

## Model Development Phase Template

Date	20 July 2024
Team ID	SWTID1720519736
Project Title	Ecommerce Shipping Prediction Using Machine Learning
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	-	Accuracy score = 67.45%
Logistic Regression	Linear model suitable for binary classification tasks, interpretable results.	-	Accuracy score = 63.95%
KNN	Non-parametric method classifying based on nearest neighbors	-	Accuracy score = 64.55%

XG Boosting	Gradient boosting ensemble method known for high performance in various tasks.	-	Accuracy score = 67.36%

Ridge Classifier	Regularized linear model that handles multicollinearity well.	-	Accuracy score=66.77%
Support Vector Classifier	SVM-based classifier, effective with non-linear boundaries.	-	Accuracy score=65.05%