EVALUATION METRICS USING CONFUSION MATRIX

RANDOM FOREST

1.ACCURACY:

What is the percentage of correct classification of both purchased and non-purchased to the total input of the test set. = 0.90%

2.RECALL:

i. What is the percentage of correct classification of purchased to the total input of purchased in the test set. = 0.92%

ii. What is the percentage of correct classification of non-purchased to the total input of non - purchased in the total set. = 0.88%

3.PRECISION:

i. What is the percentage of correct classification of purchased to sum of correct classification as purchased and wrongly classified as purchased in the test set. = 0.93%

ii. What is the percentage of correct classification of non-purchased to sum of correct classified as non-purchased and wrongly classified as non-purchased in the test set. = 0.86%

4. F1 SCORE:

i. What is the overall performance of purchased = 0.92%

ii. What is the overall performance of non-purchased = 0.87%

5. MACRO AVERAGE:

i. PRECISION - What is the average performance of precision. (correctly or wrongly classified) = 0.89%

ii. RECALL - What is the average performance of recall. (correctly classified) = 0.90%

iii. F1 MEASURE - What is the average performance of F1 measure. (overall performance) = 0.86%

6.WEIGHTED AVERAGE:

i. PRECISION - What is the sum of product of proportion rate(weight) of each class(precision) = 0.90%

ii. RECALL - What is the sum of product of proportion rate(weight) of each class(recall) = 0.90%

iii. F1 MEASURE - What is the sum of product of proportion rate(weight) of each class (F1 measure) = 0.90%