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1 C:\Users\tingt\Anaconda3\python.exe C:/Users/tingt/PycharmProjects
  /BIA656/Final/MySigma_6.py
2 Random Forest Results:
3 The logloss is: 0.617347327602
4 The accuracy score is: 0.726162097735
5 Logistic Regression Results:
6 The logloss is: 0.679737394423
7 The accuracy score is: 0.703337306317
8 Decision Tree Results:
9 The logloss is: 11.9591447996
10 The accuracy score is: 0.65357568534
11 Naive Bayes Results:
12 The logloss is: 1.12440890083
13 The accuracy score is: 0.591179976162
14 Bagging Results:
15 The logloss is: 1.8357219364
16 The accuracy score is: 0.702562574493
17 KNN Results:
18 The logloss is: 3.65621683916
19 The accuracy score is: 0.65178784267
20 AdaBoost Results:
21 The logloss is: 1.09205962504
22 The accuracy score is: 0.71758045292
23 Random Forest Confusion Matrix:
24 [[ 284   457   523]
25  [ 219 1061 2537]
26  [   75   784 10840]]
27 Random Forest Classification Report
28               precision    recall  f1-score   support
29
30      0             0.49       0.22       0.31       1264
31      1             0.46       0.28       0.35       3817
32      2             0.78       0.93       0.85      11699
33
34 avg / total             0.69       0.73       0.69      16780
35
36 Feature ranking:
37 1. logprice (0.106994)
38 2. created_day (0.106172)
39 3. price (0.102505)
40 4. building_index (0.100946)
41 5. manager_index (0.082890)
42 6. num_photos (0.077159)
43 7. zip_id (0.073623)
44 8. created_month (0.051996)

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45 9. bedrooms (0.037609)
46 10. room_sum (0.036765)
47 11. No Fee (0.020444)
48 12. Elevator (0.016781)
49 13. Hardwood Floors (0.016059)
50 14. Pre-War (0.015975)
51 15. bathrooms (0.013969)
52 16. Laundry in Unit (0.013789)
53 17. Dishwasher (0.013630)
54 18. Laundry in Building (0.013521)
55 19. Cats Allowed (0.012579)
56 20. Dogs Allowed (0.012200)
57 21. Doorman (0.012192)
58 22. Fitness Center (0.010829)
59 23. Dining Room (0.010067)
60 24. Roof Deck (0.009804)
61 25. Outdoor Space (0.009385)
62 26. Balcony (0.008139)
63 27. High Speed Internet (0.008065)
64 28. Swimming Pool (0.005911)
65 29. created_year (0.000000)
66
67 Process finished with exit code 0
68
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