



Model Optimization and Tuning Phase

Date	07 July 2024
Team ID	739868
Project Title	BlueBerry Yield Prediction
Maximum Marks	2Marks

Performance Metrics Comparison Report (2 Marks):

A Performance Metrics Comparison Report systematically evaluates the effectiveness of various machine learning models or algorithms by comparing key metrics such as MAE,MSE,R-Square. This report highlights the strengths and weaknesses of each model, providing insights into their performance on different datasets or tasks. By presenting a clear, detailed analysis, the report aids in selecting the most suitable model for deployment, ensuring optimal performance in real-world applications.





```
[46]: error_rec={
    'linearreg':{
        "mae":mae_lr,
        "rmse":rmse_lr,
        "r2":rsq_lr*100
    },
    'randomforest':{
        "mae":mae_rf,
        "rmse":rmse_rf,
        "r2":rsq_rf*100
    },
    'decisiontree':{
        "mae":mae_dt,
        "rmse":rmse_dt,
        "r2":rsq_dt*100
    },
    'xgboost':{
        "mae":mae_xgb,
        "rmse":rmse_xgb,
        "r2":rsq_xgb*100
    },
}
pd.DataFrame(error_rec).plot(kind="bar",
                              color=[
                                  sns.color_palette("pastel")[1],
                                  sns.color_palette("pastel")[2],
                                  sns.color_palette("pastel")[3],
                                  sns.color_palette("pastel")[4]]);
```





