Project Development Phase
Model Performance Test

Date	18 November 2022
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Project Name	Project – 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:** MAE , MSE , RMSE , R2 score	Since our's is a regression model we have used R2 score metrics.
			
			``python
			#predicting the values of test test
			y_pred = regressor.predict(X_test)
			#predicting the accuracy for test set
			print(r2_score(Y_test, y_pred))
			``
			0.8118243572325188

2.	Tune the Model	Hyperparameter Tuning	Hyperparameters in Machine learning are those parameters that are explicitly defined by the user to control the learning process. One such important parameter used for hyper parameter tuning is n_estimators. In our model also we have used n_estimators for hyperparameter tuning.
			
			``python
			from sklearn.ensemble import RandomForestRegressor
			from sklearn.metrics import r2_score
			regressor = RandomForestRegressor(n_estimators=1000, max_depth = 10, random_state=34)
			#fitting the model
			regressor.fit(X_train, np.ravel(Y_train,order='C'))
			
			RandomForestRegressor(max_depth=10, n_estimators=1000, random_state=34)
			``