Model Development Phase Template

Date	15 March 2024
Team ID	SWTID1720116037
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 Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest	Ensemble of decision tree; trained on different data subsets, to forecast delivery based on features like order details, shipping information, customer data and external factors.	–	Accuracy Score = 69%
ANN	analyzing historical shipping data and factors like order volume, distance, carrier performance, and weather conditions. This leads to more accurate delivery time predictions, enhancing logistics efficiency and customer satisfaction.	–	Accuracy Score = 68%

Support Vector Machine	It considering features like order volume, shipping distance, carrier performance, and weather, this model robustly predict shipping times, leading to improved logistics efficiency and customer satisfaction through more reliable delivery estimates.	–	Accuracy Score=66%