Model Development Phase Template

Date	20 July 2024
Team ID	SWTID1720110595
Project Title	Ecommerce Shipping Prediction Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Warehouse _block	The warehouse block where the product is stored.	Yes	Categorical feature that may influence the shipping time due to location.
Mode_of_S hipment	The mode of shipr	Yes	Different shipment modes have varying delivery times, impacting the target variable.
Customer_c are_calls	Number of customer care calls made.	Yes	Indicates potential issues or concerns with the order, which could affect delivery time.
Customer_r ating	Rating given by the customer (1 to 5).	Yes	Customer satisfaction might correlate with shipping efficiency.

Cost_of_the_Product	Cost of the product in US Dollars.	Yes	Higher cost products might receive priority in shipping.
Prior_purchases	Number of prior purchases by the customer.	Yes	Regular customers might have different shipping priorities or patterns.
Product_importance	Importance of the product (Low, Medium, High).	Yes	High importance products might be expedited in shipping.
Gender	Gender of the customer.	Yes	Potentially influences shipping preferences and patterns.
Discount_offered	Discount offered on the product.	Yes	High discounts might indicate promotions, which could affect shipping logistics.
Weight_in_gms	Weight of the product in grams.	Yes	Heavier products might have different shipping requirements and times.
Total_Interaction	Interaction between customer care calls and customer rating.	Yes	Derived feature combining customer interaction metrics, potentially insightful for delivery time.
Cost_per_Weight	Cost of the produc	Yes	Indicates value density, which might influence shipping method and priority.
Reached.on.Time_Y.N	Target variable indicating whether the product reached on time (1 = No, 0 = Yes).	Yes	Target variable for the prediction model.

ID	Unique identifier for each customer.	No	Not relevant for prediction, used only for identification purposes.