**Project Initialization and Planning Phase**

|  |  |
| --- | --- |
| Date | 7 July 2024 |
| Team ID | SWTID1720161281 |
| 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. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

|  |  |
| --- | --- |
| **Project Overview** | |
| Objective | To correctly predict which products were delivered on time |
| Scope | To use various Machine Learning Algorithms to predict whether a product was shipped on time or not |
| **Problem Statement** | |
| Description | An international e-commerce company wants to monitor whether a product was delivered or not. So, for that purpose develop a ML algorithm which will correctly predict weather it was delivered or not. |
| Impact | Developing a application like this will help them monitor the whether the customers are getting products on time or not, which will help them improve customer experience. |
| **Proposed Solution** | |
| Approach | Firstly, we would have to collect the dataset from Kaggle or any other sources, apply some pre-processing to it and then apply ML algorithms like SVM, Logistic Regression. |
| Key Features | The major steps in the process are applying correct pre-processing on the data and then apply a correct and accurate ML algorithm. |

**Resource Requirements**

|  |  |  |
| --- | --- | --- |
| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | Google Collab’s T4 GPU |
| Memory | RAM specifications | 12.7 GB (System RAM) +15 GB (GPU RAM) |
| Storage | Disk space for data, models, and logs | 78.2 GB |
| **Software** | | |
| Frameworks | Python frameworks | Flask, TensorFlow |
| Libraries | Additional libraries | scikit-learn, Pandas, NumPy, |
| Development Environment | IDE, version control | Google Collab IDE |
| **Data** | | |
| Data | Source, size, format | Kaggle CSV Data Set (10999 observation) |