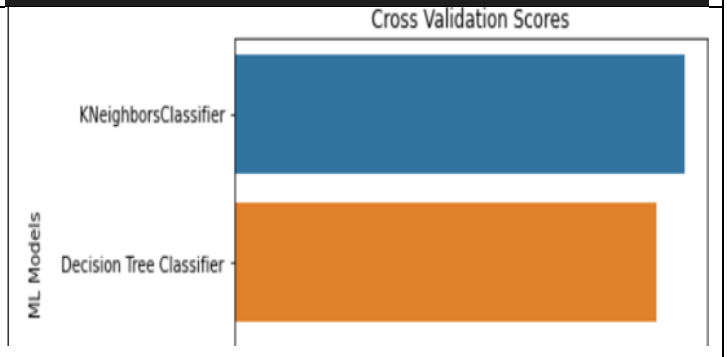
Project Development Phase
Model Performance Test

Date	15 NOvember 2022
Team ID	PNT2022TMID52685
Project Name	Developing a Flight Delay Prediction Model Using Machine Learning
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	**Classification Model:** Ensemble Model(Voting Classifier)-KNN(K-Nearest Neighbor,Decision Tree,GNB model) Confusion Matrix , Accuray Score- 93% & Classification Report	Confusion matrix [[3151 218] [36 240]] Classification report precision recall f1-score support 0 0.99 0.94 0.96 3369 1 0.52 0.87 0.65 276 accuracy 0.93 3645 macro avg 0.76 0.90 0.81 3645 weighted avg 0.95 0.93 0.94 3645 Accuracy score 0.9303155006858711
2.	Tune the Model	Hyperparameter Tuning – Grid SearchCV,Finding best estimators for each algorithm in ensemble model Validation Method – Cross Validation	

			Fitting 10 folds for each of 40 candidates, totalling 400 fits 94.58428680396644 Fitting 10 folds for each of 250 candidates, totalling 2500 fits 88.55835240274601 Fitting 10 folds for each of 54 candidates, totalling 540 fits 94.49885583524026