

ModelDevelopmentPhase Template

Date	10-july-2024
TeamID	739969
ProjectTitle	WalmartSalesAnalysisForRetailIndustrywith MachineLearning
MaximumMarks	6Marks

ModelSelectionReport

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions,hyperparameters,andperformancemetrics,includingAccuracyorF1Score.This comprehensive report will provide insights into the chosen models and their effectiveness.

Model	Description	Hyperparameters	PerformanceMetric (e.g., Accuracy, F1 Score)
RandomForest	Ensemble of decision trees;robust,handles complexrelationships, reduces overfitting, and provides feature importancefor Walmar-salesanalysis	-	95%
DecisionTree	Simpletreestructure; interpretable, captures non-linear relationships,suitable forinitialinsightsinto Walmart sales patterns.	-	93%
Xgboost	XGBoost is an advanced machine learning algorithm ideal for Walmart salesanalysisdueto its ability to handle large datasets and complexpatterns.It combines multiple decision trees to predict sales accurately by capturing seasonality, trends.	-	93%