Model Development Phase Template

Date	10-july-2024
Team ID	739925
Project Title	Walmart Sales Analysis For Retail Industry with Machine Learning
Maximum Marks	6 Marks

Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for Walmart sales analysis	-	95%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into Walmart sales patterns.	-	93%
Xgboost	XGBoost is an advanced machine learning algorithm ideal for Walmart sales analysis due to its ability to handle large datasets and complex patterns. It combines multiple decision trees to predict sales accurately by capturing seasonality, trends.	-	93%