# Classification Assignment

## Random Forest

1. What is the percentage of overall performance of your model? (Accuracy)

91%

2. What is the percentage of correct classification of Purchased to the total input of Purchased in the test set? (Recall of Purchased)

88%

3. What is the percentage of correct classification of Non Purchased to the total input of Non Purchased in the test set? (Recall of Non Purchased)

93%

4. What is the percentage of correct classification of Purchased to sum of correctly classified as Purchased and wrongly classified as Purchased in the test set? (Precision of Purchased)

88%

5. What is the percentage of correct classification of Non Purchased to sum of correctly classified as Non Purchased and wrongly classified as Non Purchased in the test set?

(Precision of Non Purchased)

93%

6. What is the overall performance of Purchased? (F1 – Measure of Purchased)

0.88

7. What is the overall performance of Non Purchased? (F1 – Measure of Non Purchased)

0.93

8. What is the average performance of Precision? (Macro Average of Precision)

0.90

9. What is the average performance of Recall? (Macro Average of Recall)

0.90

10. What is the average performance of F1 - Measure? (Macro Average of F1 - Measure)

0.90

11. What is the sum of product of proportion rate of each class of precision? (Weighted Average of

Precision)

0.91

12. What is the sum of product of proportion rate of each class of Recall? (Weighted Average of

Recall)

0.91

13. What is the sum of product of proportion rate of each class of F1 - Measure? (Weighted Average

Of F1 - Measure)

0.91

## Decision Tree

1. What is the percentage of overall performance of your model? (Accuracy)

87%

2. What is the percentage of correct classification of Purchased to the total input of Purchased in the test set? (Recall of Purchased)

73%

3. What is the percentage of correct classification of Non Purchased to the total input of Non Purchased in the test set? (Recall of Non Purchased)

94%

4. What is the percentage of correct classification of Purchased to sum of correctly classified as Purchased and wrongly classified as Purchased in the test set? (Precision of Purchased)

88%

5. What is the percentage of correct classification of Non Purchased to sum of correctly classified as Non Purchased and wrongly classified as Non Purchased in the test set?

(Precision of Non Purchased)

86%

6. What is the overall performance of Purchased? (F1 – Measure of Purchased)

0.80

7. What is the overall performance of Non Purchased? (F1 – Measure of Non Purchased)

0.90

8. What is the average performance of Precision? (Macro Average of Precision)

0.87

9. What is the average performance of Recall? (Macro Average of Recall)

0.84

10. What is the average performance of F1 - Measure? (Macro Average of F1 - Measure)

0.85

11. What is the sum of product of proportion rate of each class of precision? (Weighted Average of

Precision)

0.87

12. What is the sum of product of proportion rate of each class of Recall? (Weighted Average of

Recall)

0.87

13. What is the sum of product of proportion rate of each class of F1 - Measure? (Weighted Average

Of F1 - Measure)

0.86