**Project Initialization and Planning Phase**

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| Date | 04 June 2024 |
| Team ID | SWTID1720183095 |
| 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.

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| **Project Overview** | |
| Objective | The goal of this project is to create a machine learning model that can forecast shipping times for online purchases, enhancing both operational and customer efficiency. |
| Scope | Developing a machine learning model to predict shipping times based on historical order data. |
| **Problem Statement** | |
| Description | It aims for improving customer experience and operational efficiency using machine learning. |
| Impact | This would enable companies to enhance order fulfilment procedures overall and give clients accurate delivery estimates. |
| **Proposed Solution** | |
| Approach | Data Acquisition, Data Preprocessing, Model Selection and Training, Model Evaluation, Model Deployment. |
| Key Features | Predictive Shipping Times, Customizable Inputs, Performance Monitoring. |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | T4 GPU |
| Memory | RAM specifications | 8 GB |
| Storage | Disk space for data, models, and logs | 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | scikit-learn, pandas, numpy, matplotlib, pycharm |
| Development Environment | IDE, version control | Jupyter Notebook, Spyder |
| **Data** | | |
| Data | Source, size, format | Kaggle dataset, 614, csv UCI dataset,690, Performance Monitoring |