

Project Initialization and Planning Phase

Date	9 July 2024
Team ID	SWTID1720163281
Project Title	Ecommerce Shipping Prediction Using Machine Learning
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

Develop a machine learning model to predict ecommerce delivery times using historical shipping data. This model will analyze order details, customer location, product characteristics, and shipping methods to provide accurate delivery estimates. By improving prediction accuracy, the project aims to enhance customer satisfaction and optimize the logistics process. This solution will reduce delivery delays and increase the reliability of the ecommerce platform.

Project Overview	
Objective	To develop a machine learning model that accurately predicts ecommerce delivery times to enhance customer satisfaction and optimize logistics.
Scope	Develop, train, and deploy a machine learning model using historical shipping data to provide accurate real-time delivery time predictions for an ecommerce platform.
Problem Statement	
Description	This project develops a machine learning model to accurately predict ecommerce delivery times, enhancing customer satisfaction and optimizing logistics by analyzing historical shipping data.
Impact	This project aims to improve ecommerce efficiency by accurately predicting delivery times, enhancing customer satisfaction and operational effectiveness
Proposed Solution	
Approach	Utilize historical shipping data to develop a machine learning model for accurate ecommerce delivery time predictions, emphasizing feature engineering and real-time deployment.
Key Features	Key features include leveraging historical shipping data, advanced feature engineering, real-time deployment for instant predictions, and continuous model improvement for accuracy.

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, 10,000 images