, adj=0.125, (0 split)  
## Flight.Distance < 224.5 to the left, agree=0.550, adj=0.100, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.550, adj=0.100, (0 split)  
##   
## Node number 117530: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 117531: 36 observations  
## predicted class=1 expected loss=0.2222222 P(node) =0.0003641513  
## class counts: 8 28  
## probabilities: 0.222 0.778   
##   
## Node number 117534: 135 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.3851852 P(node) =0.001365567  
## class counts: 52 83  
## probabilities: 0.385 0.615   
## left son=235068 (88 obs) right son=235069 (47 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the left, improve=2.432037, (0 missing)  
## Age < 31.5 to the right, improve=1.651058, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.651030, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.651030, (0 missing)  
## Cleanliness < 2.5 to the left, improve=1.651030, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 2.5 to the left, agree=0.948, adj=0.851, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.948, adj=0.851, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.948, adj=0.851, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.674, adj=0.064, (0 split)  
## Age < 49.5 to the left, agree=0.659, adj=0.021, (0 split)  
##   
## Node number 117535: 97 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.2061856 P(node) =0.0009811855  
## class counts: 20 77  
## probabilities: 0.206 0.794   
## left son=235070 (66 obs) right son=235071 (31 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the right, improve=1.0907980, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.0549030, (0 missing)  
## Flight.Distance < 1182.5 to the left, improve=0.9626230, (0 missing)  
## Departure.Delay.in.Minutes < 14.5 to the right, improve=0.9381834, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.8976077, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 1 to the right, agree=0.722, adj=0.129, (0 split)  
## Flight.Distance < 1493.5 to the left, agree=0.711, adj=0.097, (0 split)  
## Departure.Delay.in.Minutes < 1.5 to the right, agree=0.711, adj=0.097, (0 split)  
## Ease.of.Online.booking < 4.5 to the left, agree=0.701, adj=0.065, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.701, adj=0.065, (0 split)  
##   
## Node number 117546: 13 observations  
## predicted class=0 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 7 6  
## probabilities: 0.538 0.462   
##   
## Node number 117547: 12 observations  
## predicted class=1 expected loss=0.1666667 P(node) =0.0001213838  
## class counts: 2 10  
## probabilities: 0.167 0.833   
##   
## Node number 117554: 30 observations, complexity param=7.197869e-05  
## predicted class=0 expected loss=0.4333333 P(node) =0.0003034594  
## class counts: 17 13  
## probabilities: 0.567 0.433   
## left son=235108 (7 obs) right son=235109 (23 obs)  
## Primary splits:  
## Flight.Distance < 231 to the left, improve=3.428986, (0 missing)  
## Age < 46.5 to the right, improve=1.633333, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.633333, (0 missing)  
## Departure.Delay.in.Minutes < 2 to the left, improve=1.001190, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.507089, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 21 to the right, agree=0.8, adj=0.143, (0 split)  
## Arrival.Delay.in.Minutes < 23.5 to the right, agree=0.8, adj=0.143, (0 split)  
##   
## Node number 117555: 29 observations  
## predicted class=1 expected loss=0.2758621 P(node) =0.0002933441  
## class counts: 8 21  
## probabilities: 0.276 0.724   
##   
## Node number 117556: 20 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.45 P(node) =0.0002023063  
## class counts: 9 11  
## probabilities: 0.450 0.550   
## left son=235112 (9 obs) right son=235113 (11 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=1.5363640, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.0666670, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.8166667, (0 missing)  
## Departure.Delay.in.Minutes < 1 to the right, improve=0.8166667, (0 missing)  
## Flight.Distance < 863.5 to the left, improve=0.3646465, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.80, adj=0.556, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.75, adj=0.444, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.75, adj=0.444, (0 split)  
## Arrival.Delay.in.Minutes < 14 to the right, agree=0.75, adj=0.444, (0 split)  
## Flight.Distance < 589 to the left, agree=0.70, adj=0.333, (0 split)  
##   
## Node number 117557: 15 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001517297  
## class counts: 3 12  
## probabilities: 0.200 0.800   
##   
## Node number 123760: 56 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3928571 P(node) =0.0005664576  
## class counts: 34 22  
## probabilities: 0.607 0.393   
## left son=247520 (8 obs) right son=247521 (48 obs)  
## Primary splits:  
## Flight.Distance < 256 to the left, improve=1.339286, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.285714, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.285714, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.285714, (0 missing)  
## Arrival.Delay.in.Minutes < 22 to the right, improve=1.000000, (0 missing)  
##   
## Node number 123761: 27 observations  
## predicted class=1 expected loss=0.2592593 P(node) =0.0002731135  
## class counts: 7 20  
## probabilities: 0.259 0.741   
##   
## Node number 123764: 13 observations  
## predicted class=0 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 8 5  
## probabilities: 0.615 0.385   
##   
## Node number 123765: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 124600: 49 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.4693878 P(node) =0.0004956504  
## class counts: 23 26  
## probabilities: 0.469 0.531   
## left son=249200 (27 obs) right son=249201 (22 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=0.8930118, (0 missing)  
## Flight.Distance < 865.5 to the left, improve=0.8003201, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.7909384, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.7450054, (0 missing)  
## Age < 27.5 to the left, improve=0.5883434, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.633, adj=0.182, (0 split)  
## Checkin.service < 4.5 to the right, agree=0.612, adj=0.136, (0 split)  
## Flight.Distance < 152.5 to the right, agree=0.592, adj=0.091, (0 split)  
## Leg.room.service < 2.5 to the right, agree=0.592, adj=0.091, (0 split)  
## Departure.Delay.in.Minutes < 3 to the left, agree=0.592, adj=0.091, (0 split)  
##   
## Node number 124601: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 124602: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 124603: 58 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.1896552 P(node) =0.0005866882  
## class counts: 11 47  
## probabilities: 0.190 0.810   
## left son=249206 (31 obs) right son=249207 (27 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=1.3496890, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.8353381, (0 missing)  
## Flight.Distance < 352 to the right, improve=0.6675862, (0 missing)  
## Age < 27.5 to the left, improve=0.6232851, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.5726842, (0 missing)  
## Surrogate splits:  
## Age < 25.5 to the right, agree=0.638, adj=0.222, (0 split)  
## Flight.Distance < 566.5 to the right, agree=0.603, adj=0.148, (0 split)  
## Male < 0.5 to the left, agree=0.586, adj=0.111, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.569, adj=0.074, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.569, adj=0.074, (0 split)  
##   
## Node number 124652: 51 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3921569 P(node) =0.000515881  
## class counts: 20 31  
## probabilities: 0.392 0.608   
## left son=249304 (40 obs) right son=249305 (11 obs)  
## Primary splits:  
## Flight.Distance < 206.5 to the right, improve=1.2409980, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the left, improve=1.0085310, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the left, improve=1.0085310, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.8089636, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=0.8089636, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.804, adj=0.091, (0 split)  
##   
## Node number 124653: 15 observations  
## predicted class=1 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 1 14  
## probabilities: 0.067 0.933   
##   
## Node number 126976: 132 observations  
## predicted class=0 expected loss=0 P(node) =0.001335222  
## class counts: 132 0  
## probabilities: 1.000 0.000   
##   
## Node number 126977: 113 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.1681416 P(node) =0.001143031  
## class counts: 94 19  
## probabilities: 0.832 0.168   
## left son=253954 (105 obs) right son=253955 (8 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=3.593953, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=2.524200, (0 missing)  
## Gate.location < 4.5 to the right, improve=2.524200, (0 missing)  
## Flight.Distance < 499.5 to the right, improve=1.366747, (0 missing)  
## Age < 48.5 to the right, improve=1.078044, (0 missing)  
##   
## Node number 126986: 14 observations  
## predicted class=0 expected loss=0 P(node) =0.0001416144  
## class counts: 14 0  
## probabilities: 1.000 0.000   
##   
## Node number 126987: 156 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3846154 P(node) =0.001577989  
## class counts: 96 60  
## probabilities: 0.615 0.385   
## left son=253974 (141 obs) right son=253975 (15 obs)  
## Primary splits:  
## Flight.Distance < 179.5 to the right, improve=2.640480, (0 missing)  
## On.board.service < 2.5 to the right, improve=2.247879, (0 missing)  
## Age < 35.5 to the right, improve=1.709402, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.577202, (0 missing)  
## Arrival.Delay.in.Minutes < 5 to the right, improve=1.385440, (0 missing)  
##   
## Node number 126988: 149 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.3959732 P(node) =0.001507182  
## class counts: 90 59  
## probabilities: 0.604 0.396   
## left son=253976 (50 obs) right son=253977 (99 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 5.5 to the right, improve=5.780218, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=5.446391, (0 missing)  
## Departure.Delay.in.Minutes < 12.5 to the right, improve=3.888020, (0 missing)  
## Age < 38.5 to the left, improve=3.345490, (0 missing)  
## Flight.Distance < 1099 to the right, improve=1.497840, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 15.5 to the right, agree=0.859, adj=0.58, (0 split)  
## Age < 38.5 to the left, agree=0.698, adj=0.10, (0 split)  
## Flight.Distance < 1190.5 to the right, agree=0.678, adj=0.04, (0 split)  
##   
## Node number 126989: 15 observations  
## predicted class=1 expected loss=0 P(node) =0.0001517297  
## class counts: 0 15  
## probabilities: 0.000 1.000   
##   
## Node number 126990: 7 observations  
## predicted class=0 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 4 3  
## probabilities: 0.571 0.429   
##   
## Node number 126991: 25 observations  
## predicted class=1 expected loss=0 P(node) =0.0002528829  
## class counts: 0 25  
## probabilities: 0.000 1.000   
##   
## Node number 127360: 23 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.173913 P(node) =0.0002326522  
## class counts: 19 4  
## probabilities: 0.826 0.174   
## left son=254720 (16 obs) right son=254721 (7 obs)  
## Primary splits:  
## Age < 28.5 to the right, improve=3.1801240, (0 missing)  
## Male < 0.5 to the right, improve=1.3051240, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=0.9920290, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.7515528, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.6086957, (0 missing)  
## Surrogate splits:  
## Male < 0.5 to the right, agree=0.826, adj=0.429, (0 split)  
##   
## Node number 127361: 41 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4634146 P(node) =0.0004147279  
## class counts: 22 19  
## probabilities: 0.537 0.463   
## left son=254722 (8 obs) right son=254723 (33 obs)  
## Primary splits:  
## Flight.Distance < 664.5 to the left, improve=2.2766080, (0 missing)  
## Age < 26.5 to the right, improve=0.9527439, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.8993348, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.5152439, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.4879451, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.829, adj=0.125, (0 split)  
##   
## Node number 129026: 52 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.1730769 P(node) =0.0005259964  
## class counts: 43 9  
## probabilities: 0.827 0.173   
## left son=258052 (21 obs) right son=258053 (31 obs)  
## Primary splits:  
## Age < 37.5 to the left, improve=2.1104220, (0 missing)  
## Arrival.Delay.in.Minutes < 62.5 to the right, improve=0.6520572, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.6117518, (0 missing)  
## Departure.Delay.in.Minutes < 58 to the right, improve=0.5664336, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.4268581, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 181 to the left, agree=0.654, adj=0.143, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.654, adj=0.143, (0 split)  
## Ease.of.Online.booking < 1.5 to the left, agree=0.635, adj=0.095, (0 split)  
## Gate.location < 4.5 to the right, agree=0.635, adj=0.095, (0 split)  
## On.board.service < 3.5 to the right, agree=0.635, adj=0.095, (0 split)  
##   
## Node number 129027: 85 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3882353 P(node) =0.0008598017  
## class counts: 52 33  
## probabilities: 0.612 0.388   
## left son=258054 (37 obs) right son=258055 (48 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=1.823543, (0 missing)  
## Flight.Distance < 475.5 to the right, improve=1.625077, (0 missing)  
## Age < 39.5 to the right, improve=1.595769, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.546061, (0 missing)  
## Male < 0.5 to the right, improve=1.137582, (0 missing)  
## Surrogate splits:  
## Age < 39.5 to the right, agree=0.635, adj=0.162, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.600, adj=0.081, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.600, adj=0.081, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.600, adj=0.081, (0 split)  
## Flight.Distance < 783 to the right, agree=0.588, adj=0.054, (0 split)  
##   
## Node number 129028: 176 observations, complexity param=0.0001919432  
## predicted class=0 expected loss=0.3693182 P(node) =0.001780295  
## class counts: 111 65  
## probabilities: 0.631 0.369   
## left son=258056 (160 obs) right son=258057 (16 obs)  
## Primary splits:  
## Flight.Distance < 161 to the right, improve=5.101136, (0 missing)  
## Age < 53.5 to the right, improve=2.966426, (0 missing)  
## Arrival.Delay.in.Minutes < 82.5 to the left, improve=2.429113, (0 missing)  
## Departure.Delay.in.Minutes < 82.5 to the left, improve=1.735044, (0 missing)  
## Gate.location < 3.5 to the right, improve=1.028978, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the left, agree=0.915, adj=0.063, (0 split)  
##   
## Node number 129029: 16 observations  
## predicted class=1 expected loss=0.125 P(node) =0.000161845  
## class counts: 2 14  
## probabilities: 0.125 0.875   
##   
## Node number 129120: 16 observations  
## predicted class=0 expected loss=0.375 P(node) =0.000161845  
## class counts: 10 6  
## probabilities: 0.625 0.375   
##   
## Node number 129121: 51 observations, complexity param=1.919432e-05  
## predicted class=1 expected loss=0.2941176 P(node) =0.000515881  
## class counts: 15 36  
## probabilities: 0.294 0.706   
## left son=258242 (11 obs) right son=258243 (40 obs)  
## Primary splits:  
## Ease.of.Online.booking < 4.5 to the right, improve=3.285561, (0 missing)  
## Arrival.Delay.in.Minutes < 41.5 to the right, improve=2.864782, (0 missing)  
## Gate.location < 4.5 to the right, improve=2.625189, (0 missing)  
## Departure.Delay.in.Minutes < 13.5 to the right, improve=2.625189, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.771925, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the right, agree=0.902, adj=0.545, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.882, adj=0.455, (0 split)  
##   
## Node number 130128: 9 observations  
## predicted class=0 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 7 2  
## probabilities: 0.778 0.222   
##   
## Node number 130129: 19 observations  
## predicted class=1 expected loss=0.4736842 P(node) =0.000192191  
## class counts: 9 10  
## probabilities: 0.474 0.526   
##   
## Node number 130628: 12 observations  
## predicted class=0 expected loss=0.25 P(node) =0.0001213838  
## class counts: 9 3  
## probabilities: 0.750 0.250   
##   
## Node number 130629: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583   
##   
## Node number 130952: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 130953: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 131068: 26 observations  
## predicted class=0 expected loss=0.03846154 P(node) =0.0002629982  
## class counts: 25 1  
## probabilities: 0.962 0.038   
##   
## Node number 131069: 7650 observations  
## predicted class=1 expected loss=0.001176471 P(node) =0.07738216  
## class counts: 9 7641  
## probabilities: 0.001 0.999   
##   
## Node number 137234: 129 observations  
## predicted class=0 expected loss=0 P(node) =0.001304876  
## class counts: 129 0  
## probabilities: 1.000 0.000   
##   
## Node number 137235: 412 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.1092233 P(node) =0.00416751  
## class counts: 367 45  
## probabilities: 0.891 0.109   
## left son=274470 (170 obs) right son=274471 (242 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 8.5 to the right, improve=2.680258, (0 missing)  
## Online.boarding < 1.5 to the right, improve=2.632371, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=2.065306, (0 missing)  
## Age < 60.5 to the right, improve=1.482752, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.363542, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 3.5 to the right, agree=0.852, adj=0.641, (0 split)  
## Leg.room.service < 4.5 to the right, agree=0.600, adj=0.029, (0 split)  
## Age < 20 to the left, agree=0.595, adj=0.018, (0 split)  
## Flight.Distance < 840.5 to the right, agree=0.592, adj=0.012, (0 split)  
##   
## Node number 150532: 81 observations  
## predicted class=0 expected loss=0.0617284 P(node) =0.0008193405  
## class counts: 76 5  
## probabilities: 0.938 0.062   
##   
## Node number 150533: 20 observations, complexity param=2.742045e-05  
## predicted class=0 expected loss=0.25 P(node) =0.0002023063  
## class counts: 15 5  
## probabilities: 0.750 0.250   
## left son=301066 (13 obs) right son=301067 (7 obs)  
## Primary splits:  
## Age < 32.5 to the left, improve=4.6428570, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.6666670, (0 missing)  
## Checkin.service < 2.5 to the right, improve=1.6666670, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.3461540, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.4166667, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the left, agree=0.95, adj=0.857, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.85, adj=0.571, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.85, adj=0.571, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.80, adj=0.429, (0 split)  
## Inflight.wifi.service < 2.5 to the left, agree=0.75, adj=0.286, (0 split)  
##   
## Node number 150534: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 150535: 15 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001517297  
## class counts: 6 9  
## probabilities: 0.400 0.600   
##   
## Node number 179232: 25 observations  
## predicted class=0 expected loss=0.28 P(node) =0.0002528829  
## class counts: 18 7  
## probabilities: 0.720 0.280   
##   
## Node number 179233: 67 observations, complexity param=5.278438e-05  
## predicted class=1 expected loss=0.4477612 P(node) =0.0006777261  
## class counts: 30 37  
## probabilities: 0.448 0.552   
## left son=358466 (58 obs) right son=358467 (9 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 3.5 to the left, improve=2.356551, (0 missing)  
## Age < 42.5 to the right, improve=2.230073, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.852277, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=1.518944, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.105290, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 5 to the left, agree=0.91, adj=0.333, (0 split)  
##   
## Node number 207836: 15 observations  
## predicted class=0 expected loss=0.1333333 P(node) =0.0001517297  
## class counts: 13 2  
## probabilities: 0.867 0.133   
##   
## Node number 207837: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 209088: 160 observations  
## predicted class=0 expected loss=0.125 P(node) =0.00161845  
## class counts: 140 20  
## probabilities: 0.875 0.125   
##   
## Node number 209089: 46 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.2826087 P(node) =0.0004653045  
## class counts: 33 13  
## probabilities: 0.717 0.283   
## left son=418178 (16 obs) right son=418179 (30 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the right, improve=2.377174, (0 missing)  
## Male < 0.5 to the right, improve=1.982943, (0 missing)  
## Age < 44 to the right, improve=1.787309, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.667189, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.667189, (0 missing)  
## Surrogate splits:  
## Age < 53.5 to the right, agree=0.761, adj=0.313, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.696, adj=0.125, (0 split)  
## Flight.Distance < 174 to the left, agree=0.674, adj=0.062, (0 split)  
##   
## Node number 209114: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 209115: 114 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3333333 P(node) =0.001153146  
## class counts: 76 38  
## probabilities: 0.667 0.333   
## left son=418230 (15 obs) right son=418231 (99 obs)  
## Primary splits:  
## Age < 51 to the right, improve=2.456566, (0 missing)  
## On.board.service < 1.5 to the left, improve=1.431009, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=1.191346, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.191346, (0 missing)  
## Gate.location < 4.5 to the right, improve=1.052049, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.886, adj=0.133, (0 split)  
## Flight.Distance < 165 to the left, agree=0.877, adj=0.067, (0 split)  
##   
## Node number 209118: 251 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3227092 P(node) =0.002538944  
## class counts: 170 81  
## probabilities: 0.677 0.323   
## left son=418236 (10 obs) right son=418237 (241 obs)  
## Primary splits:  
## Flight.Distance < 599.5 to the right, improve=2.1692480, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.9871430, (0 missing)  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=0.8358997, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.7868632, (0 missing)  
## Age < 10.5 to the left, improve=0.7799391, (0 missing)  
##   
## Node number 209119: 26 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0002629982  
## class counts: 13 13  
## probabilities: 0.500 0.500   
## left son=418238 (18 obs) right son=418239 (8 obs)  
## Primary splits:  
## Flight.Distance < 654 to the right, improve=3.250000, (0 missing)  
## On.board.service < 1.5 to the right, improve=2.443609, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.444444, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=1.444444, (0 missing)  
## Inflight.service < 3.5 to the right, improve=1.444444, (0 missing)  
## Surrogate splits:  
## Age < 63.5 to the left, agree=0.769, adj=0.250, (0 split)  
## On.board.service < 4.5 to the left, agree=0.731, adj=0.125, (0 split)  
##   
## Node number 209226: 37 observations  
## predicted class=0 expected loss=0.1891892 P(node) =0.0003742666  
## class counts: 30 7  
## probabilities: 0.811 0.189   
##   
## Node number 209227: 132 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3257576 P(node) =0.001335222  
## class counts: 89 43  
## probabilities: 0.674 0.326   
## left son=418454 (113 obs) right son=418455 (19 obs)  
## Primary splits:  
## Flight.Distance < 1411.5 to the left, improve=2.8455840, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.4676070, (0 missing)  
## Inflight.service < 4.5 to the right, improve=1.1363640, (0 missing)  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=0.9140634, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.8758259, (0 missing)  
##   
## Node number 209276: 16 observations  
## predicted class=0 expected loss=0.375 P(node) =0.000161845  
## class counts: 10 6  
## probabilities: 0.625 0.375   
##   
## Node number 209277: 11 observations  
## predicted class=1 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 3 8  
## probabilities: 0.273 0.727   
##   
## Node number 209386: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 209387: 40 observations, complexity param=3.707993e-05  
## predicted class=1 expected loss=0.475 P(node) =0.0004046126  
## class counts: 19 21  
## probabilities: 0.475 0.525   
## left son=418774 (10 obs) right son=418775 (30 obs)  
## Primary splits:  
## Flight.Distance < 850.5 to the left, improve=1.3500000, (0 missing)  
## Male < 0.5 to the right, improve=0.8809463, (0 missing)  
## Gate.location < 2.5 to the left, improve=0.8532258, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=0.7500000, (0 missing)  
## Age < 33 to the left, improve=0.6880952, (0 missing)  
## Surrogate splits:  
## On.board.service < 1.5 to the left, agree=0.800, adj=0.2, (0 split)  
## Departure.Delay.in.Minutes < 6.5 to the right, agree=0.775, adj=0.1, (0 split)  
##   
## Node number 210264: 14 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0001416144  
## class counts: 13 1  
## probabilities: 0.929 0.071   
##   
## Node number 210265: 563 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.312611 P(node) =0.005694922  
## class counts: 387 176  
## probabilities: 0.687 0.313   
## left son=420530 (43 obs) right son=420531 (520 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=2.089993, (0 missing)  
## Age < 16.5 to the left, improve=1.827001, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.450188, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.266472, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=1.264346, (0 missing)  
##   
## Node number 210266: 73 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3561644 P(node) =0.000738418  
## class counts: 47 26  
## probabilities: 0.644 0.356   
## left son=420532 (13 obs) right son=420533 (60 obs)  
## Primary splits:  
## Age < 26 to the left, improve=2.4666320, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.7175473, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=0.5582399, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=0.4443643, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.3934792, (0 missing)  
##   
## Node number 210267: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 210268: 90 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3111111 P(node) =0.0009103783  
## class counts: 62 28  
## probabilities: 0.689 0.311   
## left son=420536 (28 obs) right son=420537 (62 obs)  
## Primary splits:  
## Gate.location < 2.5 to the left, improve=4.6699440, (0 missing)  
## Online.boarding < 4.5 to the left, improve=1.0287240, (0 missing)  
## Flight.Distance < 334.5 to the left, improve=0.9388889, (0 missing)  
## Departure.Delay.in.Minutes < 5.5 to the right, improve=0.7972395, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the left, improve=0.7558316, (0 missing)  
## Surrogate splits:  
## Inflight.service < 2.5 to the left, agree=0.733, adj=0.143, (0 split)  
## Flight.Distance < 981.5 to the right, agree=0.722, adj=0.107, (0 split)  
## Inflight.entertainment < 3.5 to the left, agree=0.711, adj=0.071, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.700, adj=0.036, (0 split)  
##   
## Node number 210269: 15 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001517297  
## class counts: 5 10  
## probabilities: 0.333 0.667   
##   
## Node number 210290: 14 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.0001416144  
## class counts: 12 2  
## probabilities: 0.857 0.143   
##   
## Node number 210291: 78 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.4358974 P(node) =0.0007889945  
## class counts: 44 34  
## probabilities: 0.564 0.436   
## left son=420582 (49 obs) right son=420583 (29 obs)  
## Primary splits:  
## Age < 41.5 to the left, improve=3.1527820, (0 missing)  
## Inflight.service < 2.5 to the right, improve=2.1744420, (0 missing)  
## Flight.Distance < 1520.5 to the right, improve=1.3037110, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.0836120, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.8739213, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.744, adj=0.310, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.705, adj=0.207, (0 split)  
## Online.boarding < 4.5 to the left, agree=0.692, adj=0.172, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.692, adj=0.172, (0 split)  
## Food.and.drink < 3.5 to the right, agree=0.679, adj=0.138, (0 split)  
##   
## Node number 210292: 33 observations  
## predicted class=0 expected loss=0.2727273 P(node) =0.0003338054  
## class counts: 24 9  
## probabilities: 0.727 0.273   
##   
## Node number 210293: 33 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.4242424 P(node) =0.0003338054  
## class counts: 14 19  
## probabilities: 0.424 0.576   
## left son=420586 (7 obs) right son=420587 (26 obs)  
## Primary splits:  
## Age < 62 to the right, improve=3.3300030, (0 missing)  
## Online.boarding < 4.5 to the right, improve=2.1820820, (0 missing)  
## Flight.Distance < 1492.5 to the left, improve=1.6058280, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.7756239, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.7575758, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 3.5 to the left, agree=0.848, adj=0.286, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.848, adj=0.286, (0 split)  
## Departure.Delay.in.Minutes < 5.5 to the right, agree=0.848, adj=0.286, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.818, adj=0.143, (0 split)  
##   
## Node number 234254: 18 observations  
## predicted class=0 expected loss=0 P(node) =0.0001820757  
## class counts: 18 0  
## probabilities: 1.000 0.000   
##   
## Node number 234255: 208 observations, complexity param=0.0003119077  
## predicted class=1 expected loss=0.3461538 P(node) =0.002103985  
## class counts: 72 136  
## probabilities: 0.346 0.654   
## left son=468510 (17 obs) right son=468511 (191 obs)  
## Primary splits:  
## Age < 60.5 to the right, improve=10.645380, (0 missing)  
## Inflight.wifi.service < 1.5 to the right, improve= 9.679682, (0 missing)  
## Flight.Distance < 347 to the left, improve= 7.113846, (0 missing)  
## Departure.Delay.in.Minutes < 9.5 to the left, improve= 2.310096, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve= 2.073023, (0 missing)  
##   
## Node number 234534: 16 observations  
## predicted class=0 expected loss=0.1875 P(node) =0.000161845  
## class counts: 13 3  
## probabilities: 0.812 0.187   
##   
## Node number 234535: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 234536: 30 observations  
## predicted class=0 expected loss=0.06666667 P(node) =0.0003034594  
## class counts: 28 2  
## probabilities: 0.933 0.067   
##   
## Node number 234537: 71 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3521127 P(node) =0.0007181873  
## class counts: 46 25  
## probabilities: 0.648 0.352   
## left son=469074 (29 obs) right son=469075 (42 obs)  
## Primary splits:  
## Flight.Distance < 1011 to the right, improve=2.067601, (0 missing)  
## Gate.location < 1.5 to the right, improve=2.037223, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.828457, (0 missing)  
## Age < 14.5 to the left, improve=1.776184, (0 missing)  
## Departure.Delay.in.Minutes < 1 to the right, improve=1.527198, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 2.5 to the right, agree=0.676, adj=0.207, (0 split)  
## Age < 13.5 to the left, agree=0.634, adj=0.103, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.606, adj=0.034, (0 split)  
##   
## Node number 235058: 40 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.3 P(node) =0.0004046126  
## class counts: 28 12  
## probabilities: 0.700 0.300   
## left son=470116 (28 obs) right son=470117 (12 obs)  
## Primary splits:  
## Leg.room.service < 2.5 to the right, improve=2.7523810, (0 missing)  
## Age < 28.5 to the right, improve=2.6133330, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.9023018, (0 missing)  
## Arrival.Delay.in.Minutes < 2 to the left, improve=0.8000000, (0 missing)  
## Flight.Distance < 221.5 to the right, improve=0.7247649, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 159 to the right, agree=0.725, adj=0.083, (0 split)  
##   
## Node number 235059: 40 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.475 P(node) =0.0004046126  
## class counts: 19 21  
## probabilities: 0.475 0.525   
## left son=470118 (19 obs) right son=470119 (21 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the left, improve=3.1680450, (0 missing)  
## Age < 54.5 to the right, improve=2.5928570, (0 missing)  
## Flight.Distance < 221 to the right, improve=1.4840500, (0 missing)  
## Gate.location < 1.5 to the right, improve=1.0125000, (0 missing)  
## Male < 0.5 to the left, improve=0.7820802, (0 missing)  
## Surrogate splits:  
## Gate.location < 1.5 to the right, agree=0.675, adj=0.316, (0 split)  
## Flight.Distance < 318.5 to the left, agree=0.625, adj=0.211, (0 split)  
## Arrival.Delay.in.Minutes < 0.5 to the left, agree=0.625, adj=0.211, (0 split)  
## Age < 46.5 to the right, agree=0.600, adj=0.158, (0 split)  
## On.board.service < 4.5 to the right, agree=0.600, adj=0.158, (0 split)  
##   
## Node number 235068: 88 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.4545455 P(node) =0.0008901477  
## class counts: 40 48  
## probabilities: 0.455 0.545   
## left son=470136 (47 obs) right son=470137 (41 obs)  
## Primary splits:  
## Age < 31.5 to the right, improve=2.9015430, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.4776330, (0 missing)  
## Flight.Distance < 565.5 to the left, improve=0.7531822, (0 missing)  
## Arrival.Delay.in.Minutes < 4.5 to the left, improve=0.4335418, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.2992208, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1040.5 to the left, agree=0.591, adj=0.122, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.591, adj=0.122, (0 split)  
## Checkin.service < 4.5 to the right, agree=0.580, adj=0.098, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.568, adj=0.073, (0 split)  
## Arrival.Delay.in.Minutes < 11.5 to the left, agree=0.568, adj=0.073, (0 split)  
##   
## Node number 235069: 47 observations  
## predicted class=1 expected loss=0.2553191 P(node) =0.0004754198  
## class counts: 12 35  
## probabilities: 0.255 0.745   
##   
## Node number 235070: 66 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.2575758 P(node) =0.0006676108  
## class counts: 17 49  
## probabilities: 0.258 0.742   
## left son=470140 (51 obs) right son=470141 (15 obs)  
## Primary splits:  
## Flight.Distance < 1182.5 to the left, improve=1.4149730, (0 missing)  
## Departure.Delay.in.Minutes < 4.5 to the right, improve=1.2379450, (0 missing)  
## Arrival.Delay.in.Minutes < 66.5 to the left, improve=1.0390340, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.6556381, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.6313131, (0 missing)  
## Surrogate splits:  
## Age < 48.5 to the left, agree=0.803, adj=0.133, (0 split)  
##   
## Node number 235071: 31 observations  
## predicted class=1 expected loss=0.09677419 P(node) =0.0003135748  
## class counts: 3 28  
## probabilities: 0.097 0.903   
##   
## Node number 235108: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 235109: 23 observations, complexity param=7.197869e-05  
## predicted class=1 expected loss=0.4347826 P(node) =0.0002326522  
## class counts: 10 13  
## probabilities: 0.435 0.565   
## left son=470218 (15 obs) right son=470219 (8 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 4.5 to the left, improve=2.3543480, (0 missing)  
## Age < 39.5 to the left, improve=1.5900620, (0 missing)  
## Flight.Distance < 375 to the right, improve=0.4472050, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.3043478, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.1043478, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 4.5 to the left, agree=0.870, adj=0.625, (0 split)  
## Food.and.drink < 1.5 to the right, agree=0.739, adj=0.250, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.739, adj=0.250, (0 split)  
## Inflight.entertainment < 1.5 to the right, agree=0.739, adj=0.250, (0 split)  
## Cleanliness < 1.5 to the right, agree=0.739, adj=0.250, (0 split)  
##   
## Node number 235112: 9 observations  
## predicted class=0 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 6 3  
## probabilities: 0.667 0.333   
##   
## Node number 235113: 11 observations  
## predicted class=1 expected loss=0.2727273 P(node) =0.0001112685  
## class counts: 3 8  
## probabilities: 0.273 0.727   
##   
## Node number 247520: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 247521: 48 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4375 P(node) =0.0004855351  
## class counts: 27 21  
## probabilities: 0.562 0.437   
## left son=495042 (32 obs) right son=495043 (16 obs)  
## Primary splits:  
## Flight.Distance < 536.5 to the right, improve=1.687500, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.523901, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.440652, (0 missing)  
## Departure.Delay.in.Minutes < 1.5 to the left, improve=1.258394, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=1.125000, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the left, agree=0.708, adj=0.125, (0 split)  
## Departure.Delay.in.Minutes < 16.5 to the left, agree=0.688, adj=0.063, (0 split)  
##   
## Node number 249200: 27 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.4444444 P(node) =0.0002731135  
## class counts: 15 12  
## probabilities: 0.556 0.444   
## left son=498400 (17 obs) right son=498401 (10 obs)  
## Primary splits:  
## Flight.Distance < 427.5 to the right, improve=0.7686275, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.5333333, (0 missing)  
## Age < 25.5 to the right, improve=0.3333333, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.1794872, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=0.1096491, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 4.5 to the left, agree=0.741, adj=0.3, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.704, adj=0.2, (0 split)  
## Seat.comfort < 1.5 to the right, agree=0.704, adj=0.2, (0 split)  
## Departure.Delay.in.Minutes < 1.5 to the left, agree=0.704, adj=0.2, (0 split)  
##   
## Node number 249201: 22 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.3636364 P(node) =0.0002225369  
## class counts: 8 14  
## probabilities: 0.364 0.636   
## left son=498402 (8 obs) right son=498403 (14 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=1.71753200, (0 missing)  
## Flight.Distance < 850.5 to the left, improve=1.43181800, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.00086600, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.46753250, (0 missing)  
## Age < 26.5 to the left, improve=0.04848485, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 157 to the left, agree=0.727, adj=0.25, (0 split)  
##   
## Node number 249206: 31 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.2903226 P(node) =0.0003135748  
## class counts: 9 22  
## probabilities: 0.290 0.710   
## left son=498412 (8 obs) right son=498413 (23 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 0.5 to the right, improve=2.4154980, (0 missing)  
## Age < 26.5 to the left, improve=1.2980030, (0 missing)  
## Checkin.service < 4.5 to the right, improve=0.9481066, (0 missing)  
## Gate.location < 2.5 to the left, improve=0.6250707, (0 missing)  
## Flight.Distance < 856.5 to the right, improve=0.4741935, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 6 to the right, agree=0.806, adj=0.250, (0 split)  
## Age < 25.5 to the left, agree=0.774, adj=0.125, (0 split)  
## Seat.comfort < 2.5 to the left, agree=0.774, adj=0.125, (0 split)  
##   
## Node number 249207: 27 observations  
## predicted class=1 expected loss=0.07407407 P(node) =0.0002731135  
## class counts: 2 25  
## probabilities: 0.074 0.926   
##   
## Node number 249304: 40 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.45 P(node) =0.0004046126  
## class counts: 18 22  
## probabilities: 0.450 0.550   
## left son=498608 (23 obs) right son=498609 (17 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the left, improve=1.436829, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=1.436829, (0 missing)  
## Cleanliness < 4.5 to the left, improve=1.436829, (0 missing)  
## Age < 38.5 to the right, improve=1.205018, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.800000, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.875, adj=0.706, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.750, adj=0.412, (0 split)  
## Flight.Distance < 350 to the right, agree=0.650, adj=0.176, (0 split)  
##   
## Node number 249305: 11 observations  
## predicted class=1 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 2 9  
## probabilities: 0.182 0.818   
##   
## Node number 253954: 105 observations, complexity param=1.439574e-05  
## predicted class=0 expected loss=0.1333333 P(node) =0.001062108  
## class counts: 91 14  
## probabilities: 0.867 0.133   
## left son=507908 (30 obs) right son=507909 (75 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, improve=1.4933330, (0 missing)  
## Gate.location < 4.5 to the right, improve=1.4933330, (0 missing)  
## Age < 48.5 to the right, improve=0.9593037, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.6561506, (0 missing)  
## Arrival.Delay.in.Minutes < 11.5 to the right, improve=0.6220708, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the right, agree=0.962, adj=0.867, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.914, adj=0.700, (0 split)  
## Departure.Delay.in.Minutes < 73.5 to the right, agree=0.724, adj=0.033, (0 split)  
## Arrival.Delay.in.Minutes < 44.5 to the right, agree=0.724, adj=0.033, (0 split)  
##   
## Node number 253955: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 253974: 141 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.3546099 P(node) =0.001426259  
## class counts: 91 50  
## probabilities: 0.645 0.355   
## left son=507948 (73 obs) right son=507949 (68 obs)  
## Primary splits:  
## Checkin.service < 1.5 to the left, improve=2.694124, (0 missing)  
## Gate.location < 3.5 to the right, improve=2.273343, (0 missing)  
## On.board.service < 2.5 to the right, improve=2.030002, (0 missing)  
## Flight.Distance < 1237 to the right, improve=1.393900, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=1.389779, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.617, adj=0.206, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.617, adj=0.206, (0 split)  
## Gate.location < 3.5 to the right, agree=0.617, adj=0.206, (0 split)  
## Flight.Distance < 336 to the right, agree=0.582, adj=0.132, (0 split)  
## On.board.service < 1.5 to the right, agree=0.553, adj=0.074, (0 split)  
##   
## Node number 253975: 15 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001517297  
## class counts: 5 10  
## probabilities: 0.333 0.667   
##   
## Node number 253976: 50 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2 P(node) =0.0005057657  
## class counts: 40 10  
## probabilities: 0.800 0.200   
## left son=507952 (43 obs) right son=507953 (7 obs)  
## Primary splits:  
## Age < 55.5 to the left, improve=2.2458470, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=0.7619048, (0 missing)  
## Departure.Delay.in.Minutes < 16.5 to the right, improve=0.4155844, (0 missing)  
## Inflight.service < 3.5 to the right, improve=0.4074844, (0 missing)  
## Flight.Distance < 1007.5 to the right, improve=0.3356643, (0 missing)  
##   
## Node number 253977: 99 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.4949495 P(node) =0.001001416  
## class counts: 50 49  
## probabilities: 0.505 0.495   
## left son=507954 (13 obs) right son=507955 (86 obs)  
## Primary splits:  
## Age < 62.5 to the right, improve=3.482427, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=2.514180, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=1.559203, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the right, improve=1.481220, (0 missing)  
## Cleanliness < 3.5 to the right, improve=1.131987, (0 missing)  
##   
## Node number 254720: 16 observations  
## predicted class=0 expected loss=0 P(node) =0.000161845  
## class counts: 16 0  
## probabilities: 1.000 0.000   
##   
## Node number 254721: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 254722: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 254723: 33 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.4545455 P(node) =0.0003338054  
## class counts: 15 18  
## probabilities: 0.455 0.545   
## left son=509446 (25 obs) right son=509447 (8 obs)  
## Primary splits:  
## Flight.Distance < 804 to the right, improve=2.2936360, (0 missing)  
## EcoClass < 0.5 to the left, improve=1.2533420, (0 missing)  
## Age < 26.5 to the right, improve=0.8836364, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.6853755, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.2727273, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 6 to the left, agree=0.818, adj=0.25, (0 split)  
##   
## Node number 258052: 21 observations  
## predicted class=0 expected loss=0 P(node) =0.0002124216  
## class counts: 21 0  
## probabilities: 1.000 0.000   
##   
## Node number 258053: 31 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.2903226 P(node) =0.0003135748  
## class counts: 22 9  
## probabilities: 0.710 0.290   
## left son=516106 (10 obs) right son=516107 (21 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 6.5 to the left, improve=1.0694320, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.8340226, (0 missing)  
## Arrival.Delay.in.Minutes < 41.5 to the right, improve=0.8145976, (0 missing)  
## Age < 38.5 to the right, improve=0.6024764, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.4014663, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 11.5 to the left, agree=0.774, adj=0.3, (0 split)  
## Flight.Distance < 263.5 to the left, agree=0.742, adj=0.2, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.742, adj=0.2, (0 split)  
## Inflight.wifi.service < 4.5 to the right, agree=0.710, adj=0.1, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.710, adj=0.1, (0 split)  
##   
## Node number 258054: 37 observations  
## predicted class=0 expected loss=0.2702703 P(node) =0.0003742666  
## class counts: 27 10  
## probabilities: 0.730 0.270   
##   
## Node number 258055: 48 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.4791667 P(node) =0.0004855351  
## class counts: 25 23  
## probabilities: 0.521 0.479   
## left son=516110 (26 obs) right son=516111 (22 obs)  
## Primary splits:  
## Flight.Distance < 433.5 to the right, improve=3.3359560, (0 missing)  
## On.board.service < 1.5 to the right, improve=1.0591740, (0 missing)  
## Age < 40.5 to the right, improve=1.0083330, (0 missing)  
## Ease.of.Online.booking < 1.5 to the right, improve=0.7788462, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.6818116, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 2.5 to the right, agree=0.625, adj=0.182, (0 split)  
## Leg.room.service < 2.5 to the right, agree=0.625, adj=0.182, (0 split)  
## EcoClass < 0.5 to the right, agree=0.625, adj=0.182, (0 split)  
## Departure.Delay.in.Minutes < 6.5 to the left, agree=0.604, adj=0.136, (0 split)  
## Arrival.Delay.in.Minutes < 2.5 to the left, agree=0.604, adj=0.136, (0 split)  
##   
## Node number 258056: 160 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.33125 P(node) =0.00161845  
## class counts: 107 53  
## probabilities: 0.669 0.331   
## left son=516112 (66 obs) right son=516113 (94 obs)  
## Primary splits:  
## Age < 53.5 to the right, improve=3.188596, (0 missing)  
## Arrival.Delay.in.Minutes < 82.5 to the left, improve=2.953289, (0 missing)  
## Flight.Distance < 847.5 to the right, improve=2.604167, (0 missing)  
## Departure.Delay.in.Minutes < 82.5 to the left, improve=2.148004, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=1.357155, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the left, agree=0.613, adj=0.061, (0 split)  
## Flight.Distance < 1986.5 to the right, agree=0.600, adj=0.030, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.600, adj=0.030, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.600, adj=0.030, (0 split)  
## On.board.service < 1.5 to the left, agree=0.594, adj=0.015, (0 split)  
##   
## Node number 258057: 16 observations  
## predicted class=1 expected loss=0.25 P(node) =0.000161845  
## class counts: 4 12  
## probabilities: 0.250 0.750   
##   
## Node number 258242: 11 observations  
## predicted class=0 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 7 4  
## probabilities: 0.636 0.364   
##   
## Node number 258243: 40 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0004046126  
## class counts: 8 32  
## probabilities: 0.200 0.800   
##   
## Node number 274470: 170 observations  
## predicted class=0 expected loss=0.04117647 P(node) =0.001719603  
## class counts: 163 7  
## probabilities: 0.959 0.041   
##   
## Node number 274471: 242 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.1570248 P(node) =0.002447906  
## class counts: 204 38  
## probabilities: 0.843 0.157   
## left son=548942 (148 obs) right son=548943 (94 obs)  
## Primary splits:  
## Online.boarding < 2.5 to the right, improve=2.361975, (0 missing)  
## Age < 60.5 to the right, improve=1.818497, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.711643, (0 missing)  
## Baggage.handling < 1.5 to the right, improve=1.629114, (0 missing)  
## Flight.Distance < 950 to the left, improve=1.423187, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the right, agree=0.818, adj=0.532, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.752, adj=0.362, (0 split)  
## Cleanliness < 2.5 to the right, agree=0.723, adj=0.287, (0 split)  
## Age < 39.5 to the right, agree=0.653, adj=0.106, (0 split)  
## On.board.service < 2.5 to the left, agree=0.649, adj=0.096, (0 split)  
##   
## Node number 301066: 13 observations  
## predicted class=0 expected loss=0 P(node) =0.0001314991  
## class counts: 13 0  
## probabilities: 1.000 0.000   
##   
## Node number 301067: 7 observations  
## predicted class=1 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 2 5  
## probabilities: 0.286 0.714   
##   
## Node number 358466: 58 observations, complexity param=5.278438e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0005866882  
## class counts: 29 29  
## probabilities: 0.500 0.500   
## left son=716932 (45 obs) right son=716933 (13 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the right, improve=2.4290600, (0 missing)  
## Age < 45.5 to the right, improve=1.6977300, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.1240310, (0 missing)  
## Flight.Distance < 1137 to the right, improve=0.9784076, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.7532468, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 3570.5 to the left, agree=0.793, adj=0.077, (0 split)  
##   
## Node number 358467: 9 observations  
## predicted class=1 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 1 8  
## probabilities: 0.111 0.889   
##   
## Node number 418178: 16 observations  
## predicted class=0 expected loss=0.0625 P(node) =0.000161845  
## class counts: 15 1  
## probabilities: 0.938 0.062   
##   
## Node number 418179: 30 observations, complexity param=1.919432e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0003034594  
## class counts: 18 12  
## probabilities: 0.600 0.400   
## left son=836358 (22 obs) right son=836359 (8 obs)  
## Primary splits:  
## Gate.location < 2.5 to the right, improve=2.672727, (0 missing)  
## Male < 0.5 to the right, improve=2.128507, (0 missing)  
## Checkin.service < 4.5 to the right, improve=1.314027, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=1.200000, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.104545, (0 missing)  
## Surrogate splits:  
## Age < 13 to the right, agree=0.800, adj=0.250, (0 split)  
## Flight.Distance < 236.5 to the left, agree=0.767, adj=0.125, (0 split)  
##   
## Node number 418230: 15 observations  
## predicted class=0 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 14 1  
## probabilities: 0.933 0.067   
##   
## Node number 418231: 99 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3737374 P(node) =0.001001416  
## class counts: 62 37  
## probabilities: 0.626 0.374   
## left son=836462 (45 obs) right son=836463 (54 obs)  
## Primary splits:  
## Age < 25.5 to the left, improve=1.8915820, (0 missing)  
## Gate.location < 4.5 to the right, improve=1.1964070, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.9707071, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=0.8619529, (0 missing)  
## Cleanliness < 1.5 to the right, improve=0.8619529, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 2.5 to the left, agree=0.646, adj=0.222, (0 split)  
## Seat.comfort < 1.5 to the left, agree=0.596, adj=0.111, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the right, agree=0.596, adj=0.111, (0 split)  
## Male < 0.5 to the left, agree=0.596, adj=0.111, (0 split)  
## BusinessClass < 0.5 to the right, agree=0.586, adj=0.089, (0 split)  
##   
## Node number 418236: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 418237: 241 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3360996 P(node) =0.002437791  
## class counts: 160 81  
## probabilities: 0.664 0.336   
## left son=836474 (228 obs) right son=836475 (13 obs)  
## Primary splits:  
## Flight.Distance < 588.5 to the left, improve=2.1436350, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.0032310, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=0.9756767, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.7980601, (0 missing)  
## Age < 28.5 to the right, improve=0.7306212, (0 missing)  
##   
## Node number 418238: 18 observations  
## predicted class=0 expected loss=0.3333333 P(node) =0.0001820757  
## class counts: 12 6  
## probabilities: 0.667 0.333   
##   
## Node number 418239: 8 observations  
## predicted class=1 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 1 7  
## probabilities: 0.125 0.875   
##   
## Node number 418454: 113 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2831858 P(node) =0.001143031  
## class counts: 81 32  
## probabilities: 0.717 0.283   
## left son=836908 (20 obs) right son=836909 (93 obs)  
## Primary splits:  
## Flight.Distance < 1187 to the right, improve=1.6309450, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.4331050, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.2255960, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.1076770, (0 missing)  
## Age < 13.5 to the right, improve=0.8682674, (0 missing)  
##   
## Node number 418455: 19 observations  
## predicted class=1 expected loss=0.4210526 P(node) =0.000192191  
## class counts: 8 11  
## probabilities: 0.421 0.579   
##   
## Node number 418774: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 418775: 30 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0003034594  
## class counts: 12 18  
## probabilities: 0.400 0.600   
##   
## Node number 420530: 43 observations  
## predicted class=0 expected loss=0.1627907 P(node) =0.0004349585  
## class counts: 36 7  
## probabilities: 0.837 0.163   
##   
## Node number 420531: 520 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.325 P(node) =0.005259964  
## class counts: 351 169  
## probabilities: 0.675 0.325   
## left son=841062 (83 obs) right son=841063 (437 obs)  
## Primary splits:  
## Age < 16.5 to the left, improve=2.3096320, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.8500180, (0 missing)  
## Flight.Distance < 522.5 to the right, improve=1.2359300, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.0858970, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=0.9181436, (0 missing)  
##   
## Node number 420532: 13 observations  
## predicted class=0 expected loss=0.07692308 P(node) =0.0001314991  
## class counts: 12 1  
## probabilities: 0.923 0.077   
##   
## Node number 420533: 60 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4166667 P(node) =0.0006069189  
## class counts: 35 25  
## probabilities: 0.583 0.417   
## left son=841066 (52 obs) right son=841067 (8 obs)  
## Primary splits:  
## Age < 30.5 to the right, improve=0.8012821, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.6030552, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=0.5128205, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.4903597, (0 missing)  
## Flight.Distance < 352.5 to the right, improve=0.4166667, (0 missing)  
##   
## Node number 420536: 28 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0002832288  
## class counts: 26 2  
## probabilities: 0.929 0.071   
##   
## Node number 420537: 62 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.4193548 P(node) =0.0006271495  
## class counts: 36 26  
## probabilities: 0.581 0.419   
## left son=841074 (12 obs) right son=841075 (50 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.9002150, (0 missing)  
## Flight.Distance < 334.5 to the left, improve=1.5209290, (0 missing)  
## Age < 29.5 to the right, improve=0.8837658, (0 missing)  
## Male < 0.5 to the right, improve=0.8486835, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.5876732, (0 missing)  
## Surrogate splits:  
## On.board.service < 2.5 to the left, agree=0.839, adj=0.167, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.823, adj=0.083, (0 split)  
##   
## Node number 420582: 49 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3265306 P(node) =0.0004956504  
## class counts: 33 16  
## probabilities: 0.673 0.327   
## left son=841164 (7 obs) right son=841165 (42 obs)  
## Primary splits:  
## Age < 38 to the right, improve=1.7414970, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.6343540, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.4298080, (0 missing)  
## Flight.Distance < 1731 to the right, improve=1.3224490, (0 missing)  
## Arrival.Delay.in.Minutes < 1 to the right, improve=0.7766302, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 1.5 to the left, agree=0.918, adj=0.429, (0 split)  
##   
## Node number 420583: 29 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.3793103 P(node) =0.0002933441  
## class counts: 11 18  
## probabilities: 0.379 0.621   
## left son=841166 (10 obs) right son=841167 (19 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=3.1393830, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=2.6263260, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=2.0707570, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.1936340, (0 missing)  
## Gate.location < 3.5 to the right, improve=0.5963489, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.897, adj=0.7, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.828, adj=0.5, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.759, adj=0.3, (0 split)  
## Age < 45.5 to the left, agree=0.724, adj=0.2, (0 split)  
## Flight.Distance < 1121.5 to the left, agree=0.724, adj=0.2, (0 split)  
##   
## Node number 420586: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 420587: 26 observations  
## predicted class=1 expected loss=0.3076923 P(node) =0.0002629982  
## class counts: 8 18  
## probabilities: 0.308 0.692   
##   
## Node number 468510: 17 observations  
## predicted class=0 expected loss=0.1176471 P(node) =0.0001719603  
## class counts: 15 2  
## probabilities: 0.882 0.118   
##   
## Node number 468511: 191 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.2984293 P(node) =0.001932025  
## class counts: 57 134  
## probabilities: 0.298 0.702   
## left son=937022 (8 obs) right son=937023 (183 obs)  
## Primary splits:  
## Flight.Distance < 347 to the left, improve=8.219495, (0 missing)  
## Inflight.wifi.service < 1.5 to the right, improve=6.862036, (0 missing)  
## Age < 38.5 to the left, improve=3.694658, (0 missing)  
## Departure.Delay.in.Minutes < 8.5 to the left, improve=2.019568, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.958636, (0 missing)  
##   
## Node number 469074: 29 observations  
## predicted class=0 expected loss=0.2068966 P(node) =0.0002933441  
## class counts: 23 6  
## probabilities: 0.793 0.207   
##   
## Node number 469075: 42 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.452381 P(node) =0.0004248432  
## class counts: 23 19  
## probabilities: 0.548 0.452   
## left son=938150 (32 obs) right son=938151 (10 obs)  
## Primary splits:  
## Flight.Distance < 881 to the left, improve=3.172024, (0 missing)  
## Gate.location < 2.5 to the right, improve=2.425685, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=2.425685, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=2.181958, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.111583, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 1.5 to the left, agree=0.810, adj=0.2, (0 split)  
## Gate.location < 1.5 to the right, agree=0.786, adj=0.1, (0 split)  
## Departure.Delay.in.Minutes < 3 to the left, agree=0.786, adj=0.1, (0 split)  
##   
## Node number 470116: 28 observations  
## predicted class=0 expected loss=0.1785714 P(node) =0.0002832288  
## class counts: 23 5  
## probabilities: 0.821 0.179   
##   
## Node number 470117: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583   
##   
## Node number 470118: 19 observations  
## predicted class=0 expected loss=0.3157895 P(node) =0.000192191  
## class counts: 13 6  
## probabilities: 0.684 0.316   
##   
## Node number 470119: 21 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.2857143 P(node) =0.0002124216  
## class counts: 6 15  
## probabilities: 0.286 0.714   
## left son=940238 (8 obs) right son=940239 (13 obs)  
## Primary splits:  
## Age < 44.5 to the right, improve=2.9752750, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.3168830, (0 missing)  
## Male < 0.5 to the left, improve=1.3168830, (0 missing)  
## Flight.Distance < 301 to the right, improve=0.4987013, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=0.4987013, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the right, agree=0.762, adj=0.375, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.762, adj=0.375, (0 split)  
## Male < 0.5 to the left, agree=0.762, adj=0.375, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.714, adj=0.250, (0 split)  
## Ease.of.Online.booking < 4.5 to the right, agree=0.714, adj=0.250, (0 split)  
##   
## Node number 470136: 47 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.4255319 P(node) =0.0004754198  
## class counts: 27 20  
## probabilities: 0.574 0.426   
## left son=940272 (10 obs) right son=940273 (37 obs)  
## Primary splits:  
## Age < 36.5 to the left, improve=4.6003450, (0 missing)  
## Flight.Distance < 920.5 to the left, improve=2.0093750, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=0.9930091, (0 missing)  
## Checkin.service < 4.5 to the left, improve=0.7333022, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the left, improve=0.3501520, (0 missing)  
##   
## Node number 470137: 41 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3170732 P(node) =0.0004147279  
## class counts: 13 28  
## probabilities: 0.317 0.683   
## left son=940274 (14 obs) right son=940275 (27 obs)  
## Primary splits:  
## Flight.Distance < 1032.5 to the right, improve=2.7508070, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.5285843, (0 missing)  
## Age < 25.5 to the right, improve=0.3625492, (0 missing)  
## Seat.comfort < 1.5 to the right, improve=0.2058583, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.2058583, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.707, adj=0.143, (0 split)  
##   
## Node number 470140: 51 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.3137255 P(node) =0.000515881  
## class counts: 16 35  
## probabilities: 0.314 0.686   
## left son=940280 (44 obs) right son=940281 (7 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 66.5 to the left, improve=1.597148, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.339163, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=1.088989, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=1.088989, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.088989, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 69.5 to the left, agree=0.98, adj=0.857, (0 split)  
##   
## Node number 470141: 15 observations  
## predicted class=1 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 1 14  
## probabilities: 0.067 0.933   
##   
## Node number 470218: 15 observations  
## predicted class=0 expected loss=0.4 P(node) =0.0001517297  
## class counts: 9 6  
## probabilities: 0.600 0.400   
##   
## Node number 470219: 8 observations  
## predicted class=1 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 1 7  
## probabilities: 0.125 0.875   
##   
## Node number 495042: 32 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.34375 P(node) =0.0003236901  
## class counts: 21 11  
## probabilities: 0.656 0.344   
## left son=990084 (18 obs) right son=990085 (14 obs)  
## Primary splits:  
## Male < 0.5 to the right, improve=2.580357, (0 missing)  
## Age < 20.5 to the left, improve=2.520833, (0 missing)  
## Departure.Delay.in.Minutes < 1.5 to the left, improve=2.204167, (0 missing)  
## Flight.Distance < 635.5 to the left, improve=1.355374, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.355374, (0 missing)  
## Surrogate splits:  
## Checkin.service < 3.5 to the left, agree=0.688, adj=0.286, (0 split)  
## Departure.Delay.in.Minutes < 3.5 to the left, agree=0.688, adj=0.286, (0 split)  
## Arrival.Delay.in.Minutes < 37 to the left, agree=0.656, adj=0.214, (0 split)  
## Flight.Distance < 946 to the right, agree=0.625, adj=0.143, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.625, adj=0.143, (0 split)  
##   
## Node number 495043: 16 observations  
## predicted class=1 expected loss=0.375 P(node) =0.000161845  
## class counts: 6 10  
## probabilities: 0.375 0.625   
##   
## Node number 498400: 17 observations  
## predicted class=0 expected loss=0.3529412 P(node) =0.0001719603  
## class counts: 11 6  
## probabilities: 0.647 0.353   
##   
## Node number 498401: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 498402: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 498403: 14 observations  
## predicted class=1 expected loss=0.2142857 P(node) =0.0001416144  
## class counts: 3 11  
## probabilities: 0.214 0.786   
##   
## Node number 498412: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 498413: 23 observations  
## predicted class=1 expected loss=0.173913 P(node) =0.0002326522  
## class counts: 4 19  
## probabilities: 0.174 0.826   
##   
## Node number 498608: 23 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4347826 P(node) =0.0002326522  
## class counts: 13 10  
## probabilities: 0.565 0.435   
## left son=997216 (12 obs) right son=997217 (11 obs)  
## Primary splits:  
## Inflight.service < 4.5 to the left, improve=1.7134390, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.9658863, (0 missing)  
## Age < 46 to the left, improve=0.8876812, (0 missing)  
## Flight.Distance < 594 to the right, improve=0.8376812, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.5164690, (0 missing)  
## Surrogate splits:  
## Age < 41.5 to the right, agree=0.739, adj=0.455, (0 split)  
## Flight.Distance < 414 to the right, agree=0.739, adj=0.455, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.696, adj=0.364, (0 split)  
## Gate.location < 3.5 to the left, agree=0.652, adj=0.273, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the right, agree=0.652, adj=0.273, (0 split)  
##   
## Node number 498609: 17 observations  
## predicted class=1 expected loss=0.2941176 P(node) =0.0001719603  
## class counts: 5 12  
## probabilities: 0.294 0.706   
##   
## Node number 507908: 30 observations  
## predicted class=0 expected loss=0 P(node) =0.0003034594  
## class counts: 30 0  
## probabilities: 1.000 0.000   
##   
## Node number 507909: 75 observations, complexity param=1.439574e-05  
## predicted class=0 expected loss=0.1866667 P(node) =0.0007586486  
## class counts: 61 14  
## probabilities: 0.813 0.187   
## left son=1015818 (25 obs) right son=1015819 (50 obs)  
## Primary splits:  
## Age < 48.5 to the right, improve=1.6133330, (0 missing)  
## Arrival.Delay.in.Minutes < 11.5 to the right, improve=0.9143108, (0 missing)  
## Flight.Distance < 3368 to the right, improve=0.8983333, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.5722751, (0 missing)  
## Departure.Delay.in.Minutes < 3.5 to the right, improve=0.5651266, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.787, adj=0.36, (0 split)  
## Flight.Distance < 491 to the left, agree=0.760, adj=0.28, (0 split)  
## Seat.comfort < 3.5 to the left, agree=0.733, adj=0.20, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.733, adj=0.20, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.733, adj=0.20, (0 split)  
##   
## Node number 507948: 73 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.260274 P(node) =0.000738418  
## class counts: 54 19  
## probabilities: 0.740 0.260   
## left son=1015896 (63 obs) right son=1015897 (10 obs)  
## Primary splits:  
## Age < 29.5 to the right, improve=2.6746680, (0 missing)  
## EcoClass < 0.5 to the right, improve=2.3396090, (0 missing)  
## Flight.Distance < 669 to the left, improve=1.3635080, (0 missing)  
## On.board.service < 1.5 to the right, improve=1.0756270, (0 missing)  
## Ease.of.Online.booking < 3.5 to the right, improve=0.9171078, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.918, adj=0.4, (0 split)  
##   
## Node number 507949: 68 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.4558824 P(node) =0.0006878414  
## class counts: 37 31  
## probabilities: 0.544 0.456   
## left son=1015898 (10 obs) right son=1015899 (58 obs)  
## Primary splits:  
## Flight.Distance < 1197 to the right, improve=1.5352940, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.3450500, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=1.1862750, (0 missing)  
## Inflight.service < 3.5 to the left, improve=0.8897657, (0 missing)  
## Age < 29.5 to the left, improve=0.7686275, (0 missing)  
##   
## Node number 507952: 43 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.1395349 P(node) =0.0004349585  
## class counts: 37 6  
## probabilities: 0.860 0.140   
## left son=1015904 (22 obs) right son=1015905 (21 obs)  
## Primary splits:  
## Age < 44.5 to the right, improve=0.7974429, (0 missing)  
## Departure.Delay.in.Minutes < 11.5 to the right, improve=0.6218777, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.5073996, (0 missing)  
## Flight.Distance < 1053.5 to the right, improve=0.4432285, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=0.3827243, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the left, agree=0.744, adj=0.476, (0 split)  
## Cleanliness < 3.5 to the left, agree=0.744, adj=0.476, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.721, adj=0.429, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the left, agree=0.698, adj=0.381, (0 split)  
## Gate.location < 2.5 to the left, agree=0.698, adj=0.381, (0 split)  
##   
## Node number 507953: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 507954: 13 observations  
## predicted class=0 expected loss=0.1538462 P(node) =0.0001314991  
## class counts: 11 2  
## probabilities: 0.846 0.154   
##   
## Node number 507955: 86 observations, complexity param=9.597159e-05  
## predicted class=1 expected loss=0.4534884 P(node) =0.0008699171  
## class counts: 39 47  
## probabilities: 0.453 0.547   
## left son=1015910 (59 obs) right son=1015911 (27 obs)  
## Primary splits:  
## Food.and.drink < 2.5 to the right, improve=2.969401, (0 missing)  
## Age < 38.5 to the left, improve=2.717381, (0 missing)  
## Cleanliness < 3.5 to the right, improve=2.710129, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.470583, (0 missing)  
## Male < 0.5 to the right, improve=1.180288, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.744, adj=0.185, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.733, adj=0.148, (0 split)  
## Flight.Distance < 225.5 to the right, agree=0.721, adj=0.111, (0 split)  
##   
## Node number 509446: 25 observations, complexity param=4.79858e-05  
## predicted class=0 expected loss=0.44 P(node) =0.0002528829  
## class counts: 14 11  
## probabilities: 0.560 0.440   
## left son=1018892 (17 obs) right son=1018893 (8 obs)  
## Primary splits:  
## Age < 26.5 to the right, improve=2.2611760, (0 missing)  
## On.board.service < 1.5 to the left, improve=1.7168250, (0 missing)  
## Flight.Distance < 979 to the right, improve=0.3755556, (0 missing)  
## Male < 0.5 to the right, improve=0.3755556, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.3358730, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 4.5 to the left, agree=0.80, adj=0.375, (0 split)  
## Flight.Distance < 1232 to the left, agree=0.72, adj=0.125, (0 split)  
## Inflight.wifi.service < 4.5 to the left, agree=0.72, adj=0.125, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.72, adj=0.125, (0 split)  
## Gate.location < 1.5 to the right, agree=0.72, adj=0.125, (0 split)  
##   
## Node number 509447: 8 observations  
## predicted class=1 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 1 7  
## probabilities: 0.125 0.875   
##   
## Node number 516106: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 516107: 21 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.3809524 P(node) =0.0002124216  
## class counts: 13 8  
## probabilities: 0.619 0.381   
## left son=1032214 (8 obs) right son=1032215 (13 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 40 to the right, improve=1.6932230, (0 missing)  
## Arrival.Delay.in.Minutes < 41.5 to the right, improve=1.6932230, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.7936508, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.7619048, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve=0.5411255, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 41.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Flight.Distance < 441 to the left, agree=0.667, adj=0.125, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.667, adj=0.125, (0 split)  
## Male < 0.5 to the left, agree=0.667, adj=0.125, (0 split)  
##   
## Node number 516110: 26 observations  
## predicted class=0 expected loss=0.3076923 P(node) =0.0002629982  
## class counts: 18 8  
## probabilities: 0.692 0.308   
##   
## Node number 516111: 22 observations  
## predicted class=1 expected loss=0.3181818 P(node) =0.0002225369  
## class counts: 7 15  
## probabilities: 0.318 0.682   
##   
## Node number 516112: 66 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.2121212 P(node) =0.0006676108  
## class counts: 52 14  
## probabilities: 0.788 0.212   
## left son=1032224 (36 obs) right son=1032225 (30 obs)  
## Primary splits:  
## Flight.Distance < 442.5 to the right, improve=1.6161620, (0 missing)  
## Age < 56.5 to the left, improve=0.9696970, (0 missing)  
## Ease.of.Online.booking < 2.5 to the right, improve=0.6475006, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.6475006, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.5725108, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the right, agree=0.652, adj=0.233, (0 split)  
## Age < 58.5 to the left, agree=0.636, adj=0.200, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.621, adj=0.167, (0 split)  
## Cleanliness < 3.5 to the right, agree=0.591, adj=0.100, (0 split)  
## Departure.Delay.in.Minutes < 0.5 to the right, agree=0.591, adj=0.100, (0 split)  
##   
## Node number 516113: 94 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.4148936 P(node) =0.0009508396  
## class counts: 55 39  
## probabilities: 0.585 0.415   
## left son=1032226 (22 obs) right son=1032227 (72 obs)  
## Primary splits:  
## Flight.Distance < 847.5 to the right, improve=2.022136, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.338833, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=1.236215, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.164272, (0 missing)  
## Arrival.Delay.in.Minutes < 9.5 to the right, improve=1.163298, (0 missing)  
## Surrogate splits:  
## Inflight.wifi.service < 3.5 to the left, agree=0.777, adj=0.045, (0 split)  
##   
## Node number 548942: 148 observations  
## predicted class=0 expected loss=0.1013514 P(node) =0.001497067  
## class counts: 133 15  
## probabilities: 0.899 0.101   
##   
## Node number 548943: 94 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.2446809 P(node) =0.0009508396  
## class counts: 71 23  
## probabilities: 0.755 0.245   
## left son=1097886 (71 obs) right son=1097887 (23 obs)  
## Primary splits:  
## Seat.comfort < 2.5 to the left, improve=4.674871, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=2.825633, (0 missing)  
## Age < 34.5 to the left, improve=2.308783, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.643232, (0 missing)  
## Gate.location < 4.5 to the left, improve=1.614960, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 2.5 to the left, agree=0.851, adj=0.391, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.819, adj=0.261, (0 split)  
## Inflight.wifi.service < 2.5 to the left, agree=0.777, adj=0.087, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.777, adj=0.087, (0 split)  
##   
## Node number 716932: 45 observations, complexity param=5.278438e-05  
## predicted class=0 expected loss=0.4222222 P(node) =0.0004551892  
## class counts: 26 19  
## probabilities: 0.578 0.422   
## left son=1433864 (32 obs) right son=1433865 (13 obs)  
## Primary splits:  
## Age < 42 to the right, improve=1.3642090, (0 missing)  
## Flight.Distance < 2344 to the right, improve=1.3401710, (0 missing)  
## Cleanliness < 1.5 to the left, improve=1.3401710, (0 missing)  
## Checkin.service < 2.5 to the left, improve=1.0755560, (0 missing)  
## Male < 0.5 to the left, improve=0.5207729, (0 missing)  
## Surrogate splits:  
## Checkin.service < 3.5 to the left, agree=0.756, adj=0.154, (0 split)  
## Arrival.Delay.in.Minutes < 1.5 to the left, agree=0.756, adj=0.154, (0 split)  
## Leg.room.service < 4.5 to the left, agree=0.733, adj=0.077, (0 split)  
##   
## Node number 716933: 13 observations  
## predicted class=1 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 3 10  
## probabilities: 0.231 0.769   
##   
## Node number 836358: 22 observations  
## predicted class=0 expected loss=0.2727273 P(node) =0.0002225369  
## class counts: 16 6  
## probabilities: 0.727 0.273   
##   
## Node number 836359: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 836462: 45 observations  
## predicted class=0 expected loss=0.2666667 P(node) =0.0004551892  
## class counts: 33 12  
## probabilities: 0.733 0.267   
##   
## Node number 836463: 54 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.462963 P(node) =0.000546227  
## class counts: 29 25  
## probabilities: 0.537 0.463   
## left son=1672926 (13 obs) right son=1672927 (41 obs)  
## Primary splits:  
## Gate.location < 4.5 to the right, improve=1.8462230, (0 missing)  
## Flight.Distance < 505 to the right, improve=1.4146500, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=1.2518520, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.9870243, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.8766794, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 4.5 to the right, agree=0.778, adj=0.077, (0 split)  
##   
## Node number 836474: 228 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3201754 P(node) =0.002306292  
## class counts: 155 73  
## probabilities: 0.680 0.320   
## left son=1672948 (8 obs) right son=1672949 (220 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 2.5 to the right, improve=1.6998410, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.6738300, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.1545400, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.0364370, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.8600154, (0 missing)  
##   
## Node number 836475: 13 observations  
## predicted class=1 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 5 8  
## probabilities: 0.385 0.615   
##   
## Node number 836908: 20 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0002023063  
## class counts: 18 2  
## probabilities: 0.900 0.100   
##   
## Node number 836909: 93 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3225806 P(node) =0.0009407243  
## class counts: 63 30  
## probabilities: 0.677 0.323   
## left son=1673818 (79 obs) right son=1673819 (14 obs)  
## Primary splits:  
## Flight.Distance < 1071.5 to the left, improve=3.381147, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.744576, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.517764, (0 missing)  
## Cleanliness < 2.5 to the right, improve=1.267733, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=1.242722, (0 missing)  
##   
## Node number 841062: 83 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.2168675 P(node) =0.0008395711  
## class counts: 65 18  
## probabilities: 0.783 0.217   
## left son=1682124 (42 obs) right son=1682125 (41 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the left, improve=2.515651, (0 missing)  
## Inflight.entertainment < 4.5 to the left, improve=2.515651, (0 missing)  
## Cleanliness < 4.5 to the left, improve=2.515651, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.921343, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=1.310418, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 4.5 to the left, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 4.5 to the left, agree=0.880, adj=0.756, (0 split)  
## Checkin.service < 3.5 to the left, agree=0.614, adj=0.220, (0 split)  
## Age < 11.5 to the right, agree=0.602, adj=0.195, (0 split)  
##   
## Node number 841063: 437 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3455378 P(node) =0.004420392  
## class counts: 286 151  
## probabilities: 0.654 0.346   
## left son=1682126 (61 obs) right son=1682127 (376 obs)  
## Primary splits:  
## On.board.service < 2.5 to the left, improve=1.407625, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.173088, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.147770, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=1.060830, (0 missing)  
## Flight.Distance < 522.5 to the right, improve=1.039868, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 2.5 to the left, agree=0.908, adj=0.344, (0 split)  
## Inflight.service < 2.5 to the left, agree=0.865, adj=0.033, (0 split)  
##   
## Node number 841066: 52 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3846154 P(node) =0.0005259964  
## class counts: 32 20  
## probabilities: 0.615 0.385   
## left son=1682132 (8 obs) right son=1682133 (44 obs)  
## Primary splits:  
## Age < 36 to the left, improve=1.2744760, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.8761254, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=0.5653846, (0 missing)  
## Inflight.service < 3.5 to the right, improve=0.5653846, (0 missing)  
## Gate.location < 1.5 to the right, improve=0.5645910, (0 missing)  
##   
## Node number 841067: 8 observations  
## predicted class=1 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 3 5  
## probabilities: 0.375 0.625   
##   
## Node number 841074: 12 observations  
## predicted class=0 expected loss=0.1666667 P(node) =0.0001213838  
## class counts: 10 2  
## probabilities: 0.833 0.167   
##   
## Node number 841075: 50 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.48 P(node) =0.0005057657  
## class counts: 26 24  
## probabilities: 0.520 0.480   
## left son=1682150 (17 obs) right son=1682151 (33 obs)  
## Primary splits:  
## Flight.Distance < 707.5 to the right, improve=1.7799640, (0 missing)  
## Male < 0.5 to the right, improve=1.4082170, (0 missing)  
## Inflight.service < 3.5 to the right, improve=1.3885710, (0 missing)  
## Age < 26.5 to the right, improve=1.2100000, (0 missing)  
## On.board.service < 4.5 to the right, improve=0.7104105, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 7.5 to the right, agree=0.72, adj=0.176, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.68, adj=0.059, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.68, adj=0.059, (0 split)  
##   
## Node number 841164: 7 observations  
## predicted class=0 expected loss=0 P(node) =7.08072e-05  
## class counts: 7 0  
## probabilities: 1.000 0.000   
##   
## Node number 841165: 42 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3809524 P(node) =0.0004248432  
## class counts: 26 16  
## probabilities: 0.619 0.381   
## left son=1682330 (31 obs) right son=1682331 (11 obs)  
## Primary splits:  
## Age < 30 to the left, improve=1.9444210, (0 missing)  
## Flight.Distance < 1523 to the right, improve=1.7142860, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.0835980, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.9628419, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.7326007, (0 missing)  
##   
## Node number 841166: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 841167: 19 observations  
## predicted class=1 expected loss=0.2105263 P(node) =0.000192191  
## class counts: 4 15  
## probabilities: 0.211 0.789   
##   
## Node number 937022: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 937023: 183 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.2677596 P(node) =0.001851103  
## class counts: 49 134  
## probabilities: 0.268 0.732   
## left son=1874046 (136 obs) right son=1874047 (47 obs)  
## Primary splits:  
## Inflight.wifi.service < 1.5 to the right, improve=5.260189, (0 missing)  
## Age < 40.5 to the left, improve=4.045375, (0 missing)  
## Departure.Delay.in.Minutes < 8.5 to the left, improve=2.311777, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.471129, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.355578, (0 missing)  
## Surrogate splits:  
## Gate.location < 1.5 to the right, agree=0.902, adj=0.617, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the right, agree=0.891, adj=0.574, (0 split)  
## Ease.of.Online.booking < 1.5 to the right, agree=0.858, adj=0.447, (0 split)  
## Flight.Distance < 385.5 to the right, agree=0.754, adj=0.043, (0 split)  
## Baggage.handling < 1.5 to the right, agree=0.754, adj=0.043, (0 split)  
##   
## Node number 938150: 32 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.34375 P(node) =0.0003236901  
## class counts: 21 11  
## probabilities: 0.656 0.344   
## left son=1876300 (17 obs) right son=1876301 (15 obs)  
## Primary splits:  
## On.board.service < 2.5 to the right, improve=2.0296570, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.3553740, (0 missing)  
## Flight.Distance < 766.5 to the right, improve=0.8790584, (0 missing)  
## Age < 23.5 to the right, improve=0.7232143, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.3698671, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 816.5 to the left, agree=0.688, adj=0.333, (0 split)  
## Inflight.service < 3.5 to the right, agree=0.688, adj=0.333, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.656, adj=0.267, (0 split)  
## Age < 20.5 to the right, agree=0.625, adj=0.200, (0 split)  
## Arrival.Delay.in.Minutes < 0.5 to the left, agree=0.625, adj=0.200, (0 split)  
##   
## Node number 938151: 10 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001011531  
## class counts: 2 8  
## probabilities: 0.200 0.800   
##   
## Node number 940238: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 940239: 13 observations  
## predicted class=1 expected loss=0.07692308 P(node) =0.0001314991  
## class counts: 1 12  
## probabilities: 0.077 0.923   
##   
## Node number 940272: 10 observations  
## predicted class=0 expected loss=0 P(node) =0.0001011531  
## class counts: 10 0  
## probabilities: 1.000 0.000   
##   
## Node number 940273: 37 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.4594595 P(node) =0.0003742666  
## class counts: 17 20  
## probabilities: 0.459 0.541   
## left son=1880546 (14 obs) right son=1880547 (23 obs)  
## Primary splits:  
## Age < 43.5 to the right, improve=1.5150240, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.2176640, (0 missing)  
## Flight.Distance < 713 to the left, improve=1.0430840, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.6473842, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.2501733, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 1139 to the right, agree=0.703, adj=0.214, (0 split)  
## Gate.location < 1.5 to the left, agree=0.649, adj=0.071, (0 split)  
##   
## Node number 940274: 14 observations  
## predicted class=0 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 8 6  
## probabilities: 0.571 0.429   
##   
## Node number 940275: 27 observations  
## predicted class=1 expected loss=0.1851852 P(node) =0.0002731135  
## class counts: 5 22  
## probabilities: 0.185 0.815   
##   
## Node number 940280: 44 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.3636364 P(node) =0.0004450738  
## class counts: 16 28  
## probabilities: 0.364 0.636   
## left son=1880560 (31 obs) right son=1880561 (13 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 4.5 to the right, improve=1.624182, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.127904, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=0.969697, (0 missing)  
## Inflight.entertainment < 1.5 to the left, improve=0.969697, (0 missing)  
## Cleanliness < 1.5 to the left, improve=0.969697, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 0.5 to the right, agree=0.750, adj=0.154, (0 split)  
## Age < 47.5 to the left, agree=0.727, adj=0.077, (0 split)  
##   
## Node number 940281: 7 observations  
## predicted class=1 expected loss=0 P(node) =7.08072e-05  
## class counts: 0 7  
## probabilities: 0.000 1.000   
##   
## Node number 990084: 18 observations  
## predicted class=0 expected loss=0.1666667 P(node) =0.0001820757  
## class counts: 15 3  
## probabilities: 0.833 0.167   
##   
## Node number 990085: 14 observations  
## predicted class=1 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 6 8  
## probabilities: 0.429 0.571   
##   
## Node number 997216: 12 observations  
## predicted class=0 expected loss=0.25 P(node) =0.0001213838  
## class counts: 9 3  
## probabilities: 0.750 0.250   
##   
## Node number 997217: 11 observations  
## predicted class=1 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 4 7  
## probabilities: 0.364 0.636   
##   
## Node number 1015818: 25 observations  
## predicted class=0 expected loss=0.04 P(node) =0.0002528829  
## class counts: 24 1  
## probabilities: 0.960 0.040   
##   
## Node number 1015819: 50 observations, complexity param=1.439574e-05  
## predicted class=0 expected loss=0.26 P(node) =0.0005057657  
## class counts: 37 13  
## probabilities: 0.740 0.260   
## left son=2031638 (15 obs) right son=2031639 (35 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the left, improve=1.6019050, (0 missing)  
## Arrival.Delay.in.Minutes < 5 to the right, improve=1.2469440, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=1.0971430, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.0000000, (0 missing)  
## Departure.Delay.in.Minutes < 3.5 to the right, improve=0.8066667, (0 missing)  
##   
## Node number 1015896: 63 observations  
## predicted class=0 expected loss=0.2063492 P(node) =0.0006372648  
## class counts: 50 13  
## probabilities: 0.794 0.206   
##   
## Node number 1015897: 10 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001011531  
## class counts: 4 6  
## probabilities: 0.400 0.600   
##   
## Node number 1015898: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 1015899: 58 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0005866882  
## class counts: 29 29  
## probabilities: 0.500 0.500   
## left son=2031798 (15 obs) right son=2031799 (43 obs)  
## Primary splits:  
## Gate.location < 3.5 to the right, improve=1.1240310, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.9006211, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.7532468, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=0.7532468, (0 missing)  
## Age < 58.5 to the right, improve=0.7310924, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.983, adj=0.933, (0 split)  
## Ease.of.Online.booking < 3.5 to the right, agree=0.897, adj=0.600, (0 split)  
## Age < 24.5 to the left, agree=0.776, adj=0.133, (0 split)  
## Flight.Distance < 1145 to the right, agree=0.776, adj=0.133, (0 split)  
## Arrival.Delay.in.Minutes < 13 to the right, agree=0.759, adj=0.067, (0 split)  
##   
## Node number 1015904: 22 observations  
## predicted class=0 expected loss=0.04545455 P(node) =0.0002225369  
## class counts: 21 1  
## probabilities: 0.955 0.045   
##   
## Node number 1015905: 21 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.2380952 P(node) =0.0002124216  
## class counts: 16 5  
## probabilities: 0.762 0.238   
## left son=2031810 (14 obs) right son=2031811 (7 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 16.5 to the right, improve=2.3333330, (0 missing)  
## Age < 36 to the left, improve=2.1645020, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.4652010, (0 missing)  
## Flight.Distance < 495.5 to the right, improve=1.0008660, (0 missing)  
## Arrival.Delay.in.Minutes < 14.5 to the left, improve=0.3305861, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 9.5 to the right, agree=0.81, adj=0.429, (0 split)  
##   
## Node number 1015910: 59 observations, complexity param=9.597159e-05  
## predicted class=0 expected loss=0.4576271 P(node) =0.0005968036  
## class counts: 32 27  
## probabilities: 0.542 0.458   
## left son=2031820 (43 obs) right son=2031821 (16 obs)  
## Primary splits:  
## Cleanliness < 3.5 to the right, improve=2.3201120, (0 missing)  
## Flight.Distance < 372.5 to the left, improve=2.1738500, (0 missing)  
## Age < 38.5 to the left, improve=1.5983400, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=1.5822530, (0 missing)  
## Seat.comfort < 3.5 to the right, improve=0.4881356, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 3.5 to the right, agree=0.831, adj=0.375, (0 split)  
## Food.and.drink < 4.5 to the left, agree=0.797, adj=0.250, (0 split)  
## Male < 0.5 to the right, agree=0.780, adj=0.188, (0 split)  
## Departure.Delay.in.Minutes < 14 to the left, agree=0.763, adj=0.125, (0 split)  
## Flight.Distance < 1888.5 to the left, agree=0.746, adj=0.063, (0 split)  
##   
## Node number 1015911: 27 observations  
## predicted class=1 expected loss=0.2592593 P(node) =0.0002731135  
## class counts: 7 20  
## probabilities: 0.259 0.741   
##   
## Node number 1018892: 17 observations  
## predicted class=0 expected loss=0.2941176 P(node) =0.0001719603  
## class counts: 12 5  
## probabilities: 0.706 0.294   
##   
## Node number 1018893: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 1032214: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 1032215: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 1032224: 36 observations  
## predicted class=0 expected loss=0.1111111 P(node) =0.0003641513  
## class counts: 32 4  
## probabilities: 0.889 0.111   
##   
## Node number 1032225: 30 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.3333333 P(node) =0.0003034594  
## class counts: 20 10  
## probabilities: 0.667 0.333   
## left son=2064450 (13 obs) right son=2064451 (17 obs)  
## Primary splits:  
## Flight.Distance < 280.5 to the left, improve=3.0165910, (0 missing)  
## Ease.of.Online.booking < 2.5 to the right, improve=2.1333330, (0 missing)  
## Gate.location < 2.5 to the right, improve=2.1333330, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.5629980, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=0.5333333, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.733, adj=0.385, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.700, adj=0.308, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.667, adj=0.231, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.667, adj=0.231, (0 split)  
## Age < 55 to the left, agree=0.633, adj=0.154, (0 split)  
##   
## Node number 1032226: 22 observations  
## predicted class=0 expected loss=0.2272727 P(node) =0.0002225369  
## class counts: 17 5  
## probabilities: 0.773 0.227   
##   
## Node number 1032227: 72 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.4722222 P(node) =0.0007283027  
## class counts: 38 34  
## probabilities: 0.528 0.472   
## left son=2064454 (63 obs) right son=2064455 (9 obs)  
## Primary splits:  
## Flight.Distance < 762 to the left, improve=3.571429, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve=1.576138, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.422222, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.310935, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=1.285714, (0 missing)  
##   
## Node number 1097886: 71 observations, complexity param=2.056534e-05  
## predicted class=0 expected loss=0.1549296 P(node) =0.0007181873  
## class counts: 60 11  
## probabilities: 0.845 0.155   
## left son=2195772 (64 obs) right son=2195773 (7 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=2.6942280, (0 missing)  
## Inflight.service < 1.5 to the right, improve=0.9192329, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.9129779, (0 missing)  
## EcoClass < 0.5 to the right, improve=0.8660591, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.8094355, (0 missing)  
## Surrogate splits:  
## Gate.location < 3.5 to the left, agree=0.986, adj=0.857, (0 split)  
##   
## Node number 1097887: 23 observations, complexity param=2.056534e-05  
## predicted class=1 expected loss=0.4782609 P(node) =0.0002326522  
## class counts: 11 12  
## probabilities: 0.478 0.522   
## left son=2195774 (7 obs) right son=2195775 (16 obs)  
## Primary splits:  
## Age < 43.5 to the left, improve=2.8889750, (0 missing)  
## Flight.Distance < 482 to the right, improve=1.0496890, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.5282609, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.5282609, (0 missing)  
## Cleanliness < 2.5 to the right, improve=0.2167224, (0 missing)  
## Surrogate splits:  
## On.board.service < 1.5 to the left, agree=0.826, adj=0.429, (0 split)  
## Inflight.service < 2.5 to the right, agree=0.826, adj=0.429, (0 split)  
## Leg.room.service < 3.5 to the right, agree=0.783, adj=0.286, (0 split)  
## Inflight.wifi.service < 2.5 to the right, agree=0.739, adj=0.143, (0 split)  
## Departure.Delay.in.Minutes < 1.5 to the right, agree=0.739, adj=0.143, (0 split)  
##   
## Node number 1433864: 32 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.34375 P(node) =0.0003236901  
## class counts: 21 11  
## probabilities: 0.656 0.344   
## left son=2867728 (10 obs) right son=2867729 (22 obs)  
## Primary splits:  
## Cleanliness < 1.5 to the left, improve=1.7284090, (0 missing)  
## Age < 50 to the left, improve=0.6075405, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=0.5208333, (0 missing)  
## Flight.Distance < 736 to the left, improve=0.3698671, (0 missing)  
## Checkin.service < 2.5 to the left, improve=0.3581349, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 2374 to the right, agree=0.812, adj=0.4, (0 split)  
## Age < 45.5 to the left, agree=0.719, adj=0.1, (0 split)  
##   
## Node number 1433865: 13 observations  
## predicted class=1 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 5 8  
## probabilities: 0.385 0.615   
##   
## Node number 1672926: 13 observations  
## predicted class=0 expected loss=0.2307692 P(node) =0.0001314991  
## class counts: 10 3  
## probabilities: 0.769 0.231   
##   
## Node number 1672927: 41 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.4634146 P(node) =0.0004147279  
## class counts: 19 22  
## probabilities: 0.463 0.537   
## left son=3345854 (9 obs) right son=3345855 (32 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=2.2791330, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.4805660, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.4017380, (0 missing)  
## Age < 43 to the left, improve=1.3416330, (0 missing)  
## Flight.Distance < 508.5 to the right, improve=0.8993348, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 633.5 to the right, agree=0.805, adj=0.111, (0 split)  
##   
## Node number 1672948: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 1672949: 220 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3318182 P(node) =0.002225369  
## class counts: 147 73  
## probabilities: 0.668 0.332   
## left son=3345898 (175 obs) right son=3345899 (45 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the left, improve=2.0574030, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.4341600, (0 missing)  
## Age < 22.5 to the right, improve=1.2312630, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.1450220, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.9786596, (0 missing)  
##   
## Node number 1673818: 79 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2658228 P(node) =0.0007991099  
## class counts: 58 21  
## probabilities: 0.734 0.266   
## left son=3347636 (11 obs) right son=3347637 (68 obs)  
## Primary splits:  
## On.board.service < 1.5 to the left, improve=1.806031, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.618052, (0 missing)  
## Age < 13.5 to the right, improve=1.551861, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.493776, (0 missing)  
## Flight.Distance < 899 to the right, improve=1.018197, (0 missing)  
## Surrogate splits:  
## Age < 8.5 to the left, agree=0.873, adj=0.091, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.873, adj=0.091, (0 split)  
##   
## Node number 1673819: 14 observations  
## predicted class=1 expected loss=0.3571429 P(node) =0.0001416144  
## class counts: 5 9  
## probabilities: 0.357 0.643   
##   
## Node number 1682124: 42 observations  
## predicted class=0 expected loss=0.0952381 P(node) =0.0004248432  
## class counts: 38 4  
## probabilities: 0.905 0.095   
##   
## Node number 1682125: 41 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.3414634 P(node) =0.0004147279  
## class counts: 27 14  
## probabilities: 0.659 0.341   
## left son=3364250 (25 obs) right son=3364251 (16 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=1.3190240, (0 missing)  
## Flight.Distance < 291 to the left, improve=0.9314486, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.8528175, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.6877016, (0 missing)  
## Age < 8.5 to the right, improve=0.5489145, (0 missing)  
## Surrogate splits:  
## Age < 9.5 to the right, agree=0.659, adj=0.125, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.659, adj=0.125, (0 split)  
## Baggage.handling < 3.5 to the right, agree=0.634, adj=0.063, (0 split)  
##   
## Node number 1682126: 61 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.2459016 P(node) =0.0006170342  
## class counts: 46 15  
## probabilities: 0.754 0.246   
## left son=3364252 (27 obs) right son=3364253 (34 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the right, improve=2.8604240, (0 missing)  
## Flight.Distance < 439.5 to the right, improve=1.7602060, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the left, improve=1.0991410, (0 missing)  
## Age < 35.5 to the right, improve=0.9539532, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.7229508, (0 missing)  
## Surrogate splits:  
## Age < 57.5 to the right, agree=0.689, adj=0.296, (0 split)  
## Gate.location < 4.5 to the right, agree=0.623, adj=0.148, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.623, adj=0.148, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.607, adj=0.111, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.607, adj=0.111, (0 split)  
##   
## Node number 1682127: 376 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3617021 P(node) =0.003803358  
## class counts: 240 136  
## probabilities: 0.638 0.362   
## left son=3364254 (345 obs) right son=3364255 (31 obs)  
## Primary splits:  
## Age < 62.5 to the left, improve=1.6114110, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.2218060, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.1057430, (0 missing)  
## Flight.Distance < 987.5 to the left, improve=0.8414332, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.7333052, (0 missing)  
## Surrogate splits:  
## Ease.of.Online.booking < 2.5 to the right, agree=0.92, adj=0.032, (0 split)  
##   
## Node number 1682132: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 1682133: 44 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4318182 P(node) =0.0004450738  
## class counts: 25 19  
## probabilities: 0.568 0.432   
## left son=3364266 (10 obs) right son=3364267 (34 obs)  
## Primary splits:  
## Inflight.service < 3.5 to the right, improve=1.3909090, (0 missing)  
## Baggage.handling < 3.5 to the right, improve=0.9940837, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.7575758, (0 missing)  
## Leg.room.service < 2.5 to the left, improve=0.7424242, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.5972249, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 3.5 to the right, agree=0.795, adj=0.1, (0 split)  
##   
## Node number 1682150: 17 observations  
## predicted class=0 expected loss=0.2941176 P(node) =0.0001719603  
## class counts: 12 5  
## probabilities: 0.706 0.294   
##   
## Node number 1682151: 33 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.4242424 P(node) =0.0003338054  
## class counts: 14 19  
## probabilities: 0.424 0.576   
## left son=3364302 (16 obs) right son=3364303 (17 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=2.503565, (0 missing)  
## Flight.Distance < 322.5 to the left, improve=2.182082, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.885918, (0 missing)  
## Male < 0.5 to the right, improve=1.605828, (0 missing)  
## Age < 26.5 to the right, improve=1.406926, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the right, agree=0.970, adj=0.938, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.939, adj=0.875, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.848, adj=0.688, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.697, adj=0.375, (0 split)  
## Male < 0.5 to the right, agree=0.697, adj=0.375, (0 split)  
##   
## Node number 1682330: 31 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2903226 P(node) =0.0003135748  
## class counts: 22 9  
## probabilities: 0.710 0.290   
## left son=3364660 (18 obs) right son=3364661 (13 obs)  
## Primary splits:  
## Flight.Distance < 1409 to the right, improve=2.7571000, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.6024764, (0 missing)  
## Age < 19.5 to the left, improve=0.3981252, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.3981252, (0 missing)  
## Checkin.service < 2.5 to the right, improve=0.3551459, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 4.5 to the left, agree=0.710, adj=0.308, (0 split)  
## Checkin.service < 4.5 to the left, agree=0.645, adj=0.154, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.613, adj=0.077, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.613, adj=0.077, (0 split)  
##   
## Node number 1682331: 11 observations  
## predicted class=1 expected loss=0.3636364 P(node) =0.0001112685  
## class counts: 4 7  
## probabilities: 0.364 0.636   
##   
## Node number 1874046: 136 observations, complexity param=0.0001919432  
## predicted class=1 expected loss=0.3382353 P(node) =0.001375683  
## class counts: 46 90  
## probabilities: 0.338 0.662   
## left son=3748092 (16 obs) right son=3748093 (120 obs)  
## Primary splits:  
## Gate.location < 1.5 to the left, improve=15.882350, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=15.247700, (0 missing)  
## Departure.Arrival.time.convenient < 1.5 to the left, improve=14.126050, (0 missing)  
## Age < 40.5 to the left, improve= 3.946568, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve= 1.553782, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.993, adj=0.938, (0 split)  
## Ease.of.Online.booking < 1.5 to the left, agree=0.971, adj=0.750, (0 split)  
##   
## Node number 1874047: 47 observations  
## predicted class=1 expected loss=0.06382979 P(node) =0.0004754198  
## class counts: 3 44  
## probabilities: 0.064 0.936   
##   
## Node number 1876300: 17 observations  
## predicted class=0 expected loss=0.1764706 P(node) =0.0001719603  
## class counts: 14 3  
## probabilities: 0.824 0.176   
##   
## Node number 1876301: 15 observations  
## predicted class=1 expected loss=0.4666667 P(node) =0.0001517297  
## class counts: 7 8  
## probabilities: 0.467 0.533   
##   
## Node number 1880546: 14 observations  
## predicted class=0 expected loss=0.3571429 P(node) =0.0001416144  
## class counts: 9 5  
## probabilities: 0.643 0.357   
##   
## Node number 1880547: 23 observations, complexity param=4.79858e-05  
## predicted class=1 expected loss=0.3478261 P(node) =0.0002326522  
## class counts: 8 15  
## probabilities: 0.348 0.652   
## left son=3761094 (14 obs) right son=3761095 (9 obs)  
## Primary splits:  
## Flight.Distance < 920.5 to the left, improve=3.5776400, (0 missing)  
## Checkin.service < 4.5 to the left, improve=1.1620550, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.7732441, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.2760524, (0 missing)  
## Age < 38.5 to the left, improve=0.2378129, (0 missing)  
## Surrogate splits:  
## Age < 42.5 to the left, agree=0.696, adj=0.222, (0 split)  
## Baggage.handling < 4.5 to the left, agree=0.696, adj=0.222, (0 split)  
## Gate.location < 2.5 to the right, agree=0.652, adj=0.111, (0 split)  
##   
## Node number 1880560: 31 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.4516129 P(node) =0.0003135748  
## class counts: 14 17  
## probabilities: 0.452 0.548   
## left son=3761120 (9 obs) right son=3761121 (22 obs)  
## Primary splits:  
## Flight.Distance < 957 to the right, improve=1.1730210, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.1639300, (0 missing)  
## Age < 35 to the left, improve=0.9274883, (0 missing)  
## Arrival.Delay.in.Minutes < 11 to the left, improve=0.9274883, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.7329900, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 4.5 to the right, agree=0.774, adj=0.222, (0 split)  
##   
## Node number 1880561: 13 observations  
## predicted class=1 expected loss=0.1538462 P(node) =0.0001314991  
## class counts: 2 11  
## probabilities: 0.154 0.846   
##   
## Node number 2031638: 15 observations  
## predicted class=0 expected loss=0.06666667 P(node) =0.0001517297  
## class counts: 14 1  
## probabilities: 0.933 0.067   
##   
## Node number 2031639: 35 observations, complexity param=1.439574e-05  
## predicted class=0 expected loss=0.3428571 P(node) =0.000354036  
## class counts: 23 12  
## probabilities: 0.657 0.343   
## left son=4063278 (9 obs) right son=4063279 (26 obs)  
## Primary splits:  
## Flight.Distance < 2935.5 to the right, improve=1.3013430, (0 missing)  
## Departure.Delay.in.Minutes < 4 to the right, improve=1.0714290, (0 missing)  
## Arrival.Delay.in.Minutes < 6 to the right, improve=0.8320346, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.7714286, (0 missing)  
## Checkin.service < 1.5 to the left, improve=0.5280075, (0 missing)  
## Surrogate splits:  
## Age < 42.5 to the right, agree=0.829, adj=0.333, (0 split)  
## Cleanliness < 1.5 to the left, agree=0.771, adj=0.111, (0 split)  
## Arrival.Delay.in.Minutes < 31 to the right, agree=0.771, adj=0.111, (0 split)  
##   
## Node number 2031798: 15 observations  
## predicted class=0 expected loss=0.3333333 P(node) =0.0001517297  
## class counts: 10 5  
## probabilities: 0.667 0.333   
##   
## Node number 2031799: 43 observations, complexity param=3.998816e-05  
## predicted class=1 expected loss=0.4418605 P(node) =0.0004349585  
## class counts: 19 24  
## probabilities: 0.442 0.558   
## left son=4063598 (36 obs) right son=4063599 (7 obs)  
## Primary splits:  
## Age < 35.5 to the right, improve=1.495017, (0 missing)  
## Arrival.Delay.in.Minutes < 1.5 to the right, improve=1.241048, (0 missing)  
## Flight.Distance < 692.5 to the right, improve=1.150479, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=1.122123, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.118393, (0 missing)  
##   
## Node number 2031810: 14 observations  
## predicted class=0 expected loss=0.07142857 P(node) =0.0001416144  
## class counts: 13 1  
## probabilities: 0.929 0.071   
##   
## Node number 2031811: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 2031820: 43 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.372093 P(node) =0.0004349585  
## class counts: 27 16  
## probabilities: 0.628 0.372   
## left son=4063640 (8 obs) right son=4063641 (35 obs)  
## Primary splits:  
## Age < 56.5 to the right, improve=1.2001660, (0 missing)  
## Flight.Distance < 353.5 to the left, improve=1.2001660, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.8884778, (0 missing)  
## Male < 0.5 to the left, improve=0.7443053, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.5508010, (0 missing)  
##   
## Node number 2031821: 16 observations  
## predicted class=1 expected loss=0.3125 P(node) =0.000161845  
## class counts: 5 11  
## probabilities: 0.312 0.688   
##   
## Node number 2064450: 13 observations  
## predicted class=0 expected loss=0.07692308 P(node) =0.0001314991  
## class counts: 12 1  
## probabilities: 0.923 0.077   
##   
## Node number 2064451: 17 observations  
## predicted class=1 expected loss=0.4705882 P(node) =0.0001719603  
## class counts: 8 9  
## probabilities: 0.471 0.529   
##   
## Node number 2064454: 63 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.4126984 P(node) =0.0006372648  
## class counts: 37 26  
## probabilities: 0.587 0.413   
## left son=4128908 (11 obs) right son=4128909 (52 obs)  
## Primary splits:  
## Food.and.drink < 3.5 to the left, improve=2.7599620, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.9841270, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.4208010, (0 missing)  
## Cleanliness < 3.5 to the left, improve=1.1354270, (0 missing)  
## Flight.Distance < 361 to the right, improve=0.9544194, (0 missing)  
## Surrogate splits:  
## Cleanliness < 3.5 to the left, agree=0.889, adj=0.364, (0 split)  
## Male < 0.5 to the left, agree=0.873, adj=0.273, (0 split)  
## Flight.Distance < 188.5 to the left, agree=0.841, adj=0.091, (0 split)  
##   
## Node number 2064455: 9 observations  
## predicted class=1 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 1 8  
## probabilities: 0.111 0.889   
##   
## Node number 2195772: 64 observations  
## predicted class=0 expected loss=0.109375 P(node) =0.0006473801  
## class counts: 57 7  
## probabilities: 0.891 0.109   
##   
## Node number 2195773: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 2195774: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 2195775: 16 observations  
## predicted class=1 expected loss=0.3125 P(node) =0.000161845  
## class counts: 5 11  
## probabilities: 0.312 0.688   
##   
## Node number 2867728: 10 observations  
## predicted class=0 expected loss=0.1 P(node) =0.0001011531  
## class counts: 9 1  
## probabilities: 0.900 0.100   
##   
## Node number 2867729: 22 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4545455 P(node) =0.0002225369  
## class counts: 12 10  
## probabilities: 0.545 0.455   
## left son=5735458 (8 obs) right son=5735459 (14 obs)  
## Primary splits:  
## Flight.Distance < 731.5 to the left, improve=1.05194800, (0 missing)  
## Food.and.drink < 3.5 to the left, improve=0.36363640, (0 missing)  
## Checkin.service < 2.5 to the left, improve=0.36363640, (0 missing)  
## Age < 47.5 to the right, improve=0.28051950, (0 missing)  
## Cleanliness < 3.5 to the right, improve=0.07575758, (0 missing)  
## Surrogate splits:  
## Age < 67.5 to the right, agree=0.727, adj=0.25, (0 split)  
##   
## Node number 3345854: 9 observations  
## predicted class=0 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 7 2  
## probabilities: 0.778 0.222   
##   
## Node number 3345855: 32 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.375 P(node) =0.0003236901  
## class counts: 12 20  
## probabilities: 0.375 0.625   
## left son=6691710 (8 obs) right son=6691711 (24 obs)  
## Primary splits:  
## Flight.Distance < 508.5 to the right, improve=1.3333330, (0 missing)  
## Age < 40.5 to the left, improve=1.2510820, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.0000000, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.9657143, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.5845411, (0 missing)  
##   
## Node number 3345898: 175 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.2971429 P(node) =0.00177018  
## class counts: 123 52  
## probabilities: 0.703 0.297   
## left son=6691796 (9 obs) right son=6691797 (166 obs)  
## Primary splits:  
## Flight.Distance < 562.5 to the right, improve=1.6754560, (0 missing)  
## On.board.service < 2.5 to the left, improve=1.0001730, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.9560557, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=0.9484624, (0 missing)  
## Age < 20.5 to the right, improve=0.7877411, (0 missing)  
##   
## Node number 3345899: 45 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.4666667 P(node) =0.0004551892  
## class counts: 24 21  
## probabilities: 0.533 0.467   
## left son=6691798 (18 obs) right son=6691799 (27 obs)  
## Primary splits:  
## Flight.Distance < 342.5 to the left, improve=2.1407410, (0 missing)  
## Male < 0.5 to the left, improve=2.1407410, (0 missing)  
## Seat.comfort < 2.5 to the right, improve=0.6348178, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.5818182, (0 missing)  
## EcoClass < 0.5 to the left, improve=0.5818182, (0 missing)  
## Surrogate splits:  
## Age < 11.5 to the left, agree=0.644, adj=0.111, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the left, agree=0.644, adj=0.111, (0 split)  
## Food.and.drink < 1.5 to the left, agree=0.622, adj=0.056, (0 split)  
## Seat.comfort < 3.5 to the right, agree=0.622, adj=0.056, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.622, adj=0.056, (0 split)  
##   
## Node number 3347636: 11 observations  
## predicted class=0 expected loss=0 P(node) =0.0001112685  
## class counts: 11 0  
## probabilities: 1.000 0.000   
##   
## Node number 3347637: 68 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3088235 P(node) =0.0006878414  
## class counts: 47 21  
## probabilities: 0.691 0.309   
## left son=6695274 (56 obs) right son=6695275 (12 obs)  
## Primary splits:  
## Age < 15 to the right, improve=2.196078, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=2.196078, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.729412, (0 missing)  
## Flight.Distance < 899 to the right, improve=1.664499, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.262933, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the right, agree=0.868, adj=0.25, (0 split)  
##   
## Node number 3364250: 25 observations, complexity param=7.997633e-06  
## predicted class=0 expected loss=0.24 P(node) =0.0002528829  
## class counts: 19 6  
## probabilities: 0.760 0.240   
## left son=6728500 (16 obs) right son=6728501 (9 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=2.8005560, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.9200000, (0 missing)  
## Flight.Distance < 430.5 to the right, improve=0.6005195, (0 missing)  
## Age < 11.5 to the right, improve=0.4672222, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.4020513, (0 missing)  
## Surrogate splits:  
## On.board.service < 2.5 to the right, agree=0.72, adj=0.222, (0 split)  
## Leg.room.service < 1.5 to the right, agree=0.72, adj=0.222, (0 split)  
## Checkin.service < 2 to the right, agree=0.72, adj=0.222, (0 split)  
## Flight.Distance < 234.5 to the right, agree=0.68, adj=0.111, (0 split)  
##   
## Node number 3364251: 16 observations  
## predicted class=0 expected loss=0.5 P(node) =0.000161845  
## class counts: 8 8  
## probabilities: 0.500 0.500   
##   
## Node number 3364252: 27 observations  
## predicted class=0 expected loss=0.07407407 P(node) =0.0002731135  
## class counts: 25 2  
## probabilities: 0.926 0.074   
##   
## Node number 3364253: 34 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3823529 P(node) =0.0003439207  
## class counts: 21 13  
## probabilities: 0.618 0.382   
## left son=6728506 (14 obs) right son=6728507 (20 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=2.7302520, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.9424210, (0 missing)  
## Flight.Distance < 557.5 to the right, improve=1.7254900, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.9672484, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.7343791, (0 missing)  
## Surrogate splits:  
## Age < 46.5 to the left, agree=0.647, adj=0.143, (0 split)  
## Flight.Distance < 127 to the left, agree=0.647, adj=0.143, (0 split)  
## Cleanliness < 4.5 to the left, agree=0.647, adj=0.143, (0 split)  
##   
## Node number 3364254: 345 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3478261 P(node) =0.003489784  
## class counts: 225 120  
## probabilities: 0.652 0.348   
## left son=6728508 (333 obs) right son=6728509 (12 obs)  
## Primary splits:  
## Flight.Distance < 987.5 to the left, improve=1.3790960, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=1.0500750, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.9531373, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.8487667, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.6477058, (0 missing)  
##   
## Node number 3364255: 31 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.483871 P(node) =0.0003135748  
## class counts: 15 16  
## probabilities: 0.484 0.516   
## left son=6728510 (18 obs) right son=6728511 (13 obs)  
## Primary splits:  
## Age < 64.5 to the right, improve=4.8770330, (0 missing)  
## Checkin.service < 4.5 to the left, improve=2.7773490, (0 missing)  
## On.board.service < 4.5 to the right, improve=1.3791090, (0 missing)  
## Male < 0.5 to the left, improve=1.3791090, (0 missing)  
## Flight.Distance < 417.5 to the right, improve=0.8873797, (0 missing)  
## Surrogate splits:  
## Gate.location < 2.5 to the right, agree=0.677, adj=0.231, (0 split)  
## Flight.Distance < 153.5 to the right, agree=0.645, adj=0.154, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.613, adj=0.077, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.613, adj=0.077, (0 split)  
## On.board.service < 4.5 to the right, agree=0.613, adj=0.077, (0 split)  
##   
## Node number 3364266: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 3364267: 34 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0003439207  
## class counts: 17 17  
## probabilities: 0.500 0.500   
## left son=6728534 (24 obs) right son=6728535 (10 obs)  
## Primary splits:  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.1333330, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.1333330, (0 missing)  
## Inflight.entertainment < 2.5 to the left, improve=0.9444444, (0 missing)  
## Baggage.handling < 1.5 to the left, improve=0.9444444, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.6047431, (0 missing)  
## Surrogate splits:  
## Inflight.service < 1.5 to the left, agree=0.882, adj=0.6, (0 split)  
## Male < 0.5 to the left, agree=0.853, adj=0.5, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.824, adj=0.4, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.824, adj=0.4, (0 split)  
## Checkin.service < 2.5 to the right, agree=0.765, adj=0.2, (0 split)  
##   
## Node number 3364302: 16 observations  
## predicted class=0 expected loss=0.375 P(node) =0.000161845  
## class counts: 10 6  
## probabilities: 0.625 0.375   
##   
## Node number 3364303: 17 observations  
## predicted class=1 expected loss=0.2352941 P(node) =0.0001719603  
## class counts: 4 13  
## probabilities: 0.235 0.765   
##   
## Node number 3364660: 18 observations  
## predicted class=0 expected loss=0.1111111 P(node) =0.0001820757  
## class counts: 16 2  
## probabilities: 0.889 0.111   
##   
## Node number 3364661: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 3748092: 16 observations  
## predicted class=0 expected loss=0 P(node) =0.000161845  
## class counts: 16 0  
## probabilities: 1.000 0.000   
##   
## Node number 3748093: 120 observations, complexity param=5.998225e-05  
## predicted class=1 expected loss=0.25 P(node) =0.001213838  
## class counts: 30 90  
## probabilities: 0.250 0.750   
## left son=7496186 (29 obs) right son=7496187 (91 obs)  
## Primary splits:  
## Age < 40.5 to the left, improve=3.006821, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.556482, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.556482, (0 missing)  
## On.board.service < 2.5 to the right, improve=1.388571, (0 missing)  
## Flight.Distance < 565.5 to the right, improve=1.216216, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 61.5 to the right, agree=0.800, adj=0.172, (0 split)  
## Inflight.entertainment < 1.5 to the left, agree=0.792, adj=0.138, (0 split)  
## Arrival.Delay.in.Minutes < 52.5 to the right, agree=0.792, adj=0.138, (0 split)  
## On.board.service < 3.5 to the right, agree=0.783, adj=0.103, (0 split)  
## Baggage.handling < 1.5 to the left, agree=0.783, adj=0.103, (0 split)  
##   
## Node number 3761094: 14 observations  
## predicted class=0 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 8 6  
## probabilities: 0.571 0.429   
##   
## Node number 3761095: 9 observations  
## predicted class=1 expected loss=0 P(node) =9.103783e-05  
## class counts: 0 9  
## probabilities: 0.000 1.000   
##   
## Node number 3761120: 9 observations  
## predicted class=0 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 6 3  
## probabilities: 0.667 0.333   
##   
## Node number 3761121: 22 observations, complexity param=1.439574e-05  
## predicted class=1 expected loss=0.3636364 P(node) =0.0002225369  
## class counts: 8 14  
## probabilities: 0.364 0.636   
## left son=7522242 (13 obs) right son=7522243 (9 obs)  
## Primary splits:  
## Age < 35 to the left, improve=1.9425020, (0 missing)  
## Flight.Distance < 709.5 to the left, improve=1.0008660, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.9818182, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.9818182, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.9818182, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the right, agree=0.773, adj=0.444, (0 split)  
## Flight.Distance < 480.5 to the right, agree=0.727, adj=0.333, (0 split)  
## Seat.comfort < 2.5 to the right, agree=0.727, adj=0.333, (0 split)  
## Food.and.drink < 2.5 to the right, agree=0.682, adj=0.222, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=0.682, adj=0.222, (0 split)  
##   
## Node number 4063278: 9 observations  
## predicted class=0 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 8 1  
## probabilities: 0.889 0.111   
##   
## Node number 4063279: 26 observations, complexity param=1.439574e-05  
## predicted class=0 expected loss=0.4230769 P(node) =0.0002629982  
## class counts: 15 11  
## probabilities: 0.577 0.423   
## left son=8126558 (11 obs) right son=8126559 (15 obs)  
## Primary splits:  
## Departure.Delay.in.Minutes < 4 to the right, improve=2.2195800, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.3351650, (0 missing)  
## Flight.Distance < 1380.5 to the left, improve=1.1106080, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=0.8620047, (0 missing)  
## Age < 30.5 to the left, improve=0.6923077, (0 missing)  
## Surrogate splits:  
## Arrival.Delay.in.Minutes < 2.5 to the right, agree=0.885, adj=0.727, (0 split)  
## Checkin.service < 1.5 to the left, agree=0.769, adj=0.455, (0 split)  
## Departure.Arrival.time.convenient < 1.5 to the left, agree=0.654, adj=0.182, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.654, adj=0.182, (0 split)  
## Male < 0.5 to the right, agree=0.615, adj=0.091, (0 split)  
##   
## Node number 4063598: 36 observations, complexity param=3.998816e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0003641513  
## class counts: 18 18  
## probabilities: 0.500 0.500   
## left son=8127196 (9 obs) right son=8127197 (27 obs)  
## Primary splits:  
## Flight.Distance < 644 to the right, improve=1.851852, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=1.636364, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.505017, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=1.000000, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.000000, (0 missing)  
##   
## Node number 4063599: 7 observations  
## predicted class=1 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 1 6  
## probabilities: 0.143 0.857   
##   
## Node number 4063640: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 4063641: 35 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.4285714 P(node) =0.000354036  
## class counts: 20 15  
## probabilities: 0.571 0.429   
## left son=8127282 (10 obs) right son=8127283 (25 obs)  
## Primary splits:  
## Age < 38.5 to the left, improve=1.4628570, (0 missing)  
## Flight.Distance < 353.5 to the left, improve=1.4285710, (0 missing)  
## Male < 0.5 to the left, improve=1.1645960, (0 missing)  
## Gate.location < 4.5 to the left, improve=0.8228571, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=0.7941729, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 4.5 to the right, agree=0.743, adj=0.1, (0 split)  
## Arrival.Delay.in.Minutes < 2.5 to the right, agree=0.743, adj=0.1, (0 split)  
##   
## Node number 4128908: 11 observations  
## predicted class=0 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 10 1  
## probabilities: 0.909 0.091   
##   
## Node number 4128909: 52 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.4807692 P(node) =0.0005259964  
## class counts: 27 25  
## probabilities: 0.519 0.481   
## left son=8257818 (11 obs) right son=8257819 (41 obs)  
## Primary splits:  
## Leg.room.service < 4.5 to the right, improve=2.4936890, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.9353947, (0 missing)  
## Flight.Distance < 361.5 to the right, improve=0.9240385, (0 missing)  
## Ease.of.Online.booking < 4.5 to the right, improve=0.6782051, (0 missing)  
## Gate.location < 4.5 to the right, improve=0.6782051, (0 missing)  
##   
## Node number 5735458: 8 observations  
## predicted class=0 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 6 2  
## probabilities: 0.750 0.250   
##   
## Node number 5735459: 14 observations  
## predicted class=1 expected loss=0.4285714 P(node) =0.0001416144  
## class counts: 6 8  
## probabilities: 0.429 0.571   
##   
## Node number 6691710: 8 observations  
## predicted class=0 expected loss=0.375 P(node) =8.092252e-05  
## class counts: 5 3  
## probabilities: 0.625 0.375   
##   
## Node number 6691711: 24 observations  
## predicted class=1 expected loss=0.2916667 P(node) =0.0002427676  
## class counts: 7 17  
## probabilities: 0.292 0.708   
##   
## Node number 6691796: 9 observations  
## predicted class=0 expected loss=0 P(node) =9.103783e-05  
## class counts: 9 0  
## probabilities: 1.000 0.000   
##   
## Node number 6691797: 166 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.313253 P(node) =0.001679142  
## class counts: 114 52  
## probabilities: 0.687 0.313   
## left son=13383594 (82 obs) right son=13383595 (84 obs)  
## Primary splits:  
## Baggage.handling < 3.5 to the left, improve=1.0587370, (0 missing)  
## Inflight.service < 2.5 to the left, improve=0.9858579, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.8948325, (0 missing)  
## Age < 20.5 to the right, improve=0.7822464, (0 missing)  
## Flight.Distance < 494.5 to the left, improve=0.6949600, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.783, adj=0.561, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.729, adj=0.451, (0 split)  
## Checkin.service < 2.5 to the left, agree=0.633, adj=0.256, (0 split)  
## On.board.service < 3.5 to the left, agree=0.627, adj=0.244, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.572, adj=0.134, (0 split)  
##   
## Node number 6691798: 18 observations  
## predicted class=0 expected loss=0.2777778 P(node) =0.0001820757  
## class counts: 13 5  
## probabilities: 0.722 0.278   
##   
## Node number 6691799: 27 observations, complexity param=2.879148e-05  
## predicted class=1 expected loss=0.4074074 P(node) =0.0002731135  
## class counts: 11 16  
## probabilities: 0.407 0.593   
## left son=13383598 (13 obs) right son=13383599 (14 obs)  
## Primary splits:  
## Age < 29.5 to the right, improve=2.1689050, (0 missing)  
## Food.and.drink < 1.5 to the right, improve=1.3227510, (0 missing)  
## Inflight.entertainment < 1.5 to the right, improve=1.3227510, (0 missing)  
## Cleanliness < 1.5 to the right, improve=1.3227510, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.5925926, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 427 to the left, agree=0.667, adj=0.308, (0 split)  
## Food.and.drink < 2.5 to the left, agree=0.667, adj=0.308, (0 split)  
## Inflight.entertainment < 2.5 to the left, agree=0.667, adj=0.308, (0 split)  
## Gate.location < 1.5 to the left, agree=0.630, adj=0.231, (0 split)  
## Cleanliness < 2.5 to the left, agree=0.630, adj=0.231, (0 split)  
##   
## Node number 6695274: 56 observations  
## predicted class=0 expected loss=0.25 P(node) =0.0005664576  
## class counts: 42 14  
## probabilities: 0.750 0.250   
##   
## Node number 6695275: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583   
##   
## Node number 6728500: 16 observations  
## predicted class=0 expected loss=0.0625 P(node) =0.000161845  
## class counts: 15 1  
## probabilities: 0.938 0.062   
##   
## Node number 6728501: 9 observations  
## predicted class=1 expected loss=0.4444444 P(node) =9.103783e-05  
## class counts: 4 5  
## probabilities: 0.444 0.556   
##   
## Node number 6728506: 14 observations  
## predicted class=0 expected loss=0.1428571 P(node) =0.0001416144  
## class counts: 12 2  
## probabilities: 0.857 0.143   
##   
## Node number 6728507: 20 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.45 P(node) =0.0002023063  
## class counts: 9 11  
## probabilities: 0.450 0.550   
## left son=13457014 (10 obs) right son=13457015 (10 obs)  
## Primary splits:  
## Checkin.service < 2.5 to the right, improve=2.5000000, (0 missing)  
## Male < 0.5 to the left, improve=0.9000000, (0 missing)  
## Age < 33.5 to the right, improve=0.5813187, (0 missing)  
## Cleanliness < 4.5 to the right, improve=0.5813187, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=0.4454545, (0 missing)  
## Surrogate splits:  
## Inflight.service < 2.5 to the left, agree=0.85, adj=0.7, (0 split)  
## Age < 34.5 to the right, agree=0.80, adj=0.6, (0 split)  
## Gate.location < 2.5 to the left, agree=0.75, adj=0.5, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.75, adj=0.5, (0 split)  
## Inflight.entertainment < 3 to the left, agree=0.75, adj=0.5, (0 split)  
##   
## Node number 6728508: 333 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3393393 P(node) =0.0033684  
## class counts: 220 113  
## probabilities: 0.661 0.339   
## left son=13457016 (157 obs) right son=13457017 (176 obs)  
## Primary splits:  
## Flight.Distance < 522.5 to the right, improve=1.2760870, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.0458860, (0 missing)  
## Seat.comfort < 1.5 to the left, improve=0.9504113, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.8115236, (0 missing)  
## Leg.room.service < 1.5 to the left, improve=0.5916829, (0 missing)  
## Surrogate splits:  
## Seat.comfort < 2.5 to the left, agree=0.556, adj=0.057, (0 split)  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.541, adj=0.025, (0 split)  
## Gate.location < 3.5 to the right, agree=0.541, adj=0.025, (0 split)  
## Ease.of.Online.booking < 3.5 to the left, agree=0.538, adj=0.019, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.538, adj=0.019, (0 split)  
##   
## Node number 6728509: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583   
##   
## Node number 6728510: 18 observations  
## predicted class=0 expected loss=0.2777778 P(node) =0.0001820757  
## class counts: 13 5  
## probabilities: 0.722 0.278   
##   
## Node number 6728511: 13 observations  
## predicted class=1 expected loss=0.1538462 P(node) =0.0001314991  
## class counts: 2 11  
## probabilities: 0.154 0.846   
##   
## Node number 6728534: 24 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.4166667 P(node) =0.0002427676  
## class counts: 14 10  
## probabilities: 0.583 0.417   
## left son=13457068 (9 obs) right son=13457069 (15 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=2.6888890, (0 missing)  
## Flight.Distance < 482.5 to the left, improve=1.3333330, (0 missing)  
## Age < 54 to the left, improve=0.6736597, (0 missing)  
## Checkin.service < 3.5 to the left, improve=0.4666667, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.1666667, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.792, adj=0.444, (0 split)  
## Leg.room.service < 1.5 to the left, agree=0.792, adj=0.444, (0 split)  
## Flight.Distance < 143.5 to the left, agree=0.750, adj=0.333, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.750, adj=0.333, (0 split)  
## Arrival.Delay.in.Minutes < 1 to the right, agree=0.750, adj=0.333, (0 split)  
##   
## Node number 6728535: 10 observations  
## predicted class=1 expected loss=0.3 P(node) =0.0001011531  
## class counts: 3 7  
## probabilities: 0.300 0.700   
##   
## Node number 7496186: 29 observations, complexity param=5.998225e-05  
## predicted class=1 expected loss=0.4482759 P(node) =0.0002933441  
## class counts: 13 16  
## probabilities: 0.448 0.552   
## left son=14992372 (7 obs) right son=14992373 (22 obs)  
## Primary splits:  
## Flight.Distance < 1535.5 to the left, improve=3.085087, (0 missing)  
## Male < 0.5 to the left, improve=2.229443, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=1.609533, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.253918, (0 missing)  
## Baggage.handling < 2.5 to the right, improve=1.253918, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.793, adj=0.143, (0 split)  
## Inflight.entertainment < 2.5 to the right, agree=0.793, adj=0.143, (0 split)  
## Baggage.handling < 2.5 to the right, agree=0.793, adj=0.143, (0 split)  
##   
## Node number 7496187: 91 observations  
## predicted class=1 expected loss=0.1868132 P(node) =0.0009204936  
## class counts: 17 74  
## probabilities: 0.187 0.813   
##   
## Node number 7522242: 13 observations  
## predicted class=0 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 7 6  
## probabilities: 0.538 0.462   
##   
## Node number 7522243: 9 observations  
## predicted class=1 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 1 8  
## probabilities: 0.111 0.889   
##   
## Node number 8126558: 11 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 9 2  
## probabilities: 0.818 0.182   
##   
## Node number 8126559: 15 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001517297  
## class counts: 6 9  
## probabilities: 0.400 0.600   
##   
## Node number 8127196: 9 observations  
## predicted class=0 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 7 2  
## probabilities: 0.778 0.222   
##   
## Node number 8127197: 27 observations, complexity param=3.998816e-05  
## predicted class=1 expected loss=0.4074074 P(node) =0.0002731135  
## class counts: 11 16  
## probabilities: 0.407 0.593   
## left son=16254394 (9 obs) right son=16254395 (18 obs)  
## Primary splits:  
## Age < 39.5 to the left, improve=3.703704, (0 missing)  
## Ease.of.Online.booking < 1.5 to the left, improve=2.719390, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=2.370370, (0 missing)  
## Gate.location < 2.5 to the left, improve=2.370370, (0 missing)  
## Inflight.service < 3.5 to the left, improve=1.366449, (0 missing)  
## Surrogate splits:  
## Male < 0.5 to the left, agree=0.815, adj=0.444, (0 split)  
## Arrival.Delay.in.Minutes < 6.5 to the right, agree=0.704, adj=0.111, (0 split)  
##   
## Node number 8127282: 10 observations  
## predicted class=0 expected loss=0.2 P(node) =0.0001011531  
## class counts: 8 2  
## probabilities: 0.800 0.200   
##   
## Node number 8127283: 25 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.48 P(node) =0.0002528829  
## class counts: 12 13  
## probabilities: 0.480 0.520   
## left son=16254566 (7 obs) right son=16254567 (18 obs)  
## Primary splits:  
## Flight.Distance < 387.5 to the left, improve=1.0673020, (0 missing)  
## Male < 0.5 to the left, improve=0.4947059, (0 missing)  
## Age < 45.5 to the right, improve=0.4928205, (0 missing)  
## Checkin.service < 1.5 to the left, improve=0.2133333, (0 missing)  
## Inflight.service < 3.5 to the right, improve=0.1851282, (0 missing)  
## Surrogate splits:  
## EcoClass < 0.5 to the left, agree=0.80, adj=0.286, (0 split)  
## Arrival.Delay.in.Minutes < 1 to the right, agree=0.76, adj=0.143, (0 split)  
##   
## Node number 8257818: 11 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 9 2  
## probabilities: 0.818 0.182   
##   
## Node number 8257819: 41 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.4390244 P(node) =0.0004147279  
## class counts: 18 23  
## probabilities: 0.439 0.561   
## left son=16515638 (9 obs) right son=16515639 (32 obs)  
## Primary splits:  
## Ease.of.Online.booking < 4.5 to the right, improve=1.1951220, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.9617886, (0 missing)  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=0.7453865, (0 missing)  
## EcoClass < 0.5 to the left, improve=0.7453865, (0 missing)  
## Gate.location < 4.5 to the right, improve=0.6854445, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.976, adj=0.889, (0 split)  
## Gate.location < 4.5 to the right, agree=0.976, adj=0.889, (0 split)  
## Flight.Distance < 590.5 to the right, agree=0.829, adj=0.222, (0 split)  
##   
## Node number 13383594: 82 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.2560976 P(node) =0.0008294558  
## class counts: 61 21  
## probabilities: 0.744 0.256   
## left son=26767188 (62 obs) right son=26767189 (20 obs)  
## Primary splits:  
## Age < 52.5 to the left, improve=1.0955150, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.8755134, (0 missing)  
## Flight.Distance < 311.5 to the right, improve=0.6588684, (0 missing)  
## Seat.comfort < 2.5 to the left, improve=0.6588684, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=0.6175288, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.768, adj=0.05, (0 split)  
## Inflight.service < 4.5 to the left, agree=0.768, adj=0.05, (0 split)  
## Departure.Delay.in.Minutes < 6 to the left, agree=0.768, adj=0.05, (0 split)  
##   
## Node number 13383595: 84 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3690476 P(node) =0.0008496864  
## class counts: 53 31  
## probabilities: 0.631 0.369   
## left son=26767190 (26 obs) right son=26767191 (58 obs)  
## Primary splits:  
## Age < 44.5 to the right, improve=1.4400030, (0 missing)  
## On.board.service < 3.5 to the right, improve=1.3412700, (0 missing)  
## Flight.Distance < 492 to the left, improve=1.1585210, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=0.8333333, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=0.7877898, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 3.5 to the right, agree=0.762, adj=0.231, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.726, adj=0.115, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.702, adj=0.038, (0 split)  
## On.board.service < 4.5 to the right, agree=0.702, adj=0.038, (0 split)  
##   
## Node number 13383598: 13 observations  
## predicted class=0 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 8 5  
## probabilities: 0.615 0.385   
##   
## Node number 13383599: 14 observations  
## predicted class=1 expected loss=0.2142857 P(node) =0.0001416144  
## class counts: 3 11  
## probabilities: 0.214 0.786   
##   
## Node number 13457014: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 13457015: 10 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001011531  
## class counts: 2 8  
## probabilities: 0.200 0.800   
##   
## Node number 13457016: 157 observations, complexity param=2.999112e-05  
## predicted class=0 expected loss=0.2929936 P(node) =0.001588104  
## class counts: 111 46  
## probabilities: 0.707 0.293   
## left son=26914032 (125 obs) right son=26914033 (32 obs)  
## Primary splits:  
## Age < 27.5 to the right, improve=1.6785860, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=1.2025690, (0 missing)  
## Gate.location < 1.5 to the right, improve=1.0545680, (0 missing)  
## Online.boarding < 4.5 to the right, improve=0.8455250, (0 missing)  
## On.board.service < 3.5 to the left, improve=0.8245213, (0 missing)  
##   
## Node number 13457017: 176 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.3806818 P(node) =0.001780295  
## class counts: 109 67  
## probabilities: 0.619 0.381   
## left son=26914034 (119 obs) right son=26914035 (57 obs)  
## Primary splits:  
## Flight.Distance < 407.5 to the left, improve=4.489447, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=2.913900, (0 missing)  
## Online.boarding < 4.5 to the left, improve=2.106523, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.570372, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.412744, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.688, adj=0.035, (0 split)  
##   
## Node number 13457068: 9 observations  
## predicted class=0 expected loss=0.1111111 P(node) =9.103783e-05  
## class counts: 8 1  
## probabilities: 0.889 0.111   
##   
## Node number 13457069: 15 observations  
## predicted class=1 expected loss=0.4 P(node) =0.0001517297  
## class counts: 6 9  
## probabilities: 0.400 0.600   
##   
## Node number 14992372: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 14992373: 22 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3181818 P(node) =0.0002225369  
## class counts: 7 15  
## probabilities: 0.318 0.682   
## left son=29984746 (7 obs) right son=29984747 (15 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=1.3168830, (0 missing)  
## Arrival.Delay.in.Minutes < 3.5 to the right, improve=1.3061380, (0 missing)  
## Flight.Distance < 2743 to the right, improve=1.2121210, (0 missing)  
## Age < 37.5 to the right, improve=0.8181818, (0 missing)  
## Male < 0.5 to the left, improve=0.8181818, (0 missing)  
##   
## Node number 16254394: 9 observations  
## predicted class=0 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 7 2  
## probabilities: 0.778 0.222   
##   
## Node number 16254395: 18 observations  
## predicted class=1 expected loss=0.2222222 P(node) =0.0001820757  
## class counts: 4 14  
## probabilities: 0.222 0.778   
##   
## Node number 16254566: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 16254567: 18 observations  
## predicted class=1 expected loss=0.3888889 P(node) =0.0001820757  
## class counts: 7 11  
## probabilities: 0.389 0.611   
##   
## Node number 16515638: 9 observations  
## predicted class=0 expected loss=0.3333333 P(node) =9.103783e-05  
## class counts: 6 3  
## probabilities: 0.667 0.333   
##   
## Node number 16515639: 32 observations, complexity param=5.598343e-05  
## predicted class=1 expected loss=0.375 P(node) =0.0003236901  
## class counts: 12 20  
## probabilities: 0.375 0.625   
## left son=33031278 (20 obs) right son=33031279 (12 obs)  
## Primary splits:  
## Flight.Distance < 361.5 to the right, improve=1.6666670, (0 missing)  
## Arrival.Delay.in.Minutes < 0.5 to the right, improve=1.0000000, (0 missing)  
## Leg.room.service < 3.5 to the left, improve=0.9109312, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve=0.6627451, (0 missing)  
## Gate.location < 2.5 to the left, improve=0.6627451, (0 missing)  
## Surrogate splits:  
## Age < 52.5 to the left, agree=0.656, adj=0.083, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.656, adj=0.083, (0 split)  
##   
## Node number 26767188: 62 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.2096774 P(node) =0.0006271495  
## class counts: 49 13  
## probabilities: 0.790 0.210   
## left son=53534376 (40 obs) right son=53534377 (22 obs)  
## Primary splits:  
## Age < 19.5 to the right, improve=1.6165690, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.9293395, (0 missing)  
## Departure.Arrival.time.convenient < 3.5 to the right, improve=0.9257456, (0 missing)  
## Flight.Distance < 384.5 to the left, improve=0.8029326, (0 missing)  
## Food.and.drink < 2.5 to the left, improve=0.6169305, (0 missing)  
## Surrogate splits:  
## Leg.room.service < 1.5 to the right, agree=0.694, adj=0.136, (0 split)  
## Arrival.Delay.in.Minutes < 0.5 to the left, agree=0.677, adj=0.091, (0 split)  
## Flight.Distance < 213.5 to the right, agree=0.661, adj=0.045, (0 split)  
## BusinessClass < 0.5 to the left, agree=0.661, adj=0.045, (0 split)  
##   
## Node number 26767189: 20 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.4 P(node) =0.0002023063  
## class counts: 12 8  
## probabilities: 0.600 0.400   
## left son=53534378 (11 obs) right son=53534379 (9 obs)  
## Primary splits:  
## Flight.Distance < 314.5 to the right, improve=4.670707, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.350000, (0 missing)  
## Inflight.service < 2.5 to the left, improve=1.034343, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.632967, (0 missing)  
## Age < 63.5 to the right, improve=0.600000, (0 missing)  
## Surrogate splits:  
## Checkin.service < 3.5 to the left, agree=0.75, adj=0.444, (0 split)  
## Departure.Arrival.time.convenient < 0.5 to the right, agree=0.65, adj=0.222, (0 split)  
## Seat.comfort < 2.5 to the left, agree=0.65, adj=0.222, (0 split)  
## Baggage.handling < 2.5 to the left, agree=0.65, adj=0.222, (0 split)  
## Inflight.service < 1.5 to the right, agree=0.65, adj=0.222, (0 split)  
##   
## Node number 26767190: 26 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.2307692 P(node) =0.0002629982  
## class counts: 20 6  
## probabilities: 0.769 0.231   
## left son=53534380 (19 obs) right son=53534381 (7 obs)  
## Primary splits:  
## Flight.Distance < 293 to the right, improve=2.2232500, (0 missing)  
## Age < 56.5 to the left, improve=1.2307690, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.9688645, (0 missing)  
## On.board.service < 2.5 to the right, improve=0.7495662, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.3941679, (0 missing)  
## Surrogate splits:  
## Age < 64 to the left, agree=0.808, adj=0.286, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.808, adj=0.286, (0 split)  
##   
## Node number 26767191: 58 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.4310345 P(node) =0.0005866882  
## class counts: 33 25  
## probabilities: 0.569 0.431   
## left son=53534382 (51 obs) right son=53534383 (7 obs)  
## Primary splits:  
## Flight.Distance < 492 to the left, improve=1.2774080, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=1.1885920, (0 missing)  
## Leg.room.service < 1.5 to the right, improve=0.6982759, (0 missing)  
## On.board.service < 3.5 to the right, improve=0.6955486, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=0.6284560, (0 missing)  
##   
## Node number 26914032: 125 observations, complexity param=2.999112e-05  
## predicted class=0 expected loss=0.256 P(node) =0.001264414  
## class counts: 93 32  
## probabilities: 0.744 0.256   
## left son=53828064 (105 obs) right son=53828065 (20 obs)  
## Primary splits:  
## Gate.location < 1.5 to the right, improve=1.7921900, (0 missing)  
## Flight.Distance < 548.5 to the left, improve=1.2711720, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.7491269, (0 missing)  
## Age < 53.5 to the right, improve=0.5350476, (0 missing)  
## Cleanliness < 4.5 to the left, improve=0.5279304, (0 missing)  
##   
## Node number 26914033: 32 observations, complexity param=2.999112e-05  
## predicted class=0 expected loss=0.4375 P(node) =0.0003236901  
## class counts: 18 14  
## probabilities: 0.562 0.437   
## left son=53828066 (16 obs) right son=53828067 (16 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=1.0000000, (0 missing)  
## Seat.comfort < 4.5 to the right, improve=1.0000000, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.0000000, (0 missing)  
## Cleanliness < 4.5 to the right, improve=1.0000000, (0 missing)  
## Checkin.service < 4.5 to the left, improve=0.7681818, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Cleanliness < 4.5 to the right, agree=1.000, adj=1.000, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.812, adj=0.625, (0 split)  
## Flight.Distance < 835 to the right, agree=0.781, adj=0.562, (0 split)  
## Age < 19.5 to the left, agree=0.656, adj=0.312, (0 split)  
##   
## Node number 26914034: 119 observations, complexity param=3.598935e-05  
## predicted class=0 expected loss=0.302521 P(node) =0.001203722  
## class counts: 83 36  
## probabilities: 0.697 0.303   
## left son=53828068 (111 obs) right son=53828069 (8 obs)  
## Primary splits:  
## Online.boarding < 4.5 to the left, improve=3.434704, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=2.872427, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.210324, (0 missing)  
## Age < 31.5 to the left, improve=1.205770, (0 missing)  
## Gate.location < 1.5 to the left, improve=1.118487, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 3.5 to the right, agree=0.941, adj=0.125, (0 split)  
##   
## Node number 26914035: 57 observations, complexity param=3.598935e-05  
## predicted class=1 expected loss=0.4561404 P(node) =0.0005765729  
## class counts: 26 31  
## probabilities: 0.456 0.544   
## left son=53828070 (21 obs) right son=53828071 (36 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the right, improve=1.764829, (0 missing)  
## Food.and.drink < 4.5 to the right, improve=1.650702, (0 missing)  
## Seat.comfort < 3.5 to the left, improve=1.607232, (0 missing)  
## Leg.room.service < 4.5 to the right, improve=1.442404, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.156632, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.702, adj=0.190, (0 split)  
## Gate.location < 4.5 to the right, agree=0.702, adj=0.190, (0 split)  
## On.board.service < 4.5 to the right, agree=0.702, adj=0.190, (0 split)  
## Age < 18.5 to the left, agree=0.667, adj=0.095, (0 split)  
## Leg.room.service < 4.5 to the right, agree=0.667, adj=0.095, (0 split)  
##   
## Node number 29984746: 7 observations  
## predicted class=0 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 4 3  
## probabilities: 0.571 0.429   
##   
## Node number 29984747: 15 observations  
## predicted class=1 expected loss=0.2 P(node) =0.0001517297  
## class counts: 3 12  
## probabilities: 0.200 0.800   
##   
## Node number 33031278: 20 observations, complexity param=5.598343e-05  
## predicted class=0 expected loss=0.5 P(node) =0.0002023063  
## class counts: 10 10  
## probabilities: 0.500 0.500   
## left son=66062556 (7 obs) right son=66062557 (13 obs)  
## Primary splits:  
## Arrival.Delay.in.Minutes < 7.5 to the right, improve=2.747253, (0 missing)  
## Ease.of.Online.booking < 2.5 to the left, improve=2.525253, (0 missing)  
## Gate.location < 2.5 to the left, improve=1.666667, (0 missing)  
## On.board.service < 3.5 to the left, improve=1.666667, (0 missing)  
## Baggage.handling < 3.5 to the left, improve=1.666667, (0 missing)  
## Surrogate splits:  
## Departure.Delay.in.Minutes < 10 to the right, agree=0.95, adj=0.857, (0 split)  
##   
## Node number 33031279: 12 observations  
## predicted class=1 expected loss=0.1666667 P(node) =0.0001213838  
## class counts: 2 10  
## probabilities: 0.167 0.833   
##   
## Node number 53534376: 40 observations  
## predicted class=0 expected loss=0.125 P(node) =0.0004046126  
## class counts: 35 5  
## probabilities: 0.875 0.125   
##   
## Node number 53534377: 22 observations, complexity param=1.199645e-05  
## predicted class=0 expected loss=0.3636364 P(node) =0.0002225369  
## class counts: 14 8  
## probabilities: 0.636 0.364   
## left son=107068754 (11 obs) right son=107068755 (11 obs)  
## Primary splits:  
## Flight.Distance < 335 to the left, improve=1.4545450, (0 missing)  
## Checkin.service < 1.5 to the left, improve=1.0008660, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the left, improve=0.9818182, (0 missing)  
## Age < 12.5 to the left, improve=0.6818182, (0 missing)  
## On.board.service < 2.5 to the left, improve=0.6091686, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.682, adj=0.364, (0 split)  
## Age < 11.5 to the right, agree=0.636, adj=0.273, (0 split)  
## Gate.location < 2.5 to the left, agree=0.636, adj=0.273, (0 split)  
## Departure.Arrival.time.convenient < 2.5 to the right, agree=0.591, adj=0.182, (0 split)  
## On.board.service < 3.5 to the right, agree=0.591, adj=0.182, (0 split)  
##   
## Node number 53534378: 11 observations  
## predicted class=0 expected loss=0.09090909 P(node) =0.0001112685  
## class counts: 10 1  
## probabilities: 0.909 0.091   
##   
## Node number 53534379: 9 observations  
## predicted class=1 expected loss=0.2222222 P(node) =9.103783e-05  
## class counts: 2 7  
## probabilities: 0.222 0.778   
##   
## Node number 53534380: 19 observations  
## predicted class=0 expected loss=0.1052632 P(node) =0.000192191  
## class counts: 17 2  
## probabilities: 0.895 0.105   
##   
## Node number 53534381: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 53534382: 51 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.3921569 P(node) =0.000515881  
## class counts: 31 20  
## probabilities: 0.608 0.392   
## left son=107068764 (8 obs) right son=107068765 (43 obs)  
## Primary splits:  
## Flight.Distance < 400 to the right, improve=2.9183770, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.8470588, (0 missing)  
## Age < 14.5 to the right, improve=0.5215177, (0 missing)  
## Food.and.drink < 1.5 to the left, improve=0.4901961, (0 missing)  
## Cleanliness < 1.5 to the left, improve=0.4901961, (0 missing)  
##   
## Node number 53534383: 7 observations  
## predicted class=1 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 2 5  
## probabilities: 0.286 0.714   
##   
## Node number 53828064: 105 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.2190476 P(node) =0.001062108  
## class counts: 82 23  
## probabilities: 0.781 0.219   
## left son=107656128 (24 obs) right son=107656129 (81 obs)  
## Primary splits:  
## Flight.Distance < 588.5 to the left, improve=1.1460320, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.6100840, (0 missing)  
## Cleanliness < 4.5 to the left, improve=0.5717687, (0 missing)  
## Age < 53.5 to the right, improve=0.5061850, (0 missing)  
## Leg.room.service < 4.5 to the left, improve=0.3539171, (0 missing)  
##   
## Node number 53828065: 20 observations, complexity param=2.999112e-05  
## predicted class=0 expected loss=0.45 P(node) =0.0002023063  
## class counts: 11 9  
## probabilities: 0.550 0.450   
## left son=107656130 (7 obs) right son=107656131 (13 obs)  
## Primary splits:  
## Age < 48.5 to the right, improve=2.0318680, (0 missing)  
## Male < 0.5 to the left, improve=1.6979800, (0 missing)  
## Baggage.handling < 4.5 to the left, improve=0.9000000, (0 missing)  
## Inflight.service < 4.5 to the right, improve=0.5813187, (0 missing)  
## Departure.Arrival.time.convenient < 4.5 to the left, improve=0.3646465, (0 missing)  
##   
## Node number 53828066: 16 observations  
## predicted class=0 expected loss=0.3125 P(node) =0.000161845  
## class counts: 11 5  
## probabilities: 0.688 0.312   
##   
## Node number 53828067: 16 observations  
## predicted class=1 expected loss=0.4375 P(node) =0.000161845  
## class counts: 7 9  
## probabilities: 0.437 0.562   
##   
## Node number 53828068: 111 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.2702703 P(node) =0.0011228  
## class counts: 81 30  
## probabilities: 0.730 0.270   
## left son=107656136 (43 obs) right son=107656137 (68 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=2.3993790, (0 missing)  
## Cleanliness < 4.5 to the right, improve=2.1937220, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.8021010, (0 missing)  
## Checkin.service < 4.5 to the right, improve=1.3245760, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.9910487, (0 missing)  
## Surrogate splits:  
## Cleanliness < 4.5 to the right, agree=0.955, adj=0.884, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.937, adj=0.837, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.874, adj=0.674, (0 split)  
## Baggage.handling < 3.5 to the left, agree=0.667, adj=0.140, (0 split)  
## Age < 57.5 to the right, agree=0.640, adj=0.070, (0 split)  
##   
## Node number 53828069: 8 observations  
## predicted class=1 expected loss=0.25 P(node) =8.092252e-05  
## class counts: 2 6  
## probabilities: 0.250 0.750   
##   
## Node number 53828070: 21 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.3809524 P(node) =0.0002124216  
## class counts: 13 8  
## probabilities: 0.619 0.381   
## left son=107656140 (8 obs) right son=107656141 (13 obs)  
## Primary splits:  
## Age < 39.5 to the left, improve=1.6932230, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=1.5393770, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.9603175, (0 missing)  
## Male < 0.5 to the right, improve=0.9603175, (0 missing)  
## Flight.Distance < 478.5 to the left, improve=0.3663004, (0 missing)  
## Surrogate splits:  
## Food.and.drink < 4.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Inflight.entertainment < 4.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Leg.room.service < 2.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Inflight.service < 3.5 to the left, agree=0.714, adj=0.250, (0 split)  
## Flight.Distance < 478.5 to the left, agree=0.667, adj=0.125, (0 split)  
##   
## Node number 53828071: 36 observations, complexity param=2.39929e-05  
## predicted class=1 expected loss=0.3611111 P(node) =0.0003641513  
## class counts: 13 23  
## probabilities: 0.361 0.639   
## left son=107656142 (19 obs) right son=107656143 (17 obs)  
## Primary splits:  
## Food.and.drink < 4.5 to the right, improve=2.1962500, (0 missing)  
## Inflight.entertainment < 4.5 to the right, improve=1.3888890, (0 missing)  
## Checkin.service < 3.5 to the left, improve=1.1111110, (0 missing)  
## Age < 28.5 to the right, improve=1.0183840, (0 missing)  
## Flight.Distance < 500.5 to the left, improve=0.8278599, (0 missing)  
## Surrogate splits:  
## Inflight.entertainment < 4.5 to the right, agree=0.917, adj=0.824, (0 split)  
## Cleanliness < 4.5 to the right, agree=0.889, adj=0.765, (0 split)  
## Seat.comfort < 4.5 to the right, agree=0.778, adj=0.529, (0 split)  
## Leg.room.service < 3.5 to the left, agree=0.694, adj=0.353, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.667, adj=0.294, (0 split)  
##   
## Node number 66062556: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 66062557: 13 observations  
## predicted class=1 expected loss=0.3076923 P(node) =0.0001314991  
## class counts: 4 9  
## probabilities: 0.308 0.692   
##   
## Node number 107068754: 11 observations  
## predicted class=0 expected loss=0.1818182 P(node) =0.0001112685  
## class counts: 9 2  
## probabilities: 0.818 0.182   
##   
## Node number 107068755: 11 observations  
## predicted class=1 expected loss=0.4545455 P(node) =0.0001112685  
## class counts: 5 6  
## probabilities: 0.455 0.545   
##   
## Node number 107068764: 8 observations  
## predicted class=0 expected loss=0 P(node) =8.092252e-05  
## class counts: 8 0  
## probabilities: 1.000 0.000   
##   
## Node number 107068765: 43 observations, complexity param=2.879148e-05  
## predicted class=0 expected loss=0.4651163 P(node) =0.0004349585  
## class counts: 23 20  
## probabilities: 0.535 0.465   
## left son=214137530 (25 obs) right son=214137531 (18 obs)  
## Primary splits:  
## Flight.Distance < 322 to the left, improve=2.5153490, (0 missing)  
## Inflight.entertainment < 2.5 to the right, improve=1.0753490, (0 missing)  
## Age < 22.5 to the right, improve=0.8523624, (0 missing)  
## Departure.Arrival.time.convenient < 2.5 to the right, improve=0.8415027, (0 missing)  
## Food.and.drink < 2.5 to the right, improve=0.7075660, (0 missing)  
## Surrogate splits:  
## On.board.service < 3.5 to the right, agree=0.674, adj=0.222, (0 split)  
## Male < 0.5 to the left, agree=0.674, adj=0.222, (0 split)  
## Leg.room.service < 1.5 to the right, agree=0.651, adj=0.167, (0 split)  
## Age < 16.5 to the right, agree=0.628, adj=0.111, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the right, agree=0.628, adj=0.111, (0 split)  
##   
## Node number 107656128: 24 observations  
## predicted class=0 expected loss=0.08333333 P(node) =0.0002427676  
## class counts: 22 2  
## probabilities: 0.917 0.083   
##   
## Node number 107656129: 81 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.2592593 P(node) =0.0008193405  
## class counts: 60 21  
## probabilities: 0.741 0.259   
## left son=215312258 (71 obs) right son=215312259 (10 obs)  
## Primary splits:  
## Flight.Distance < 627 to the right, improve=1.3223790, (0 missing)  
## Age < 53.5 to the right, improve=0.8719807, (0 missing)  
## Online.boarding < 4.5 to the right, improve=0.7215007, (0 missing)  
## Food.and.drink < 4.5 to the left, improve=0.6830623, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.5341880, (0 missing)  
##   
## Node number 107656130: 7 observations  
## predicted class=0 expected loss=0.1428571 P(node) =7.08072e-05  
## class counts: 6 1  
## probabilities: 0.857 0.143   
##   
## Node number 107656131: 13 observations  
## predicted class=1 expected loss=0.3846154 P(node) =0.0001314991  
## class counts: 5 8  
## probabilities: 0.385 0.615   
##   
## Node number 107656136: 43 observations  
## predicted class=0 expected loss=0.1395349 P(node) =0.0004349585  
## class counts: 37 6  
## probabilities: 0.860 0.140   
##   
## Node number 107656137: 68 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.3529412 P(node) =0.0006878414  
## class counts: 44 24  
## probabilities: 0.647 0.353   
## left son=215312274 (23 obs) right son=215312275 (45 obs)  
## Primary splits:  
## Checkin.service < 4.5 to the right, improve=2.2279060, (0 missing)  
## Inflight.service < 2.5 to the right, improve=1.3421570, (0 missing)  
## Leg.room.service < 3.5 to the right, improve=1.3237590, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=1.2566260, (0 missing)  
## Male < 0.5 to the left, improve=0.7991744, (0 missing)  
## Surrogate splits:  
## Departure.Arrival.time.convenient < 4.5 to the right, agree=0.706, adj=0.130, (0 split)  
## Flight.Distance < 92 to the left, agree=0.691, adj=0.087, (0 split)  
##   
## Node number 107656140: 8 observations  
## predicted class=0 expected loss=0.125 P(node) =8.092252e-05  
## class counts: 7 1  
## probabilities: 0.875 0.125   
##   
## Node number 107656141: 13 observations  
## predicted class=1 expected loss=0.4615385 P(node) =0.0001314991  
## class counts: 6 7  
## probabilities: 0.462 0.538   
##   
## Node number 107656142: 19 observations  
## predicted class=0 expected loss=0.4736842 P(node) =0.000192191  
## class counts: 10 9  
## probabilities: 0.526 0.474   
##   
## Node number 107656143: 17 observations  
## predicted class=1 expected loss=0.1764706 P(node) =0.0001719603  
## class counts: 3 14  
## probabilities: 0.176 0.824   
##   
## Node number 214137530: 25 observations  
## predicted class=0 expected loss=0.32 P(node) =0.0002528829  
## class counts: 17 8  
## probabilities: 0.680 0.320   
##   
## Node number 214137531: 18 observations  
## predicted class=1 expected loss=0.3333333 P(node) =0.0001820757  
## class counts: 6 12  
## probabilities: 0.333 0.667   
##   
## Node number 215312258: 71 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.2253521 P(node) =0.0007181873  
## class counts: 55 16  
## probabilities: 0.775 0.225   
## left son=430624516 (31 obs) right son=430624517 (40 obs)  
## Primary splits:  
## Checkin.service < 3.5 to the left, improve=1.0209900, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.8073000, (0 missing)  
## Age < 52.5 to the right, improve=0.5825177, (0 missing)  
## Flight.Distance < 947 to the right, improve=0.5825177, (0 missing)  
## Online.boarding < 4.5 to the right, improve=0.4705506, (0 missing)  
## Surrogate splits:  
## Inflight.service < 3.5 to the left, agree=0.662, adj=0.226, (0 split)  
## Gate.location < 2.5 to the left, agree=0.648, adj=0.194, (0 split)  
## Flight.Distance < 748.5 to the right, agree=0.620, adj=0.129, (0 split)  
## Age < 36.5 to the left, agree=0.606, adj=0.097, (0 split)  
## Departure.Arrival.time.convenient < 3.5 to the left, agree=0.606, adj=0.097, (0 split)  
##   
## Node number 215312259: 10 observations  
## predicted class=0 expected loss=0.5 P(node) =0.0001011531  
## class counts: 5 5  
## probabilities: 0.500 0.500   
##   
## Node number 215312274: 23 observations, complexity param=2.39929e-05  
## predicted class=0 expected loss=0.173913 P(node) =0.0002326522  
## class counts: 19 4  
## probabilities: 0.826 0.174   
## left son=430624548 (16 obs) right son=430624549 (7 obs)  
## Primary splits:  
## Flight.Distance < 225 to the right, improve=3.1801240, (0 missing)  
## Male < 0.5 to the left, improve=0.8944099, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.7420290, (0 missing)  
## Gate.location < 2.5 to the right, improve=0.4117260, (0 missing)  
## Inflight.service < 4.5 to the left, improve=0.2905138, (0 missing)  
## Surrogate splits:  
## Gate.location < 4.5 to the left, agree=0.739, adj=0.143, (0 split)  
##   
## Node number 215312275: 45 observations, complexity param=3.199053e-05  
## predicted class=0 expected loss=0.4444444 P(node) =0.0004551892  
## class counts: 25 20  
## probabilities: 0.556 0.444   
## left son=430624550 (21 obs) right son=430624551 (24 obs)  
## Primary splits:  
## Leg.room.service < 3.5 to the right, improve=1.9841270, (0 missing)  
## Flight.Distance < 231 to the left, improve=1.2348270, (0 missing)  
## Inflight.service < 4.5 to the left, improve=1.0888890, (0 missing)  
## Age < 45 to the left, improve=1.0724900, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.7407407, (0 missing)  
## Surrogate splits:  
## Age < 47 to the left, agree=0.644, adj=0.238, (0 split)  
## Flight.Distance < 248.5 to the left, agree=0.622, adj=0.190, (0 split)  
## Inflight.entertainment < 4.5 to the right, agree=0.622, adj=0.190, (0 split)  
## Baggage.handling < 4.5 to the right, agree=0.622, adj=0.190, (0 split)  
## On.board.service < 4.5 to the right, agree=0.600, adj=0.143, (0 split)  
##   
## Node number 430624516: 31 observations  
## predicted class=0 expected loss=0.1290323 P(node) =0.0003135748  
## class counts: 27 4  
## probabilities: 0.871 0.129   
##   
## Node number 430624517: 40 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.3 P(node) =0.0004046126  
## class counts: 28 12  
## probabilities: 0.700 0.300   
## left son=861249034 (18 obs) right son=861249035 (22 obs)  
## Primary splits:  
## Male < 0.5 to the left, improve=2.3353540, (0 missing)  
## Online.boarding < 4.5 to the right, improve=1.5272730, (0 missing)  
## Age < 52.5 to the right, improve=0.8286738, (0 missing)  
## Flight.Distance < 788 to the left, improve=0.8000000, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.8000000, (0 missing)  
## Surrogate splits:  
## Flight.Distance < 681.5 to the left, agree=0.725, adj=0.389, (0 split)  
## Online.boarding < 4.5 to the right, agree=0.725, adj=0.389, (0 split)  
## Food.and.drink < 3.5 to the left, agree=0.675, adj=0.278, (0 split)  
## Age < 37.5 to the left, agree=0.650, adj=0.222, (0 split)  
## Inflight.service < 4.5 to the right, agree=0.650, adj=0.222, (0 split)  
##   
## Node number 430624548: 16 observations  
## predicted class=0 expected loss=0 P(node) =0.000161845  
## class counts: 16 0  
## probabilities: 1.000 0.000   
##   
## Node number 430624549: 7 observations  
## predicted class=1 expected loss=0.4285714 P(node) =7.08072e-05  
## class counts: 3 4  
## probabilities: 0.429 0.571   
##   
## Node number 430624550: 21 observations  
## predicted class=0 expected loss=0.2857143 P(node) =0.0002124216  
## class counts: 15 6  
## probabilities: 0.714 0.286   
##   
## Node number 430624551: 24 observations, complexity param=3.199053e-05  
## predicted class=1 expected loss=0.4166667 P(node) =0.0002427676  
## class counts: 10 14  
## probabilities: 0.417 0.583   
## left son=861249102 (7 obs) right son=861249103 (17 obs)  
## Primary splits:  
## Baggage.handling < 4.5 to the right, improve=1.7507000, (0 missing)  
## Flight.Distance < 332.5 to the left, improve=1.4817930, (0 missing)  
## Gate.location < 2.5 to the right, improve=1.4817930, (0 missing)  
## Age < 33.5 to the left, improve=1.1523810, (0 missing)  
## Leg.room.service < 2.5 to the right, improve=0.3333333, (0 missing)  
## Surrogate splits:  
## On.board.service < 4.5 to the right, agree=0.792, adj=0.286, (0 split)  
## Age < 20.5 to the left, agree=0.750, adj=0.143, (0 split)  
## Flight.Distance < 400 to the right, agree=0.750, adj=0.143, (0 split)  
##   
## Node number 861249034: 18 observations  
## predicted class=0 expected loss=0.1111111 P(node) =0.0001820757  
## class counts: 16 2  
## probabilities: 0.889 0.111   
##   
## Node number 861249035: 22 observations, complexity param=9.597159e-06  
## predicted class=0 expected loss=0.4545455 P(node) =0.0002225369  
## class counts: 12 10  
## probabilities: 0.545 0.455   
## left son=1722498070 (10 obs) right son=1722498071 (12 obs)  
## Primary splits:  
## On.board.service < 3.5 to the left, improve=0.8757576, (0 missing)  
## Gate.location < 3.5 to the left, improve=0.7305195, (0 missing)  
## Baggage.handling < 4.5 to the right, improve=0.4475524, (0 missing)  
## Seat.comfort < 4.5 to the left, improve=0.3636364, (0 missing)  
## Age < 47.5 to the left, improve=0.3108003, (0 missing)  
## Surrogate splits:  
## Baggage.handling < 4.5 to the right, agree=0.682, adj=0.3, (0 split)  
## Age < 35 to the left, agree=0.636, adj=0.2, (0 split)  
## Flight.Distance < 866 to the left, agree=0.636, adj=0.2, (0 split)  
## Gate.location < 3.5 to the right, agree=0.636, adj=0.2, (0 split)  
## Food.and.drink < 4.5 to the right, agree=0.636, adj=0.2, (0 split)  
##   
## Node number 861249102: 7 observations  
## predicted class=0 expected loss=0.2857143 P(node) =7.08072e-05  
## class counts: 5 2  
## probabilities: 0.714 0.286   
##   
## Node number 861249103: 17 observations  
## predicted class=1 expected loss=0.2941176 P(node) =0.0001719603  
## class counts: 5 12  
## probabilities: 0.294 0.706   
##   
## Node number 1722498070: 10 observations  
## predicted class=0 expected loss=0.3 P(node) =0.0001011531  
## class counts: 7 3  
## probabilities: 0.700 0.300   
##   
## Node number 1722498071: 12 observations  
## predicted class=1 expected loss=0.4166667 P(node) =0.0001213838  
## class counts: 5 7  
## probabilities: 0.417 0.583

test$ct\_pred\_prob<-predict(ct\_model,test)[,2]  
test$ct\_pred\_class<-predict(ct\_model,test,type="class")  
  
table(test$ct\_pred\_class,test$Satisfied, dnn=c("predicted","actual"))

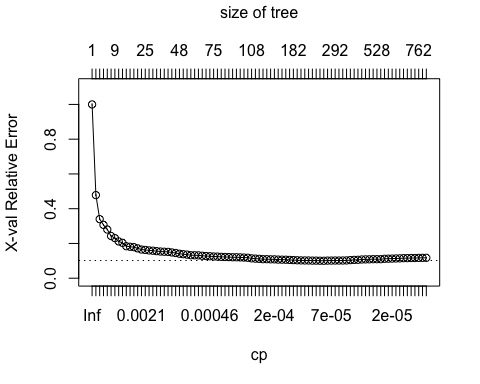
## actual  
## predicted 0 1  
## 0 13586 682  
## 1 546 9827

#K fold and tree pruning

printcp(ct\_model)

##   
## Classification tree:  
## rpart(formula = Satisfied ~ ., data = train, method = "class",   
## control = rpart.control(cp = 0))  
##   
## Variables actually used in tree construction:  
## [1] Age Arrival.Delay.in.Minutes   
## [3] Baggage.handling BusinessClass   
## [5] BusinessTravel Checkin.service   
## [7] Cleanliness Departure.Arrival.time.convenient  
## [9] Departure.Delay.in.Minutes Ease.of.Online.booking   
## [11] EcoClass Flight.Distance   
## [13] Food.and.drink Gate.location   
## [15] Inflight.entertainment Inflight.service   
## [17] Inflight.wifi.service Leg.room.service   
## [19] LoyalCustomer Male   
## [21] On.board.service Online.boarding   
## [23] Seat.comfort   
##   
## Root node error: 41679/98860 = 0.4216  
##   
## n= 98860   
##   
## CP nsplit rel error xerror xstd  
## 1 5.2173e-01 0 1.000000 1.00000 0.0037253  
## 2 1.3822e-01 1 0.478274 0.47827 0.0030268  
## 3 3.3158e-02 2 0.340051 0.34005 0.0026437  
## 4 2.6656e-02 3 0.306893 0.30689 0.0025319  
## 5 9.3972e-03 4 0.280237 0.28024 0.0024350  
## 6 8.8534e-03 7 0.252045 0.24288 0.0022871  
## 7 8.1096e-03 8 0.243192 0.23067 0.0022352  
## 8 7.1979e-03 11 0.211617 0.21162 0.0021504  
## 9 5.7703e-03 13 0.197222 0.20351 0.0021128  
## 10 3.4790e-03 15 0.185681 0.18419 0.0020189  
## 11 2.7592e-03 16 0.182202 0.18086 0.0020021  
## 12 2.7112e-03 19 0.173925 0.17865 0.0019909  
## 13 2.3753e-03 21 0.168502 0.17167 0.0019547  
## 14 1.7755e-03 23 0.163752 0.16507 0.0019196  
## 15 1.3916e-03 24 0.161976 0.16274 0.0019070  
## 16 1.2476e-03 25 0.160584 0.15994 0.0018917  
## 17 1.0557e-03 26 0.159337 0.15821 0.0018822  
## 18 1.0077e-03 30 0.154490 0.15569 0.0018682  
## 19 9.5972e-04 31 0.153483 0.15353 0.0018561  
## 20 9.3572e-04 34 0.150268 0.15235 0.0018495  
## 21 8.6374e-04 35 0.149332 0.15144 0.0018443  
## 22 7.2778e-04 36 0.148468 0.14825 0.0018261  
## 23 6.3341e-04 39 0.146285 0.14504 0.0018075  
## 24 5.7583e-04 47 0.138775 0.14079 0.0017825  
## 25 5.5184e-04 48 0.138199 0.13820 0.0017671  
## 26 5.1585e-04 49 0.137647 0.13575 0.0017523  
## 27 4.9185e-04 51 0.136616 0.13222 0.0017308  
## 28 4.8786e-04 53 0.135632 0.13198 0.0017293  
## 29 4.8586e-04 58 0.132849 0.13148 0.0017262  
## 30 4.7986e-04 66 0.127642 0.12925 0.0017123  
## 31 4.6786e-04 67 0.127162 0.12747 0.0017012  
## 32 4.5587e-04 70 0.125363 0.12637 0.0016942  
## 33 4.4387e-04 74 0.123539 0.12484 0.0016845  
## 34 4.3187e-04 76 0.122652 0.12440 0.0016817  
## 35 4.0788e-04 77 0.122220 0.12294 0.0016724  
## 36 3.6789e-04 78 0.121812 0.12210 0.0016670  
## 37 3.4790e-04 82 0.120276 0.12150 0.0016631  
## 38 3.4390e-04 84 0.119581 0.12049 0.0016565  
## 39 3.3590e-04 87 0.118549 0.12049 0.0016565  
## 40 3.1876e-04 91 0.117205 0.11972 0.0016515  
## 41 3.1191e-04 99 0.114302 0.11879 0.0016454  
## 42 2.8791e-04 102 0.113366 0.11769 0.0016381  
## 43 2.6392e-04 107 0.111927 0.11425 0.0016153  
## 44 2.5364e-04 112 0.110607 0.11262 0.0016043  
## 45 2.3993e-04 121 0.108280 0.11152 0.0015968  
## 46 2.3193e-04 131 0.105689 0.10948 0.0015829  
## 47 2.1594e-04 134 0.104993 0.10948 0.0015829  
## 48 2.0394e-04 136 0.104561 0.10862 0.0015769  
## 49 1.9194e-04 138 0.104153 0.10845 0.0015758  
## 50 1.7595e-04 150 0.101682 0.10715 0.0015668  
## 51 1.6795e-04 153 0.101154 0.10670 0.0015636  
## 52 1.5595e-04 167 0.098635 0.10641 0.0015616  
## 53 1.4396e-04 177 0.097075 0.10533 0.0015540  
## 54 1.3196e-04 181 0.096499 0.10423 0.0015462  
## 55 1.1996e-04 183 0.096236 0.10322 0.0015391  
## 56 1.1397e-04 193 0.095036 0.10245 0.0015336  
## 57 1.1097e-04 200 0.094076 0.10211 0.0015312  
## 58 1.0797e-04 208 0.093188 0.10202 0.0015305  
## 59 1.0397e-04 212 0.092757 0.10125 0.0015250  
## 60 9.5972e-05 215 0.092445 0.10125 0.0015250  
## 61 8.7974e-05 236 0.090333 0.10067 0.0015208  
## 62 8.3975e-05 240 0.089973 0.10041 0.0015189  
## 63 7.1979e-05 242 0.089805 0.10130 0.0015253  
## 64 6.7180e-05 280 0.086998 0.10147 0.0015265  
## 65 6.3981e-05 291 0.086230 0.10175 0.0015286  
## 66 5.9982e-05 313 0.084791 0.10173 0.0015284  
## 67 5.5983e-05 323 0.084191 0.10185 0.0015293  
## 68 5.2784e-05 336 0.083375 0.10233 0.0015327  
## 69 4.7986e-05 344 0.082871 0.10415 0.0015457  
## 70 4.1988e-05 404 0.079776 0.10542 0.0015547  
## 71 3.9988e-05 412 0.079440 0.10600 0.0015587  
## 72 3.7080e-05 430 0.078409 0.10763 0.0015701  
## 73 3.5989e-05 449 0.077497 0.10826 0.0015744  
## 74 3.1991e-05 501 0.074858 0.10864 0.0015771  
## 75 2.9991e-05 523 0.074090 0.10941 0.0015824  
## 76 2.8791e-05 527 0.073970 0.10943 0.0015825  
## 77 2.7420e-05 560 0.072746 0.10943 0.0015825  
## 78 2.3993e-05 567 0.072555 0.11181 0.0015988  
## 79 2.0565e-05 651 0.070419 0.11238 0.0016027  
## 80 1.9194e-05 659 0.070251 0.11289 0.0016061  
## 81 1.5995e-05 675 0.069891 0.11356 0.0016106  
## 82 1.4396e-05 712 0.069076 0.11421 0.0016150  
## 83 1.1996e-05 723 0.068908 0.11526 0.0016221  
## 84 9.5972e-06 735 0.068764 0.11545 0.0016233  
## 85 7.9976e-06 745 0.068668 0.11627 0.0016288  
## 86 5.9982e-06 757 0.068572 0.11625 0.0016286  
## 87 3.9988e-06 761 0.068548 0.11689 0.0016329  
## 88 2.3993e-06 767 0.068524 0.11725 0.0016353  
## 89 0.0000e+00 777 0.068500 0.11740 0.0016362

plotcp(ct\_model)

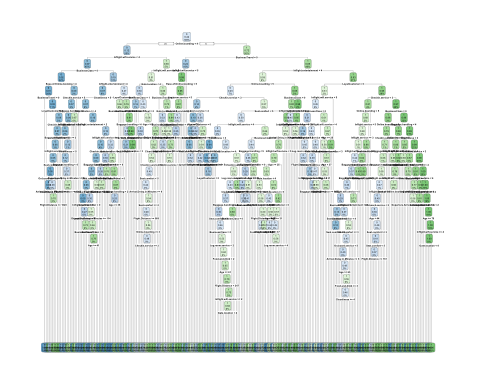


min\_xerror<-ct\_model$cptable[which.min(ct\_model$cptable[,"xerror"]),]  
min\_xerror

## CP nsplit rel error xerror xstd   
## 8.397514e-05 2.400000e+02 8.997337e-02 1.004103e-01 1.518930e-03

# prune tree with minimum cp value  
min\_xerror\_tree<-prune(ct\_model, cp=min\_xerror[1])  
rpart.plot(min\_xerror\_tree)

## Warning: labs do not fit even at cex 0.15, there may be some overplotting



bp\_tree<-min\_xerror\_tree  
test$ct\_bp\_pred\_prob<-predict(bp\_tree,test)[,2]  
test$ct\_bp\_pred\_class=ifelse(test$ct\_bp\_pred\_prob>0.5,"Yes","No")  
  
table(test$ct\_bp\_pred\_class==test$default) # error rate

## < table of extent 0 >

table(test$ct\_bp\_pred\_class,test$Satisfied, dnn=c("predicted","actual")) # confusion table on test data

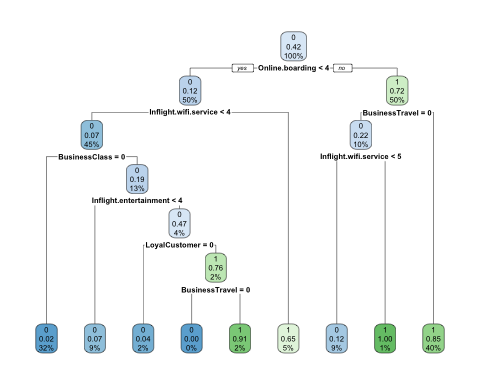
## actual  
## predicted 0 1  
## No 13762 735  
## Yes 370 9774

#The min xerror tree is still too complex to view as a manager. #Min xerror is 0.095708 at cp 7.4244e-05

trimmed\_model<-rpart(Satisfied~ .,   
 data= train,   
 method="class",  
 control = rpart.control(cp=8.3302e-03))   
  
test$ct\_pred\_prob\_trim<-predict(trimmed\_model,test)[,2]  
test$ct\_pred\_class\_trim<-predict(trimmed\_model,test,type="class")  
  
table(test$ct\_pred\_class\_trim,test$Satisfied, dnn=c("predicted","actual"))

## actual  
## predicted 0 1  
## 0 12159 583  
## 1 1973 9926

rpart.plot(trimmed\_model)



#Logistic

logit\_model<-glm(Satisfied ~. -Arrival.Delay.in.Minutes, family="binomial",data=train)  
summary(logit\_model)

##   
## Call:  
## glm(formula = Satisfied ~ . - Arrival.Delay.in.Minutes, family = "binomial",   
## data = train)  
##   
## Deviance Residuals:   
## Min 1Q Median 3Q Max   
## -3.3490 -0.2878 -0.0527 0.2873 3.8229   
##   
## Coefficients:  
## Estimate Std. Error z value Pr(>|z|)   
## (Intercept) -1.655e+01 1.343e-01 -123.226 < 2e-16 \*\*\*  
## Age -2.891e-03 8.544e-04 -3.384 0.000715 \*\*\*  
## Flight.Distance 2.938e-05 1.335e-05 2.200 0.027803 \*   
## Inflight.wifi.service 7.901e-01 1.434e-02 55.082 < 2e-16 \*\*\*  
## Departure.Arrival.time.convenient -2.806e-01 1.075e-02 -26.104 < 2e-16 \*\*\*  
## Ease.of.Online.booking 3.674e-01 1.494e-02 24.586 < 2e-16 \*\*\*  
## Gate.location -2.669e-01 1.257e-02 -21.237 < 2e-16 \*\*\*  
## Food.and.drink -4.798e-02 1.263e-02 -3.798 0.000146 \*\*\*  
## Online.boarding 9.216e-01 1.348e-02 68.393 < 2e-16 \*\*\*  
## Seat.comfort 2.437e-02 1.356e-02 1.798 0.072247 .   
## Inflight.entertainment 1.026e-01 1.724e-02 5.949 2.70e-09 \*\*\*  
## On.board.service 3.513e-01 1.239e-02 28.362 < 2e-16 \*\*\*  
## Leg.room.service 3.136e-01 1.062e-02 29.525 < 2e-16 \*\*\*  
## Baggage.handling 1.577e-01 1.383e-02 11.402 < 2e-16 \*\*\*  
## Checkin.service 3.479e-01 1.022e-02 34.041 < 2e-16 \*\*\*  
## Inflight.service 1.596e-01 1.445e-02 11.046 < 2e-16 \*\*\*  
## Cleanliness 2.418e-01 1.409e-02 17.167 < 2e-16 \*\*\*  
## Departure.Delay.in.Minutes -3.845e-03 3.045e-04 -12.627 < 2e-16 \*\*\*  
## Male 2.909e-02 2.342e-02 1.242 0.214205   
## LoyalCustomer 2.821e+00 3.917e-02 72.021 < 2e-16 \*\*\*  
## BusinessTravel 3.397e+00 4.002e-02 84.895 < 2e-16 \*\*\*  
## EcoClass 2.459e-01 4.915e-02 5.004 5.61e-07 \*\*\*  
## BusinessClass 1.111e+00 5.091e-02 21.828 < 2e-16 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## (Dispersion parameter for binomial family taken to be 1)  
##   
## Null deviance: 134608 on 98859 degrees of freedom  
## Residual deviance: 48610 on 98837 degrees of freedom  
## AIC: 48656  
##   
## Number of Fisher Scoring iterations: 7

test$logit\_pred\_prob<-predict(logit\_model,test,type="response")  
test$logit\_pred\_class<-ifelse(test$logit\_pred\_prob>0.5,"1","0")

table(test$logit\_pred\_class,test$Satisfied, dnn=c("predicted","actual"))

## actual  
## predicted 0 1  
## 0 12868 1245  
## 1 1264 9264

#Step wise regression

null\_model <- glm(Satisfied~1, data = train, family = "binomial")  
  
  
forward\_model <- step(null\_model, scope = list(lower = null\_model, upper = logit\_model), direction = "forward")

## Start: AIC=134610.2  
## Satisfied ~ 1  
##   
## Df Deviance AIC  
## + Online.boarding 1 96122 96126  
## + BusinessClass 1 107625 107629  
## + BusinessTravel 1 111129 111133  
## + EcoClass 1 112822 112826  
## + Inflight.entertainment 1 115148 115152  
## + Inflight.wifi.service 1 119296 119300  
## + Seat.comfort 1 120618 120622  
## + On.board.service 1 122388 122392  
## + Leg.room.service 1 122839 122843  
## + Cleanliness 1 124193 124197  
## + Flight.Distance 1 125173 125177  
## + Baggage.handling 1 127133 127137  
## + Inflight.service 1 127353 127357  
## + Ease.of.Online.booking 1 128604 128608  
## + Checkin.service 1 128797 128801  
## + Food.and.drink 1 129716 129720  
## + LoyalCustomer 1 130186 130190  
## + Age 1 132455 132459  
## + Departure.Delay.in.Minutes 1 134363 134367  
## + Departure.Arrival.time.convenient 1 134500 134504  
## + Male 1 134590 134594  
## <none> 134608 134610  
## + Gate.location 1 134606 134610  
##   
## Step: AIC=96126.31  
## Satisfied ~ Online.boarding  
##   
## Df Deviance AIC  
## + BusinessTravel 1 77395 77401  
## + BusinessClass 1 80673 80679  
## + EcoClass 1 83501 83507  
## + Inflight.entertainment 1 86130 86136  
## + Leg.room.service 1 86512 86518  
## + On.board.service 1 87707 87713  
## + Inflight.service 1 90127 90133  
## + Baggage.handling 1 90170 90176  
## + Flight.Distance 1 90871 90877  
## + Inflight.wifi.service 1 93036 93042  
## + Seat.comfort 1 94063 94069  
## + Cleanliness 1 94104 94110  
## + LoyalCustomer 1 94503 94509  
## + Checkin.service 1 94519 94525  
## + Food.and.drink 1 95263 95269  
## + Departure.Arrival.time.convenient 1 95417 95423  
## + Ease.of.Online.booking 1 95737 95743  
## + Age 1 95897 95903  
## + Male 1 95922 95928  
## + Departure.Delay.in.Minutes 1 95948 95954  
## + Gate.location 1 96115 96121  
## <none> 96122 96126  
##   
## Step: AIC=77400.83  
## Satisfied ~ Online.boarding + BusinessTravel  
##   
## Df Deviance AIC  
## + On.board.service 1 68853 68861  
## + Inflight.entertainment 1 69629 69637  
## + Leg.room.service 1 69779 69787  
## + Inflight.service 1 70963 70971  
## + LoyalCustomer 1 71042 71050  
## + Baggage.handling 1 71218 71226  
## + BusinessClass 1 73303 73311  
## + Inflight.wifi.service 1 73859 73867  
## + EcoClass 1 74186 74194  
## + Checkin.service 1 74792 74800  
## + Cleanliness 1 75647 75655  
## + Flight.Distance 1 75675 75683  
## + Seat.comfort 1 76055 76063  
## + Ease.of.Online.booking 1 76864 76872  
## + Food.and.drink 1 76894 76902  
## + Age 1 77017 77025  
## + Departure.Delay.in.Minutes 1 77168 77176  
## + Male 1 77321 77329  
## + Departure.Arrival.time.convenient 1 77359 77367  
## + Gate.location 1 77393 77401  
## <none> 77395 77401  
##   
## Step: AIC=68861.48  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service  
##   
## Df Deviance AIC  
## + LoyalCustomer 1 61951 61961  
## + Leg.room.service 1 65495 65505  
## + Inflight.wifi.service 1 65804 65814  
## + Inflight.entertainment 1 65929 65939  
## + BusinessClass 1 66649 66659  
## + EcoClass 1 67006 67016  
## + Flight.Distance 1 67559 67569  
## + Cleanliness 1 67562 67572  
## + Baggage.handling 1 67597 67607  
## + Inflight.service 1 67638 67648  
## + Checkin.service 1 67784 67794  
## + Seat.comfort 1 67883 67893  
## + Ease.of.Online.booking 1 68175 68185  
## + Food.and.drink 1 68316 68326  
## + Age 1 68594 68604  
## + Departure.Delay.in.Minutes 1 68695 68705  
## + Male 1 68770 68780  
## + Departure.Arrival.time.convenient 1 68828 68838  
## <none> 68853 68861  
## + Gate.location 1 68853 68863  
##   
## Step: AIC=61961.33  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer  
##   
## Df Deviance AIC  
## + Inflight.wifi.service 1 57163 57175  
## + Leg.room.service 1 58878 58890  
## + Baggage.handling 1 59866 59878  
## + Inflight.service 1 59899 59911  
## + Inflight.entertainment 1 60128 60140  
## + Checkin.service 1 60322 60334  
## + Ease.of.Online.booking 1 60727 60739  
## + Cleanliness 1 60891 60903  
## + BusinessClass 1 61185 61197  
## + EcoClass 1 61516 61528  
## + Food.and.drink 1 61587 61599  
## + Seat.comfort 1 61659 61671  
## + Age 1 61754 61766  
## + Departure.Delay.in.Minutes 1 61763 61775  
## + Flight.Distance 1 61864 61876  
## + Male 1 61893 61905  
## + Departure.Arrival.time.convenient 1 61946 61958  
## <none> 61951 61961  
## + Gate.location 1 61951 61963  
##   
## Step: AIC=57175.02  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service  
##   
## Df Deviance AIC  
## + Leg.room.service 1 54907 54921  
## + Checkin.service 1 55115 55129  
## + BusinessClass 1 55372 55386  
## + Inflight.service 1 55657 55671  
## + Baggage.handling 1 55723 55737  
## + Inflight.entertainment 1 55998 56012  
## + Cleanliness 1 56090 56104  
## + Gate.location 1 56169 56183  
## + EcoClass 1 56173 56187  
## + Departure.Arrival.time.convenient 1 56207 56221  
## + Seat.comfort 1 56670 56684  
## + Flight.Distance 1 56877 56891  
## + Food.and.drink 1 56909 56923  
## + Departure.Delay.in.Minutes 1 57024 57038  
## + Age 1 57101 57115  
## + Male 1 57144 57158  
## + Ease.of.Online.booking 1 57150 57164  
## <none> 57163 57175  
##   
## Step: AIC=54921.23  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service  
##   
## Df Deviance AIC  
## + Checkin.service 1 53158 53174  
## + BusinessClass 1 53384 53400  
## + Cleanliness 1 53977 53993  
## + EcoClass 1 54073 54089  
## + Inflight.service 1 54083 54099  
## + Departure.Arrival.time.convenient 1 54120 54136  
## + Baggage.handling 1 54125 54141  
## + Gate.location 1 54129 54145  
## + Inflight.entertainment 1 54204 54220  
## + Seat.comfort 1 54495 54511  
## + Food.and.drink 1 54652 54668  
## + Flight.Distance 1 54676 54692  
## + Departure.Delay.in.Minutes 1 54735 54751  
## + Age 1 54836 54852  
## + Male 1 54892 54908  
## + Ease.of.Online.booking 1 54902 54918  
## <none> 54907 54921  
##   
## Step: AIC=53173.88  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service  
##   
## Df Deviance AIC  
## + BusinessClass 1 51957 51975  
## + Departure.Arrival.time.convenient 1 52247 52265  
## + Inflight.entertainment 1 52388 52406  
## + Gate.location 1 52412 52430  
## + Cleanliness 1 52443 52461  
## + EcoClass 1 52524 52542  
## + Inflight.service 1 52550 52568  
## + Baggage.handling 1 52603 52621  
## + Seat.comfort 1 52886 52904  
## + Food.and.drink 1 52938 52956  
## + Departure.Delay.in.Minutes 1 52948 52966  
## + Flight.Distance 1 52972 52990  
## + Age 1 53083 53101  
## + Male 1 53146 53164  
## <none> 53158 53174  
## + Ease.of.Online.booking 1 53157 53175  
##   
## Step: AIC=51975.05  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass  
##   
## Df Deviance AIC  
## + Departure.Arrival.time.convenient 1 50946 50966  
## + Inflight.entertainment 1 51120 51140  
## + Gate.location 1 51166 51186  
## + Cleanliness 1 51203 51223  
## + Inflight.service 1 51486 51506  
## + Baggage.handling 1 51530 51550  
## + Seat.comfort 1 51727 51747  
## + Food.and.drink 1 51737 51757  
## + Departure.Delay.in.Minutes 1 51765 51785  
## + Age 1 51891 51911  
## + EcoClass 1 51932 51952  
## + Ease.of.Online.booking 1 51946 51966  
## + Male 1 51950 51970  
## + Flight.Distance 1 51954 51974  
## <none> 51957 51975  
##   
## Step: AIC=50965.89  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient  
##   
## Df Deviance AIC  
## + Inflight.entertainment 1 50224 50246  
## + Cleanliness 1 50231 50253  
## + Inflight.service 1 50474 50496  
## + Baggage.handling 1 50535 50557  
## + Seat.comfort 1 50729 50751  
## + Gate.location 1 50745 50767  
## + Food.and.drink 1 50752 50774  
## + Departure.Delay.in.Minutes 1 50763 50785  
## + Ease.of.Online.booking 1 50769 50791  
## + Age 1 50903 50925  
## + EcoClass 1 50923 50945  
## + Male 1 50941 50963  
## + Flight.Distance 1 50941 50963  
## <none> 50946 50966  
##   
## Step: AIC=50246.07  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment  
##   
## Df Deviance AIC  
## + Ease.of.Online.booking 1 49956 49980  
## + Inflight.service 1 49993 50017  
## + Baggage.handling 1 50008 50032  
## + Gate.location 1 50021 50045  
## + Departure.Delay.in.Minutes 1 50058 50082  
## + Cleanliness 1 50073 50097  
## + Age 1 50177 50201  
## + EcoClass 1 50198 50222  
## + Male 1 50217 50241  
## + Food.and.drink 1 50217 50241  
## + Flight.Distance 1 50217 50241  
## <none> 50224 50246  
## + Seat.comfort 1 50224 50248  
##   
## Step: AIC=49979.75  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking  
##   
## Df Deviance AIC  
## + Gate.location 1 49454 49480  
## + Inflight.service 1 49711 49737  
## + Baggage.handling 1 49713 49739  
## + Cleanliness 1 49778 49804  
## + Departure.Delay.in.Minutes 1 49798 49824  
## + Age 1 49916 49942  
## + EcoClass 1 49934 49960  
## + Flight.Distance 1 49950 49976  
## + Male 1 49950 49976  
## + Food.and.drink 1 49950 49976  
## <none> 49956 49980  
## + Seat.comfort 1 49955 49981  
##   
## Step: AIC=49480.3  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location  
##   
## Df Deviance AIC  
## + Baggage.handling 1 49236 49264  
## + Inflight.service 1 49238 49266  
## + Cleanliness 1 49261 49289  
## + Departure.Delay.in.Minutes 1 49308 49336  
## + Age 1 49421 49449  
## + EcoClass 1 49432 49460  
## + Food.and.drink 1 49448 49476  
## + Flight.Distance 1 49449 49477  
## + Male 1 49450 49478  
## + Seat.comfort 1 49450 49478  
## <none> 49454 49480  
##   
## Step: AIC=49263.62  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling  
##   
## Df Deviance AIC  
## + Cleanliness 1 48980 49010  
## + Departure.Delay.in.Minutes 1 49082 49112  
## + Inflight.service 1 49139 49169  
## + EcoClass 1 49212 49242  
## + Age 1 49214 49244  
## + Seat.comfort 1 49217 49247  
## + Flight.Distance 1 49229 49259  
## + Male 1 49232 49262  
## <none> 49236 49264  
## + Food.and.drink 1 49235 49265  
##   
## Step: AIC=49010.23  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness  
##   
## Df Deviance AIC  
## + Departure.Delay.in.Minutes 1 48801 48833  
## + Inflight.service 1 48832 48864  
## + EcoClass 1 48955 48987  
## + Food.and.drink 1 48958 48990  
## + Age 1 48965 48997  
## + Flight.Distance 1 48975 49007  
## <none> 48980 49010  
## + Male 1 48979 49011  
## + Seat.comfort 1 48980 49012  
##   
## Step: AIC=48833.4  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes  
##   
## Df Deviance AIC  
## + Inflight.service 1 48670 48704  
## + EcoClass 1 48776 48810  
## + Food.and.drink 1 48781 48815  
## + Age 1 48785 48819  
## + Flight.Distance 1 48796 48830  
## <none> 48801 48833  
## + Male 1 48800 48834  
## + Seat.comfort 1 48801 48835  
##   
## Step: AIC=48703.91  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service  
##   
## Df Deviance AIC  
## + EcoClass 1 48643 48679  
## + Food.and.drink 1 48658 48694  
## + Age 1 48660 48696  
## + Flight.Distance 1 48663 48699  
## <none> 48670 48704  
## + Male 1 48669 48705  
## + Seat.comfort 1 48669 48705  
##   
## Step: AIC=48679.27  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass  
##   
## Df Deviance AIC  
## + Food.and.drink 1 48631 48669  
## + Age 1 48633 48671  
## + Flight.Distance 1 48637 48675  
## <none> 48643 48679  
## + Male 1 48642 48680  
## + Seat.comfort 1 48642 48680  
##   
## Step: AIC=48669.49  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink  
##   
## Df Deviance AIC  
## + Age 1 48620 48660  
## + Flight.Distance 1 48625 48665  
## + Seat.comfort 1 48629 48669  
## <none> 48631 48669  
## + Male 1 48630 48670  
##   
## Step: AIC=48660.1  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink + Age  
##   
## Df Deviance AIC  
## + Flight.Distance 1 48615 48657  
## + Seat.comfort 1 48617 48659  
## <none> 48620 48660  
## + Male 1 48619 48661  
##   
## Step: AIC=48657.13  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink + Age + Flight.Distance  
##   
## Df Deviance AIC  
## + Seat.comfort 1 48612 48656  
## <none> 48615 48657  
## + Male 1 48614 48658  
##   
## Step: AIC=48656.03  
## Satisfied ~ Online.boarding + BusinessTravel + On.board.service +   
## LoyalCustomer + Inflight.wifi.service + Leg.room.service +   
## Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink + Age + Flight.Distance +   
## Seat.comfort  
##   
## Df Deviance AIC  
## <none> 48612 48656  
## + Male 1 48610 48656

summary(forward\_model)

##   
## Call:  
## glm(formula = Satisfied ~ Online.boarding + BusinessTravel +   
## On.board.service + LoyalCustomer + Inflight.wifi.service +   
## Leg.room.service + Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink + Age + Flight.Distance +   
## Seat.comfort, family = "binomial", data = train)  
##   
## Deviance Residuals:   
## Min 1Q Median 3Q Max   
## -3.3451 -0.2877 -0.0526 0.2874 3.8268   
##   
## Coefficients:  
## Estimate Std. Error z value Pr(>|z|)   
## (Intercept) -1.654e+01 1.340e-01 -123.430 < 2e-16 \*\*\*  
## Online.boarding 9.216e-01 1.348e-02 68.392 < 2e-16 \*\*\*  
## BusinessTravel 3.398e+00 4.002e-02 84.914 < 2e-16 \*\*\*  
## On.board.service 3.509e-01 1.238e-02 28.338 < 2e-16 \*\*\*  
## LoyalCustomer 2.823e+00 3.916e-02 72.083 < 2e-16 \*\*\*  
## Inflight.wifi.service 7.904e-01 1.434e-02 55.119 < 2e-16 \*\*\*  
## Leg.room.service 3.134e-01 1.062e-02 29.510 < 2e-16 \*\*\*  
## Checkin.service 3.479e-01 1.022e-02 34.043 < 2e-16 \*\*\*  
## BusinessClass 1.112e+00 5.090e-02 21.856 < 2e-16 \*\*\*  
## Departure.Arrival.time.convenient -2.808e-01 1.075e-02 -26.120 < 2e-16 \*\*\*  
## Inflight.entertainment 1.019e-01 1.723e-02 5.915 3.32e-09 \*\*\*  
## Ease.of.Online.booking 3.676e-01 1.494e-02 24.605 < 2e-16 \*\*\*  
## Gate.location -2.670e-01 1.257e-02 -21.244 < 2e-16 \*\*\*  
## Baggage.handling 1.581e-01 1.383e-02 11.434 < 2e-16 \*\*\*  
## Cleanliness 2.424e-01 1.408e-02 17.222 < 2e-16 \*\*\*  
## Departure.Delay.in.Minutes -3.844e-03 3.046e-04 -12.618 < 2e-16 \*\*\*  
## Inflight.service 1.598e-01 1.445e-02 11.059 < 2e-16 \*\*\*  
## EcoClass 2.466e-01 4.914e-02 5.019 5.20e-07 \*\*\*  
## Food.and.drink -4.746e-02 1.262e-02 -3.760 0.00017 \*\*\*  
## Age -2.896e-03 8.544e-04 -3.390 0.00070 \*\*\*  
## Flight.Distance 2.943e-05 1.335e-05 2.204 0.02754 \*   
## Seat.comfort 2.385e-02 1.355e-02 1.760 0.07837 .   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## (Dispersion parameter for binomial family taken to be 1)  
##   
## Null deviance: 134608 on 98859 degrees of freedom  
## Residual deviance: 48612 on 98838 degrees of freedom  
## AIC: 48656  
##   
## Number of Fisher Scoring iterations: 7

backward\_model <- step(logit\_model, scope = list(lower = null\_model, upper = logit\_model), direction = "backward")

## Start: AIC=48656.49  
## Satisfied ~ (Age + Flight.Distance + Inflight.wifi.service +   
## Departure.Arrival.time.convenient + Ease.of.Online.booking +   
## Gate.location + Food.and.drink + Online.boarding + Seat.comfort +   
## Inflight.entertainment + On.board.service + Leg.room.service +   
## Baggage.handling + Checkin.service + Inflight.service + Cleanliness +   
## Departure.Delay.in.Minutes + Arrival.Delay.in.Minutes + Male +   
## LoyalCustomer + BusinessTravel + EcoClass + BusinessClass) -   
## Arrival.Delay.in.Minutes  
##   
## Df Deviance AIC  
## - Male 1 48612 48656  
## <none> 48610 48656  
## - Seat.comfort 1 48614 48658  
## - Flight.Distance 1 48615 48659  
## - Age 1 48622 48666  
## - Food.and.drink 1 48625 48669  
## - EcoClass 1 48636 48680  
## - Inflight.entertainment 1 48646 48690  
## - Inflight.service 1 48733 48777  
## - Baggage.handling 1 48741 48785  
## - Departure.Delay.in.Minutes 1 48773 48817  
## - Cleanliness 1 48907 48951  
## - Gate.location 1 49076 49120  
## - BusinessClass 1 49107 49151  
## - Ease.of.Online.booking 1 49227 49271  
## - Departure.Arrival.time.convenient 1 49297 49341  
## - On.board.service 1 49434 49478  
## - Leg.room.service 1 49491 49535  
## - Checkin.service 1 49810 49854  
## - Inflight.wifi.service 1 52038 52082  
## - Online.boarding 1 53821 53865  
## - LoyalCustomer 1 54872 54916  
## - BusinessTravel 1 57808 57852  
##   
## Step: AIC=48656.03  
## Satisfied ~ Age + Flight.Distance + Inflight.wifi.service + Departure.Arrival.time.convenient +   
## Ease.of.Online.booking + Gate.location + Food.and.drink +   
## Online.boarding + Seat.comfort + Inflight.entertainment +   
## On.board.service + Leg.room.service + Baggage.handling +   
## Checkin.service + Inflight.service + Cleanliness + Departure.Delay.in.Minutes +   
## LoyalCustomer + BusinessTravel + EcoClass + BusinessClass  
##   
## Df Deviance AIC  
## <none> 48612 48656  
## - Seat.comfort 1 48615 48657  
## - Flight.Distance 1 48617 48659  
## - Age 1 48624 48666  
## - Food.and.drink 1 48626 48668  
## - EcoClass 1 48638 48680  
## - Inflight.entertainment 1 48647 48689  
## - Inflight.service 1 48735 48777  
## - Baggage.handling 1 48743 48785  
## - Departure.Delay.in.Minutes 1 48775 48817  
## - Cleanliness 1 48911 48953  
## - Gate.location 1 49078 49120  
## - BusinessClass 1 49110 49152  
## - Ease.of.Online.booking 1 49229 49271  
## - Departure.Arrival.time.convenient 1 49300 49342  
## - On.board.service 1 49434 49476  
## - Leg.room.service 1 49492 49534  
## - Checkin.service 1 49812 49854  
## - Inflight.wifi.service 1 52046 52088  
## - Online.boarding 1 53822 53864  
## - LoyalCustomer 1 54886 54928  
## - BusinessTravel 1 57815 57857

summary(backward\_model)

##   
## Call:  
## glm(formula = Satisfied ~ Age + Flight.Distance + Inflight.wifi.service +   
## Departure.Arrival.time.convenient + Ease.of.Online.booking +   
## Gate.location + Food.and.drink + Online.boarding + Seat.comfort +   
## Inflight.entertainment + On.board.service + Leg.room.service +   
## Baggage.handling + Checkin.service + Inflight.service + Cleanliness +   
## Departure.Delay.in.Minutes + LoyalCustomer + BusinessTravel +   
## EcoClass + BusinessClass, family = "binomial", data = train)  
##   
## Deviance Residuals:   
## Min 1Q Median 3Q Max   
## -3.3451 -0.2877 -0.0526 0.2874 3.8268   
##   
## Coefficients:  
## Estimate Std. Error z value Pr(>|z|)   
## (Intercept) -1.654e+01 1.340e-01 -123.430 < 2e-16 \*\*\*  
## Age -2.896e-03 8.544e-04 -3.390 0.00070 \*\*\*  
## Flight.Distance 2.943e-05 1.335e-05 2.204 0.02754 \*   
## Inflight.wifi.service 7.904e-01 1.434e-02 55.119 < 2e-16 \*\*\*  
## Departure.Arrival.time.convenient -2.808e-01 1.075e-02 -26.120 < 2e-16 \*\*\*  
## Ease.of.Online.booking 3.676e-01 1.494e-02 24.605 < 2e-16 \*\*\*  
## Gate.location -2.670e-01 1.257e-02 -21.244 < 2e-16 \*\*\*  
## Food.and.drink -4.746e-02 1.262e-02 -3.760 0.00017 \*\*\*  
## Online.boarding 9.216e-01 1.348e-02 68.392 < 2e-16 \*\*\*  
## Seat.comfort 2.385e-02 1.355e-02 1.760 0.07837 .   
## Inflight.entertainment 1.019e-01 1.723e-02 5.915 3.32e-09 \*\*\*  
## On.board.service 3.509e-01 1.238e-02 28.338 < 2e-16 \*\*\*  
## Leg.room.service 3.134e-01 1.062e-02 29.510 < 2e-16 \*\*\*  
## Baggage.handling 1.581e-01 1.383e-02 11.434 < 2e-16 \*\*\*  
## Checkin.service 3.479e-01 1.022e-02 34.043 < 2e-16 \*\*\*  
## Inflight.service 1.598e-01 1.445e-02 11.059 < 2e-16 \*\*\*  
## Cleanliness 2.424e-01 1.408e-02 17.222 < 2e-16 \*\*\*  
## Departure.Delay.in.Minutes -3.844e-03 3.046e-04 -12.618 < 2e-16 \*\*\*  
## LoyalCustomer 2.823e+00 3.916e-02 72.083 < 2e-16 \*\*\*  
## BusinessTravel 3.398e+00 4.002e-02 84.914 < 2e-16 \*\*\*  
## EcoClass 2.466e-01 4.914e-02 5.019 5.20e-07 \*\*\*  
## BusinessClass 1.112e+00 5.090e-02 21.856 < 2e-16 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## (Dispersion parameter for binomial family taken to be 1)  
##   
## Null deviance: 134608 on 98859 degrees of freedom  
## Residual deviance: 48612 on 98838 degrees of freedom  
## AIC: 48656  
##   
## Number of Fisher Scoring iterations: 7

summary(forward\_model)

##   
## Call:  
## glm(formula = Satisfied ~ Online.boarding + BusinessTravel +   
## On.board.service + LoyalCustomer + Inflight.wifi.service +   
## Leg.room.service + Checkin.service + BusinessClass + Departure.Arrival.time.convenient +   
## Inflight.entertainment + Ease.of.Online.booking + Gate.location +   
## Baggage.handling + Cleanliness + Departure.Delay.in.Minutes +   
## Inflight.service + EcoClass + Food.and.drink + Age + Flight.Distance +   
## Seat.comfort, family = "binomial", data = train)  
##   
## Deviance Residuals:   
## Min 1Q Median 3Q Max   
## -3.3451 -0.2877 -0.0526 0.2874 3.8268   
##   
## Coefficients:  
## Estimate Std. Error z value Pr(>|z|)   
## (Intercept) -1.654e+01 1.340e-01 -123.430 < 2e-16 \*\*\*  
## Online.boarding 9.216e-01 1.348e-02 68.392 < 2e-16 \*\*\*  
## BusinessTravel 3.398e+00 4.002e-02 84.914 < 2e-16 \*\*\*  
## On.board.service 3.509e-01 1.238e-02 28.338 < 2e-16 \*\*\*  
## LoyalCustomer 2.823e+00 3.916e-02 72.083 < 2e-16 \*\*\*  
## Inflight.wifi.service 7.904e-01 1.434e-02 55.119 < 2e-16 \*\*\*  
## Leg.room.service 3.134e-01 1.062e-02 29.510 < 2e-16 \*\*\*  
## Checkin.service 3.479e-01 1.022e-02 34.043 < 2e-16 \*\*\*  
## BusinessClass 1.112e+00 5.090e-02 21.856 < 2e-16 \*\*\*  
## Departure.Arrival.time.convenient -2.808e-01 1.075e-02 -26.120 < 2e-16 \*\*\*  
## Inflight.entertainment 1.019e-01 1.723e-02 5.915 3.32e-09 \*\*\*  
## Ease.of.Online.booking 3.676e-01 1.494e-02 24.605 < 2e-16 \*\*\*  
## Gate.location -2.670e-01 1.257e-02 -21.244 < 2e-16 \*\*\*  
## Baggage.handling 1.581e-01 1.383e-02 11.434 < 2e-16 \*\*\*  
## Cleanliness 2.424e-01 1.408e-02 17.222 < 2e-16 \*\*\*  
## Departure.Delay.in.Minutes -3.844e-03 3.046e-04 -12.618 < 2e-16 \*\*\*  
## Inflight.service 1.598e-01 1.445e-02 11.059 < 2e-16 \*\*\*  
## EcoClass 2.466e-01 4.914e-02 5.019 5.20e-07 \*\*\*  
## Food.and.drink -4.746e-02 1.262e-02 -3.760 0.00017 \*\*\*  
## Age -2.896e-03 8.544e-04 -3.390 0.00070 \*\*\*  
## Flight.Distance 2.943e-05 1.335e-05 2.204 0.02754 \*   
## Seat.comfort 2.385e-02 1.355e-02 1.760 0.07837 .   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## (Dispersion parameter for binomial family taken to be 1)  
##   
## Null deviance: 134608 on 98859 degrees of freedom  
## Residual deviance: 48612 on 98838 degrees of freedom  
## AIC: 48656  
##   
## Number of Fisher Scoring iterations: 7

summary(backward\_model)

##   
## Call:  
## glm(formula = Satisfied ~ Age + Flight.Distance + Inflight.wifi.service +   
## Departure.Arrival.time.convenient + Ease.of.Online.booking +   
## Gate.location + Food.and.drink + Online.boarding + Seat.comfort +   
## Inflight.entertainment + On.board.service + Leg.room.service +   
## Baggage.handling + Checkin.service + Inflight.service + Cleanliness +   
## Departure.Delay.in.Minutes + LoyalCustomer + BusinessTravel +   
## EcoClass + BusinessClass, family = "binomial", data = train)  
##   
## Deviance Residuals:   
## Min 1Q Median 3Q Max   
## -3.3451 -0.2877 -0.0526 0.2874 3.8268   
##   
## Coefficients:  
## Estimate Std. Error z value Pr(>|z|)   
## (Intercept) -1.654e+01 1.340e-01 -123.430 < 2e-16 \*\*\*  
## Age -2.896e-03 8.544e-04 -3.390 0.00070 \*\*\*  
## Flight.Distance 2.943e-05 1.335e-05 2.204 0.02754 \*   
## Inflight.wifi.service 7.904e-01 1.434e-02 55.119 < 2e-16 \*\*\*  
## Departure.Arrival.time.convenient -2.808e-01 1.075e-02 -26.120 < 2e-16 \*\*\*  
## Ease.of.Online.booking 3.676e-01 1.494e-02 24.605 < 2e-16 \*\*\*  
## Gate.location -2.670e-01 1.257e-02 -21.244 < 2e-16 \*\*\*  
## Food.and.drink -4.746e-02 1.262e-02 -3.760 0.00017 \*\*\*  
## Online.boarding 9.216e-01 1.348e-02 68.392 < 2e-16 \*\*\*  
## Seat.comfort 2.385e-02 1.355e-02 1.760 0.07837 .   
## Inflight.entertainment 1.019e-01 1.723e-02 5.915 3.32e-09 \*\*\*  
## On.board.service 3.509e-01 1.238e-02 28.338 < 2e-16 \*\*\*  
## Leg.room.service 3.134e-01 1.062e-02 29.510 < 2e-16 \*\*\*  
## Baggage.handling 1.581e-01 1.383e-02 11.434 < 2e-16 \*\*\*  
## Checkin.service 3.479e-01 1.022e-02 34.043 < 2e-16 \*\*\*  
## Inflight.service 1.598e-01 1.445e-02 11.059 < 2e-16 \*\*\*  
## Cleanliness 2.424e-01 1.408e-02 17.222 < 2e-16 \*\*\*  
## Departure.Delay.in.Minutes -3.844e-03 3.046e-04 -12.618 < 2e-16 \*\*\*  
## LoyalCustomer 2.823e+00 3.916e-02 72.083 < 2e-16 \*\*\*  
## BusinessTravel 3.398e+00 4.002e-02 84.914 < 2e-16 \*\*\*  
## EcoClass 2.466e-01 4.914e-02 5.019 5.20e-07 \*\*\*  
## BusinessClass 1.112e+00 5.090e-02 21.856 < 2e-16 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## (Dispersion parameter for binomial family taken to be 1)  
##   
## Null deviance: 134608 on 98859 degrees of freedom  
## Residual deviance: 48612 on 98838 degrees of freedom  
## AIC: 48656  
##   
## Number of Fisher Scoring iterations: 7

#ROC

library(pROC)

## Type 'citation("pROC")' for a citation.

##   
## Attaching package: 'pROC'

## The following objects are masked from 'package:stats':  
##   
## cov, smooth, var

ct\_roc<-roc(test$Satisfied,test$ct\_pred\_prob\_trim,auc=TRUE)

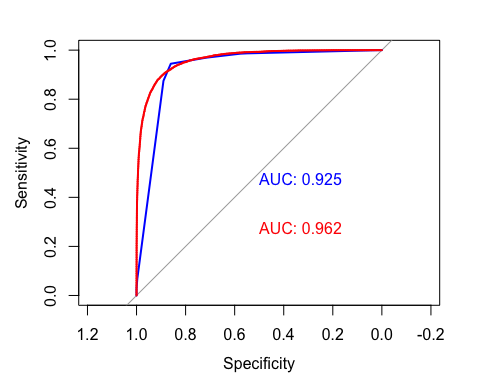
## Setting levels: control = 0, case = 1

## Setting direction: controls < cases

logit\_roc<-roc(test$Satisfied,test$logit\_pred\_prob,auc=TRUE)

## Setting levels: control = 0, case = 1  
## Setting direction: controls < cases

plot(ct\_roc,print.auc=TRUE,col="blue")  
plot(logit\_roc,print.auc=TRUE,print.auc.y=.3, col="red",add=TRUE)



cor(train)

## Age Flight.Distance  
## Age 1.000000000 0.095051793  
## Flight.Distance 0.095051793 1.000000000  
## Inflight.wifi.service 0.011795879 0.008226336  
## Departure.Arrival.time.convenient 0.037397423 -0.015848226  
## Ease.of.Online.booking 0.016933453 0.053952615  
## Gate.location -0.003007974 0.004468949  
## Food.and.drink 0.019768286 0.058023349  
## Online.boarding 0.183910606 0.198303820  
## Seat.comfort 0.157492655 0.158449273  
## Inflight.entertainment 0.078165547 0.133249888  
## On.board.service 0.063447140 0.115908524  
## Leg.room.service 0.054320375 0.136586979  
## Baggage.handling -0.041527533 0.070601110  
## Checkin.service 0.037263389 0.075660693  
## Inflight.service -0.044289932 0.064679529  
## Cleanliness 0.049987172 0.093438813  
## Departure.Delay.in.Minutes -0.011129725 0.002255113  
## Arrival.Delay.in.Minutes -0.013361432 -0.001918004  
## Male 0.007559704 0.007465621  
## LoyalCustomer 0.277069792 0.229379915  
## BusinessTravel 0.050517579 0.261998872  
## Satisfied 0.146936111 0.306375471  
## EcoClass -0.132382123 -0.406193006  
## BusinessClass 0.137086113 0.469381259  
## Inflight.wifi.service  
## Age 0.011795879  
## Flight.Distance 0.008226336  
## Inflight.wifi.service 1.000000000  
## Departure.Arrival.time.convenient 0.338608670  
## Ease.of.Online.booking 0.686344882  
## Gate.location 0.364235146  
## Food.and.drink 0.145945247  
## Online.boarding 0.467613673  
## Seat.comfort 0.139254728  
## Inflight.entertainment 0.218309676  
## On.board.service 0.128054312  
## Leg.room.service 0.155208383  
## Baggage.handling 0.120299953  
## Checkin.service 0.060886958  
## Inflight.service 0.109911442  
## Cleanliness 0.149498659  
## Departure.Delay.in.Minutes -0.025784189  
## Arrival.Delay.in.Minutes -0.028011471  
## Male 0.008537833  
## LoyalCustomer 0.001093452  
## BusinessTravel 0.127327633  
## Satisfied 0.384173475  
## EcoClass -0.058410272  
## BusinessClass 0.054012096  
## Departure.Arrival.time.convenient  
## Age 0.0373974233  
## Flight.Distance -0.0158482264  
## Inflight.wifi.service 0.3386086701  
## Departure.Arrival.time.convenient 1.0000000000  
## Ease.of.Online.booking 0.4563026681  
## Gate.location 0.4765329222  
## Food.and.drink 0.0037208759  
## Online.boarding 0.0632971101  
## Seat.comfort 0.0133810190  
## Inflight.entertainment -0.0106588534  
## On.board.service 0.0670576601  
## Leg.room.service 0.0073778137  
## Baggage.handling 0.0679821014  
## Checkin.service 0.0998729305  
## Inflight.service 0.0705522564  
## Cleanliness 0.0165235544  
## Departure.Delay.in.Minutes 0.0003859646  
## Arrival.Delay.in.Minutes -0.0015952298  
## Male 0.0084234936  
## LoyalCustomer 0.2044448011  
## BusinessTravel -0.2496411644  
## Satisfied -0.0331402647  
## EcoClass 0.0687294145  
## BusinessClass -0.0829313182  
## Ease.of.Online.booking Gate.location  
## Age 0.016933453 -0.003007974  
## Flight.Distance 0.053952615 0.004468949  
## Inflight.wifi.service 0.686344882 0.364235146  
## Departure.Arrival.time.convenient 0.456302668 0.476532922  
## Ease.of.Online.booking 1.000000000 0.508338356  
## Gate.location 0.508338356 1.000000000  
## Food.and.drink 0.028897772 -0.001587715  
## Online.boarding 0.369596989 -0.002968650  
## Seat.comfort 0.031316031 0.003378201  
## Inflight.entertainment 0.034469739 0.003371346  
## On.board.service 0.034985086 -0.028597524  
## Leg.room.service 0.083084053 -0.005939365  
## Baggage.handling 0.027737972 0.003193738  
## Checkin.service 0.023754503 -0.034014979  
## Inflight.service 0.026936243 0.001697291  
## Cleanliness 0.017313906 -0.003309680  
## Departure.Delay.in.Minutes -0.012399847 0.005783349  
## Arrival.Delay.in.Minutes -0.014665177 0.005412286  
## Male 0.007290876 0.001077333  
## LoyalCustomer 0.020979123 -0.006845010  
## BusinessTravel 0.131611105 0.031549130  
## Satisfied 0.244344463 0.004458589  
## EcoClass -0.110259115 -0.004234525  
## BusinessClass 0.120117845 0.004929452  
## Food.and.drink Online.boarding Seat.comfort  
## Age 0.019768286 0.18391061 0.157492655  
## Flight.Distance 0.058023349 0.19830382 0.158449273  
## Inflight.wifi.service 0.145945247 0.46761367 0.139254728  
## Departure.Arrival.time.convenient 0.003720876 0.06329711 0.013381019  
## Ease.of.Online.booking 0.028897772 0.36959699 0.031316031  
## Gate.location -0.001587715 -0.00296865 0.003378201  
## Food.and.drink 1.000000000 0.25078469 0.575526849  
## Online.boarding 0.250784686 1.00000000 0.436329586  
## Seat.comfort 0.575526849 0.43632959 1.000000000  
## Inflight.entertainment 0.625715068 0.30549408 0.617379360  
## On.board.service 0.061850395 0.17400077 0.138928722  
## Leg.room.service 0.034572602 0.13801735 0.114276008  
## Baggage.handling 0.037345223 0.10295233 0.082546617  
## Checkin.service 0.088220231 0.22413025 0.193669254  
## Inflight.service 0.037005821 0.09442716 0.076656967  
## Cleanliness 0.657417183 0.35039690 0.679173835  
## Departure.Delay.in.Minutes -0.023676103 -0.02763374 -0.027220567  
## Arrival.Delay.in.Minutes -0.026142313 -0.03185357 -0.029723454  
## Male 0.005983664 -0.03944357 -0.026706936  
## LoyalCustomer 0.060149352 0.18033322 0.161232658  
## BusinessTravel 0.063071015 0.21612972 0.123707331  
## Satisfied 0.220308944 0.57229481 0.362737073  
## EcoClass -0.080033055 -0.29312347 -0.208017151  
## BusinessClass 0.087589158 0.32896594 0.234478925  
## Inflight.entertainment On.board.service  
## Age 0.078165547 0.06344714  
## Flight.Distance 0.133249888 0.11590852  
## Inflight.wifi.service 0.218309676 0.12805431  
## Departure.Arrival.time.convenient -0.010658853 0.06705766  
## Ease.of.Online.booking 0.034469739 0.03498509  
## Gate.location 0.003371346 -0.02859752  
## Food.and.drink 0.625715068 0.06185039  
## Online.boarding 0.305494081 0.17400077  
## Seat.comfort 0.617379360 0.13892872  
## Inflight.entertainment 1.000000000 0.41943977  
## On.board.service 0.419439771 1.00000000  
## Leg.room.service 0.301413439 0.35801401  
## Baggage.handling 0.379409092 0.51966004  
## Checkin.service 0.127966099 0.25014127  
## Inflight.service 0.404049793 0.54832715  
## Cleanliness 0.696590490 0.12932691  
## Departure.Delay.in.Minutes -0.031865131 -0.03406238  
## Arrival.Delay.in.Minutes -0.035047407 -0.03782401  
## Male 0.005257214 0.00683131  
## LoyalCustomer 0.114832872 0.06431761  
## BusinessTravel 0.152813755 0.05819995  
## Satisfied 0.424532774 0.34073446  
## EcoClass -0.184258254 -0.19143587  
## BusinessClass 0.207491098 0.22947178  
## Leg.room.service Baggage.handling  
## Age 0.054320375 -0.041527533  
## Flight.Distance 0.136586979 0.070601110  
## Inflight.wifi.service 0.155208383 0.120299953  
## Departure.Arrival.time.convenient 0.007377814 0.067982101  
## Ease.of.Online.booking 0.083084053 0.027737972  
## Gate.location -0.005939365 0.003193738  
## Food.and.drink 0.034572602 0.037345223  
## Online.boarding 0.138017354 0.102952329  
## Seat.comfort 0.114276008 0.082546617  
## Inflight.entertainment 0.301413439 0.379409092  
## On.board.service 0.358014011 0.519660038  
## Leg.room.service 1.000000000 0.366928115  
## Baggage.handling 0.366928115 1.000000000  
## Checkin.service 0.159718903 0.240293209  
## Inflight.service 0.368528816 0.629685946  
## Cleanliness 0.101783719 0.102449082  
## Departure.Delay.in.Minutes 0.010491957 -0.007254448  
## Arrival.Delay.in.Minutes 0.007698262 -0.010130788  
## Male 0.024160344 0.036781354  
## LoyalCustomer 0.059423555 -0.016131599  
## BusinessTravel 0.133884627 0.035829947  
## Satisfied 0.335923776 0.267548369  
## EcoClass -0.188975469 -0.148974439  
## BusinessClass 0.221041238 0.182047740  
## Checkin.service Inflight.service Cleanliness  
## Age 0.03726339 -0.044289932 0.049987172  
## Flight.Distance 0.07566069 0.064679529 0.093438813  
## Inflight.wifi.service 0.06088696 0.109911442 0.149498659  
## Departure.Arrival.time.convenient 0.09987293 0.070552256 0.016523554  
## Ease.of.Online.booking 0.02375450 0.026936243 0.017313906  
## Gate.location -0.03401498 0.001697291 -0.003309680  
## Food.and.drink 0.08822023 0.037005821 0.657417183  
## Online.boarding 0.22413025 0.094427162 0.350396904  
## Seat.comfort 0.19366925 0.076656967 0.679173835  
## Inflight.entertainment 0.12796610 0.404049793 0.696590490  
## On.board.service 0.25014127 0.548327145 0.129326908  
## Leg.room.service 0.15971890 0.368528816 0.101783719  
## Baggage.handling 0.24029321 0.629685946 0.102449082  
## Checkin.service 1.00000000 0.243395425 0.181416588  
## Inflight.service 0.24339542 1.000000000 0.095877699  
## Cleanliness 0.18141659 0.095877699 1.000000000  
## Departure.Delay.in.Minutes -0.01676899 -0.056517602 -0.013463505  
## Arrival.Delay.in.Minutes -0.01912421 -0.061514413 -0.015474052  
## Male 0.01071457 0.037591883 0.005989591  
## LoyalCustomer 0.03703576 -0.014725002 0.084067499  
## BusinessTravel -0.02067321 0.026621571 0.078079428  
## Satisfied 0.23867399 0.263677452 0.316969292  
## EcoClass -0.13012434 -0.144263065 -0.123385933  
## BusinessClass 0.16268452 0.175967824 0.139732363  
## Departure.Delay.in.Minutes  
## Age -0.0111297253  
## Flight.Distance 0.0022551134  
## Inflight.wifi.service -0.0257841894  
## Departure.Arrival.time.convenient 0.0003859646  
## Ease.of.Online.booking -0.0123998472  
## Gate.location 0.0057833495  
## Food.and.drink -0.0236761027  
## Online.boarding -0.0276337352  
## Seat.comfort -0.0272205672  
## Inflight.entertainment -0.0318651307  
## On.board.service -0.0340623835  
## Leg.room.service 0.0104919565  
## Baggage.handling -0.0072544478  
## Checkin.service -0.0167689854  
## Inflight.service -0.0565176023  
## Cleanliness -0.0134635045  
## Departure.Delay.in.Minutes 1.0000000000  
## Arrival.Delay.in.Minutes 0.9649935485  
## Male 0.0026372480  
## LoyalCustomer -0.0054949195  
## BusinessTravel 0.0063011811  
## Satisfied -0.0481900115  
## EcoClass 0.0082342165  
## BusinessClass -0.0104102559  
## Arrival.Delay.in.Minutes Male  
## Age -0.0133614319 0.0075597036  
## Flight.Distance -0.0019180044 0.0074656212  
## Inflight.wifi.service -0.0280114710 0.0085378332  
## Departure.Arrival.time.convenient -0.0015952298 0.0084234936  
## Ease.of.Online.booking -0.0146651774 0.0072908756  
## Gate.location 0.0054122856 0.0010773330  
## Food.and.drink -0.0261423131 0.0059836639  
## Online.boarding -0.0318535684 -0.0394435681  
## Seat.comfort -0.0297234545 -0.0267069357  
## Inflight.entertainment -0.0350474073 0.0052572142  
## On.board.service -0.0378240117 0.0068313103  
## Leg.room.service 0.0076982620 0.0241603435  
## Baggage.handling -0.0101307883 0.0367813542  
## Checkin.service -0.0191242084 0.0107145723  
## Inflight.service -0.0615144128 0.0375918826  
## Cleanliness -0.0154740518 0.0059895910  
## Departure.Delay.in.Minutes 0.9649935485 0.0026372480  
## Arrival.Delay.in.Minutes 1.0000000000 0.0004635898  
## Male 0.0004635898 1.0000000000  
## LoyalCustomer -0.0061842337 0.0309143615  
## BusinessTravel 0.0059011338 -0.0067612304  
## Satisfied -0.0552260284 0.0136566934  
## EcoClass 0.0116819975 -0.0047687262  
## BusinessClass -0.0150633993 0.0100741147  
## LoyalCustomer BusinessTravel Satisfied  
## Age 0.277069792 0.050517579 0.146936111  
## Flight.Distance 0.229379915 0.261998872 0.306375471  
## Inflight.wifi.service 0.001093452 0.127327633 0.384173475  
## Departure.Arrival.time.convenient 0.204444801 -0.249641164 -0.033140265  
## Ease.of.Online.booking 0.020979123 0.131611105 0.244344463  
## Gate.location -0.006845010 0.031549130 0.004458589  
## Food.and.drink 0.060149352 0.063071015 0.220308944  
## Online.boarding 0.180333217 0.216129721 0.572294808  
## Seat.comfort 0.161232658 0.123707331 0.362737073  
## Inflight.entertainment 0.114832872 0.152813755 0.424532774  
## On.board.service 0.064317607 0.058199946 0.340734456  
## Leg.room.service 0.059423555 0.133884627 0.335923776  
## Baggage.handling -0.016131599 0.035829947 0.267548369  
## Checkin.service 0.037035760 -0.020673214 0.238673991  
## Inflight.service -0.014725002 0.026621571 0.263677452  
## Cleanliness 0.084067499 0.078079428 0.316969292  
## Departure.Delay.in.Minutes -0.005494919 0.006301181 -0.048190011  
## Arrival.Delay.in.Minutes -0.006184234 0.005901134 -0.055226028  
## Male 0.030914361 -0.006761230 0.013656693  
## LoyalCustomer 1.000000000 -0.304882843 0.204252431  
## BusinessTravel -0.304882843 1.000000000 0.454598872  
## Satisfied 0.204252431 0.454598872 1.000000000  
## EcoClass -0.126589719 -0.495190998 -0.456376248  
## BusinessClass 0.094028990 0.546649884 0.510182640  
## EcoClass BusinessClass  
## Age -0.132382123 0.137086113  
## Flight.Distance -0.406193006 0.469381259  
## Inflight.wifi.service -0.058410272 0.054012096  
## Departure.Arrival.time.convenient 0.068729414 -0.082931318  
## Ease.of.Online.booking -0.110259115 0.120117845  
## Gate.location -0.004234525 0.004929452  
## Food.and.drink -0.080033055 0.087589158  
## Online.boarding -0.293123469 0.328965941  
## Seat.comfort -0.208017151 0.234478925  
## Inflight.entertainment -0.184258254 0.207491098  
## On.board.service -0.191435875 0.229471779  
## Leg.room.service -0.188975469 0.221041238  
## Baggage.handling -0.148974439 0.182047740  
## Checkin.service -0.130124335 0.162684517  
## Inflight.service -0.144263065 0.175967824  
## Cleanliness -0.123385933 0.139732363  
## Departure.Delay.in.Minutes 0.008234216 -0.010410256  
## Arrival.Delay.in.Minutes 0.011681998 -0.015063399  
## Male -0.004768726 0.010074115  
## LoyalCustomer -0.126589719 0.094028990  
## BusinessTravel -0.495190998 0.546649884  
## Satisfied -0.456376248 0.510182640  
## EcoClass 1.000000000 -0.865622037  
## BusinessClass -0.865622037 1.000000000

library(car)

## Loading required package: carData

vif(logit\_model)

## Age Flight.Distance   
## 1.151594 1.365149   
## Inflight.wifi.service Departure.Arrival.time.convenient   
## 1.938122 1.900959   
## Ease.of.Online.booking Gate.location   
## 2.733736 2.013104   
## Food.and.drink Online.boarding   
## 1.845279 1.321340   
## Seat.comfort Inflight.entertainment   
## 1.950410 2.954702   
## On.board.service Leg.room.service   
## 1.616072 1.203443   
## Baggage.handling Checkin.service   
## 1.759727 1.199437   
## Inflight.service Cleanliness   
## 1.928081 2.201101   
## Departure.Delay.in.Minutes Male   
## 1.018088 1.006763   
## LoyalCustomer BusinessTravel   
## 1.664659 1.929359   
## EcoClass BusinessClass   
## 4.191725 4.714535