Model Development Phase Template

Date	05 July 2024
Team ID	739898
Project Title	Anticipating Business Bankruptcy
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 predicting the bankrupted business	-	Accuracy score = 81%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights in predicting the bankrupted business	-	Accuracy score = 88%

Support vector classifier	A Support Vector Classifier (SVC) is a type of supervised machine learning model used for classification tasks. It is part of the larger family of Support Vector Machines (SVM), which can be used for both classification and regression. SVC is particularly effective for high-dimensional spaces and situations where the number of dimensions exceeds the number of samples.	-	Accuracy score = 94%