

Model Development Phase Template

Date	15 June 24
Team ID	739820
Project Title	Predicting the Unpredictable: A Look into the world of Powerlifting
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 = 87.72%

Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan approval patterns.	-	Accuracy score = 77.20%
Linear Regression	Linear regression is fundamental statistical method used to model and analyze relationship between	-	Accuracy score = 79%

	dependent variable and one or more independent variable		
XGBoost	XGBoost is short for Extreme Gradient Boosting, is a powerful and efficient	-	Accuracy score = 87.72%