

Model Development Phase Template

Date	14 July 2024
Team ID	739963
Project Title	Blood Donation Prediction
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., Accuracy, F1 Score)
Logistic Regression	Logistic regression is a statistical method used in machine learning for binary classification problems, where the outcome can take one of two possible values. It is a type of regression analysis used to predict the probability of a binary outcome based on one or more predictor variables.	–	Accuracy Score =93%

Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for predicting the bankrupted business	–	Accuracy Score =90%
Support Vector Machine (SVM)	Support Vector Machine (SVM) is a supervised machine learning algorithm that can be used for both classification and regression tasks, but it is primarily used for classification.	–	Accuracy Score =90%