

Model Development Phase Template

Date	15 July 2024
Team ID	739961
Project Title SmartLender -	Automotive Kickstart
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	Hyper Parameter s	Performance metric (Accuracy_score, F1_score)
Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for loan approval prediction.	—	80%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan approval patterns.	—	82%

KNN	Classifies based on nearest neighbors and predicts whether the project is successful or not	—	79%
SVM	SVM will divide and verify the data in the form of SVM hyper lines . It will divide the data into 2 or 3 different parts and gives us predict value	—	82%