

Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID41109
Project Name	Car Resale Value 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: LGBM Regressor MAE: 1327.55 MSE: 9492244.28 RMSE: 3080.95 RMSLE: 8.03 R2 Score: 0.8668 Adjusted R2 Score: 0.8668	Choose the metrics of the model <pre>#predicting the values to test set y_pred = regressor.predict(X_test) #printing the accuracy for test set print(r2_score(Y_test,y_pred))</pre>
2.	Tune the Model	Hyperparameter Tuning 1) Learning Rate: [0.01, 0.03, 0.05, 0.07] 2) Boosting Type: ['gbdt','dart','goss','rf'] 3) Number of Estimators: [100,200,300] Validation Method: Grid Search Cross Validation Best Parameters: Learning Rate – 0.07 Boosting Type – 'gbdt' Number of Estimators - 300	<pre>lgbm configs = { "name": 'LGBMRegressor', "method": "grid", "metric": { "name": "adj_r2", "goal": "maximize" }, "parameters": { "learning_rate": { "values": [0.01, 0.03, 0.05, 0.07] }, "objective": ["values": ['root_mean_squared_error']], "boosting_type": { "values": ['gbdt','dart','goss','rf'] }, "reg_sqrt": { "values": [True] }, "metric": { "values": ['rmse'] }, "n_estimators": { "values": [100,200,300] }, "random_state": { "values": [42] } } }</pre>