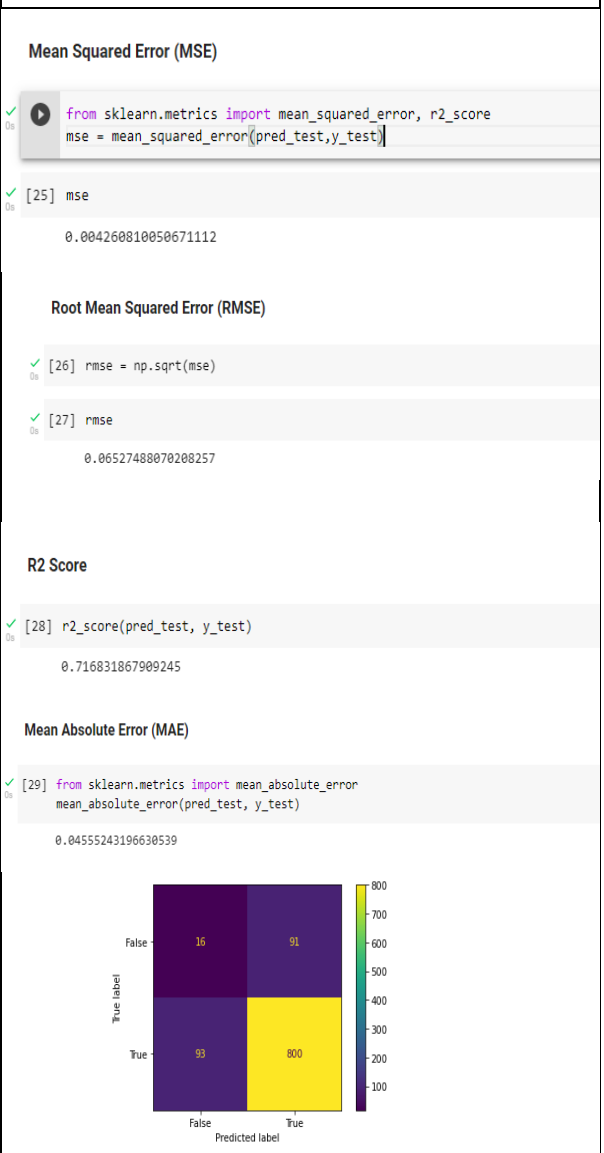
Project Development
Phase Model
Performance Test

Date	19 November 2022
Team ID	PNT2022TMD04288
Project Name	University Admit Eligibility Predictor
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Regression Model:** MAE - 0.04555 MSE - 0.00426 RMSE – 0.06527 , R2 score – 0.71683 **Classification Model:** Confusion Matrix - Accuracy Score -0.82 Classification Report -	

			In [44]: ``` Accuracy = metrics.accuracy_score(actual, predicted) Accuracy ``` Out[44]: 0.816 Classification Report In [56]: ``` from sklearn.metrics import classification_report print(classification_report(actual, predicted)) ``` |	precision	recall	f1-score	support
---	---	---	---	---
0	0.15	0.15	0.15	107
1	0.90	0.90	0.90	893
accuracy			0.82	1000
macro avg	0.52	0.52	0.52	1000
weighted avg	0.82	0.82	0.82	1000
2.	Tune the Model	Hyperparameter Tuning - Validation Method –	2.Stratified K-Fold In [63]: ``` from sklearn import datasets from sklearn.tree import DecisionTreeClassifier from sklearn.model_selection import StratifiedKFold, cross_val_score X, y = datasets.load_iris(return_X_y=True) clf = DecisionTreeClassifier(random_state=42) sk_folds = StratifiedKFold(n_splits = 5) scores = cross_val_score(clf, X, y, cv = sk_folds) print("Cross Validation Scores: ", scores) print("Average CV Score: ", scores.mean()) print("Number of CV Scores used in Average: ", len(scores)) ``` Cross Validation Scores: [0.96666667 0.96666667 0.9 0.93333333 1.] Average CV Score: 0.9533333333333334 Number of CV Scores used in Average: 5