

EVALUATION METRICS USING CONFUSION MATRIX

SUPPORT VECTOR MACHINE

1.ACCURACY:

What is the percentage of correct classification of both purchased and non-purchased to the total input of the test set. = **0.78%**

2.RECALL:

- i. What is the percentage of correct classification of purchased to the total input of purchased in the test set. = **0.96%**
- ii. What is the percentage of correct classification of non-purchased to the total input of non - purchased in the total set. = **0.47%**

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. = **0.76%**
- 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. = **0.88%**

4. F1 SCORE:

- i. What is the overall performance of purchased = **0.85%**
- ii. What is the overall performance of non-purchased = **0.61%**

5. MACRO AVERAGE:

- i. PRECISION - What is the average performance of precision. (correctly or wrongly classified) = **0.82%**
- ii. RECALL - What is the average performance of recall. (correctly classified) = **0.72%**
- iii. F1 MEASURE - What is the average performance of F1 measure. (overall performance) = **0.73%**

6.WEIGHTED AVERAGE:

- i. PRECISION - What is the sum of product of proportion rate(weight) of each class(precision) = **0.81%**
- ii. RECALL - What is the sum of product of proportion rate(weight) of each class(recall) = **0.78%**
- iii. F1 MEASURE - What is the sum of product of proportion rate(weight) of each class (F1 measure) = **0.76%**