Project Initialization and Planning Phase

Date	4 JULY 2024
Team ID	SWTID1720151584
Project Title	E-Commerce Shipping Prediction Using Machine Learning
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

Machine Learning predicts specific e-commerce delivery dates, boosting sales and customer satisfaction.

Project Overview	
Objective	Develop a machine learning model for shipping predictions for e-commerce orders.
Scope	Historical order data, real-time carrier data, external data sources, predicting delivery ranges or specific delivery dates
Problem Statement	
Description	E-commerce customers experience frustration due to inaccurate or unreliable shipping estimates, leading to a negative shopping experience.
Impact	Machine learning can predict e-commerce shipping times, boosting customer satisfaction, sales, and efficiency, but data security and bias need attention.
Proposed Solution	
Approach	Train machine learning models on historical data to predict future e-commerce delivery times.
Key Features	Our solution goes beyond ranges, predicting specific e-commerce delivery dates with confidence intervals.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	GPU :Intel(R) Iris(R) Xe Graphics CPU:12th Gen Intel(R) Core(TM) i7-1260P
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	sci kit-learn, pandas, numpy, matplotlib, Sea-born , TensorFlow
Development Environment	IDE, version control	Jupyter Notebook, spyder
Data		
Data	Source, size, format	Kaggle dataset, 10,999 rows