**Model Development Phase Template**

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| 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.

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| **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% |



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