

## Model Development Phase Template

Date	03 June 2024
Team ID	739692
Project Title	Harvesting Brilliance: A Taxanomic Tale of Pumpkin Seeds Varieties
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)
Logistic Regression	A model that predicts the probability of a binary outcome.	C=1.0, solver='liblinear'	Accuracy: 86%, F1 Score: 0.87
Random Forest	An ensemble model that uses multiple decision trees.	n_estimators=100, max_depth=10	Accuracy: 87%, F1 Score: 0.88
Support vector Machine	A model that finds the optimal hyperplane for classification.	C=1.0, kernel='linear'	Accuracy: 66%, F1 Score: 0.67
Gradient Boosting	An ensemble model that builds trees sequentially.	n_estimators=200, learning_rate=0.1	Accuracy: 88%, F1 Score: 0.88

## Model Selection Report:

