Project Initialization and Planning Phase

Date	15 March 2024
Team ID	SWTID1720108903
Project Title	Ecommerce Shipping Prediction Using Machine Learning
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. The proposal report aims to transform the e-commerce shipping process using machine learning, boosting efficiency and accuracy. It tackles system inefficiencies, promising better operations, reduced delays, and happier customers. Key features include a machine learning-based delivery time prediction model and real-time tracking.

Project Overview	
Objective	The primary objective is to revolutionize the e-commerce shipping process by implementing advanced machine learning techniques, ensuring faster and more accurate delivery predictions.
Scope	The project comprehensively assesses and enhances the shipping prediction process, incorporating machine learning for a more robust and efficient system.
Problem Statement	
Description	Addressing inaccuracies and inefficiencies in the current shipping prediction system that adversely affect operational efficiency and customer satisfaction.
Impact	Solving these issues will result in improved operational efficiency, reduced shipping delays, and an overall enhancement in the delivery process, contributing to customer satisfaction and organizational success.
Proposed Solution	
Approach	Employing machine learning techniques to analyze and predict delivery times, creating a dynamic and adaptable shipping prediction

	system.
Key Features	Implementation of a machine learning-based delivery time prediction model. Real-time tracking and updates for customers. Proactive notifications for any changes in the delivery schedule. Integration with multiple logistics providers to choose the most efficient option.

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask
Libraries	Additional libraries	e.g., scikit-learn, pandas, numpy
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git
Data		
Data	Source, size, format	e.g., Kaggle dataset, train.csv