Project Development Phase
Model Performance Test

Date	10 NOvember 2022
Team ID	PNT2022TMID37289
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:** MAE -0.098 MSE -0.313 RMSE -0.313 R2 score -0.597	RMSE: 0.31362502409359 MSE: 0.31362502409359 MAE: 0.09836065573770492 R2 SCORCE: 0.5978021978021978

| 2. | Tune the Model | Hyperparameter Tuning - Validation Method - <br><br>1 ) Learning Rate: [0.01, 0.03, 0.05, 0.07] <br>2) Boosting Type: ['gbdt','dart','goss','rf'] <br>3) Number of Estimators:[50,75,100] <br><br><br>Validation Method: Grid Search Cross Validation <br><br>Best Parameters: <br>Learning Rate — 0.07 <br>Boosting Type — 'gbdt' <br>Number of Estimators - 100 | ```json
Rf_configs={

    "name":'RandomForestRegressor',
    "name":"grid",
    "metric":{
        "name":"adj_r2",
        "goal":"maximize"
    },
    "parametres":{
        "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":[50,75,100]
        },
        "random_state":{
            "values":[4]
        }
    }
}
``` |