Project Development Phase Model Performance Test

Date	19 NOV 22	
Team ID	PNT2022TMID54519	
Project Name	Project — Car Resale Value Prediction	
Maximum Marks	10 Marks	

Model Performance Testing:

S.No.	Parameter	Values	Screenshot
1.	Metrics	Regression Model: LGBM Regressor MAE: 1327.56 MSE: 9492244.25 RMSE: 3080.93 RMSLE: 8.05 R2 Score: 0.8664 Adjusted R2 Score: 0.8666	Marie Control
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	lgtm configs = {

Screenshots

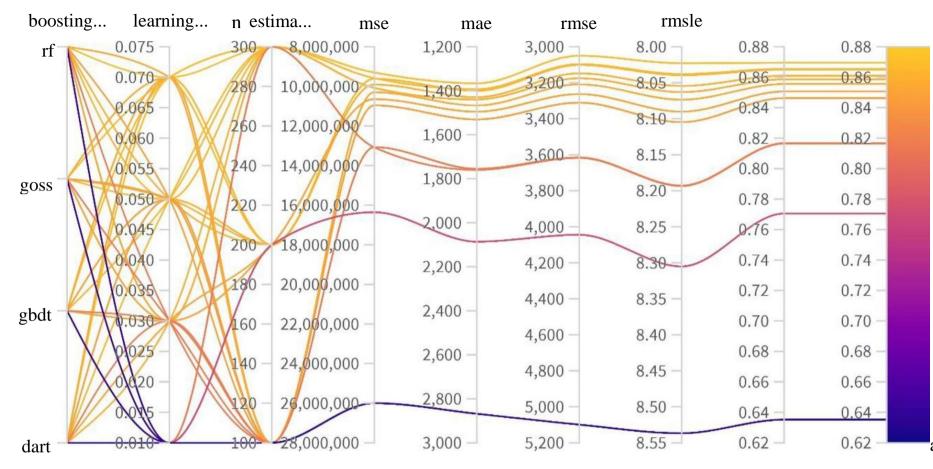
1) Metrics

2) Tune the model

```
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]
            "values": [42]
```

Igbm configs

Wandb Sweep:



adj_r2