

## Project Development Phase Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID21221
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	<b>Regression Model:</b> MAE , MSE , RMSE , R2 score	<p>Since our's is a regression model we have used R2 score metrics.</p> <pre>#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))</pre> <p>0.8118243572325188</p>
2.	Tune the Model	Hyperparameter Tuning	<p>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.</p> <pre>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)</pre>