Project Development Phase

Model Performance Test

Date	10 NOvember 2022
Team ID	PNT2022TMID40758
Project Name	Project - TRIP BASED FUEL CONSUMPTION PREDICTION
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 - 8.203 MSE - 128.398 RMSE - 11.331 R2 score - 0.721	Performance Metrics [259]: from sklearn.metrics import r2_score from sklearn.metrics import mean_squared_error from sklearn.metrics import mean_absolute_error [260]: mae = mean_absolute_error(y_test, pred) mae [260]: 8.203867369235024 [261]: mse= mean_squared_error(y_test,pred) mse [261]: 128.39806863056307 [262]: rmse = np.sqrt(mse) rmse [262]: 11.331287156830996 [263]: r2_score(y_test,pred) [263]: 0.721307989574244
2.	Tune the Model	Hyperparameter Tuning - 0.929 Validation Method - Cross Validation	[252]: rcv.score(x_test, pred) [252]: 0.9292735740693612 from sklearn.model_selection import cross_val_score lin_score = cross_val_score(rcv, x, y, cv=5, scoring="neg_mean_absolute_error") Fitting 5 folds for each of 1 candidates, totalling 5 fits Fitting 5 folds for each of 1 candidates, totalling 5 fits Fitting 5 folds for each of 1 candidates, totalling 5 fits Fitting 5 folds for each of 1 candidates, totalling 5 fits Fitting 5 folds for each of 1 candidates, totalling 5 fits lin_score_n = -lin_score lin_score_n array([8.75539133, 9.01726042, 8.87656065, 8.67217387, 8.75847804]) np.mean(lin_score_n) 8.815972860563146