Model Development Phase Template

Date	01 May 2024
Team ID	Team-738315
Project Title	Online Payment Fraud Detection using 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 loan approval prediction.	-	Accuracy score = 66%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan approval patterns.	-	Accuracy score = 99.8%
SVM	Support Vector Machine (SVM) is a supervised learning algorithm for classification and regression tasks, finding optimal hyperplanes for separation.	-	Accuracy score = 99.5%

XGBoost	XGBoost is an optimized gradient boosting library that utilizes parallel and distributed computing for improved performance in classification and regression..	-	Accuracy score = 99.8%