

Model Development Phase Template

Date	13 June 2024
Team ID	740014
Project Title	Optimising Food Delivery Using ML
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 Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., R2 score)
Random Forest Regressor	An ensemble learning method that uses multiple decision trees to improve predictive performance.	n_estimators, max_depth, min_samples_split, min_samples_leaf	R2 Score: 0.9212348902293894
Decision tree regressor	A non-parametric model that predicts target values by learning decision rules from features.	max_depth, min_samples_split, min_samples_leaf	R2 Score: 0.9994962879709425

XG Boost regressor	An efficient and scalable implementation of gradient boosting framework.	learning_rate, n_estimators, max_depth, subsample, colsample_bytree	R2 Score: 0.5008550984251501
KNN	A simple, instance-based learning algorithm that predicts based on the closest training examples.	n_neighbors, weights, algorithm	R2 Score: 0.16416827677006174