When I used min max scaler, the algorithm performed better compared to when standardscaler was used. Using minmax scaler, we achieved an accuracy of

precision recall f1-score support

0 0.91 0.71 0.80 1035

1 0.51 0.82 0.62 374

accuracy 0.74 1409

macro avg 0.71 0.76 0.71 1409

weighted avg 0.81 0.74 0.75 1409

compared to standardscaler where we got an accuracy of

precision recall f1-score support

0 0.91 0.71 0.80 1035

1 0.51 0.82 0.62 374

accuracy 0.74 1409

macro avg 0.71 0.76 0.71 1409

weighted avg 0.81 0.74 0.75 1409

hence, it was concluded that the minmax scaler is the best scaler for our dataset.

NAÏVE BAYES

Confusion matrix shows 736+298 = 1034 correct predictions and 299+76 = 375 incorrect predictions.

Confusion matrix

[[736 299]

[ 76 298]]

True Positives(TP) = 736 [AP:1 and PP:1) - 736

True Negatives(TN) = 298 [AN:0 and PN:0) - 298

False Positives(FP) = 299 [AN:0 BUT PP:1) – 299 (TYPE 1 ERROR)

False Negatives(FN) = 76 [AP:1 BUT PN:0) – 76 (TYPE 11 ERROR)