Model Development Phase Template

Date	15 March 2024
Team ID	739926
Project Title	Loan Sanction Amount Prediction Data With 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	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 sanction amount prediction.	-	R^2 score = 0.85
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan sanction amount patterns.	-	R^2 score = 0.75
KNN	Linear approach; provides a straightforward model for predicting loan sanction amounts, useful for its simplicity and interpretability	-	R^2 score = 0.70

Gradient Boosting	Gradient boosting with trees; optimizes predictive performance, handles comp--lex relationships, and is suitable for accurate loan sanction amount predicti--ons.	-	R² score = 0.87