Project Development PhaseModel Performance Test

Date	11 November 2022
Tea	PNT2022TMID30798
Project Name	Project – Developing a Flight Delay Prediction Using Machine Learning
Maximum Marks	10 Marks

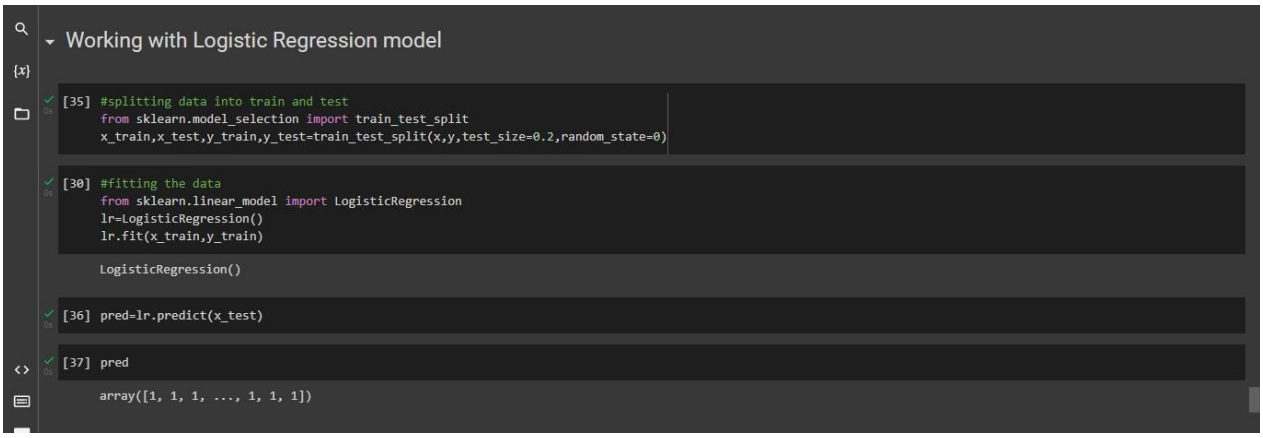
Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Regression Model: Logistic Regression** MAE – 0.2614201567193304 MSE - 0.5228403895458661 RMSE - 0.7230704321004928 R2 score - -2.888783182487615 **Classification Model: Decision Tree Classifier** Confusion Matrix - array([[61, 259], [26, 1865]]) Accuracy Score- 0.8756218967472637 Classification Report – refer screenshot	Attached Below
2.	Tune the Model	Hyperparameter Tuning - Validation Method -	Attached Below

1. METRICS:

REGRESSION MODEL: LOGISTIC REGRESSION

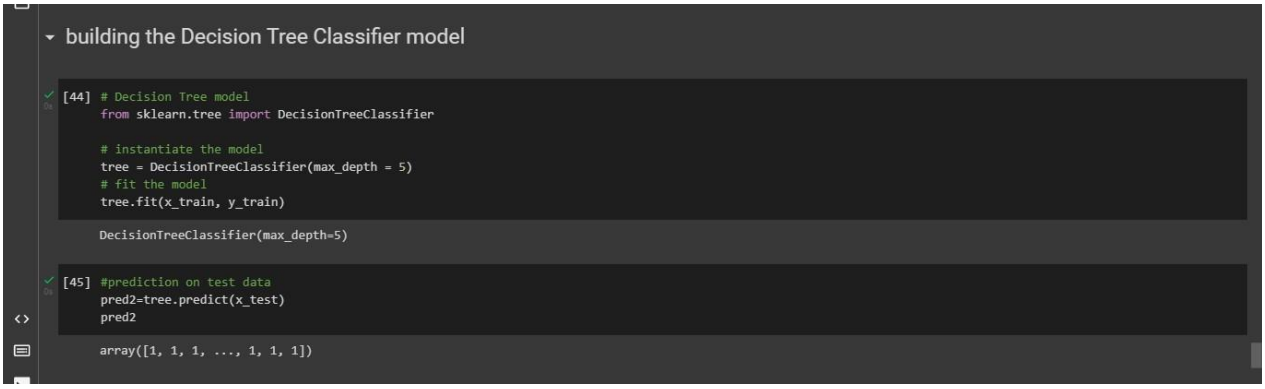


EVALUATION METRICS:

Here are some evaluation metrics used for regression they are,

- R2 Score
- Mean Square Error(MSE)
- RMSE(Root Mean Square Error)
- Mean Absolute Error(MAE)

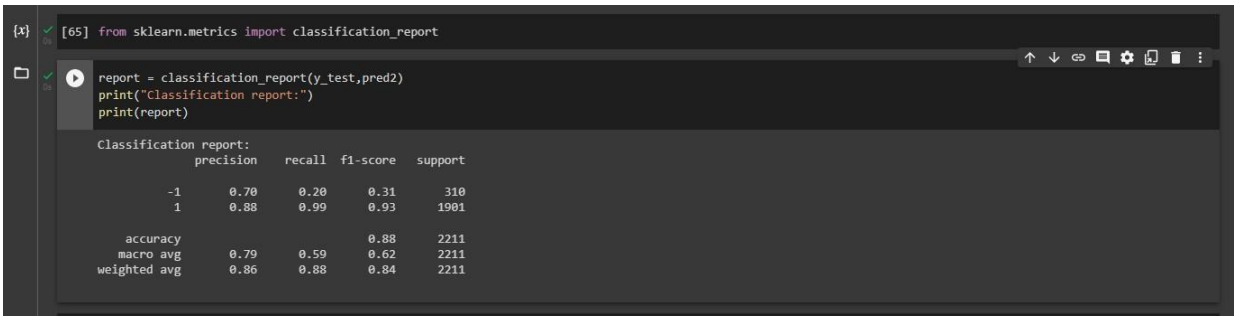
CLASSIFICATION MODEL: DECISION TREE CLASSIFIER



EVALUATION METRICS:

Some of the evaluation metrics is as follows

- Confusion matrix
- Accuracy score
- Classification report



2. **TUNE THE MODEL:** DECISION TREE CLASSIFIER

HYPERPARAMETER TUNING: