# Project Initialization and Planning Phase

| Date | 8 July 2024 |
|---|---|
| Team ID | 740109 |
| Project Title | Identification Of Methodology Used In Real Estate Property Valuation |
| Maximum Marks | 3 Marks |

## Project Proposal (Proposed Solution) template

This project proposal includes the objective, scope, problem statement, proposed solution, and resource requirements tailored for the identification of methodologies used in real estate property valuation.

| Project Overview | |
|---|---|
| Objective | The primary objective is to revolutionize the real estate valuation process by implementing advanced machine learning techniques, ensuring more accurate property valuations, and enhancing decision-making for buyers, sellers, and investors. |
| Scope | The project comprehensively assesses and enhances the real estate property valuation process, incorporating machine learning for a more robust and efficient system. |
| **Problem Statement** | |
| Description | Addressing inaccuracies and inefficiencies in the current property valuation methods that adversely affect operational efficiency and market stability |
| Impact | Accurate valuations will lead to better financial decisions, reduced risk, increased customer satisfaction, and a more stable real estate market. |
| **Proposed Solution** | |
| Approach | The primary objective is to revolutionize the real estate valuation process by implementing advanced machine learning techniques, ensuring more accurate property valuations and enhanced decision-making strategies. |
| Key Features | • implementation of a machine learning-based property valuation model.<br><br>• Real-time trend analysis for quicker strategic adjustments.<br>• Continuous learning to adapt to evolving market dynamics. |

## Resource Requirements

| Resource Type | Description | Specification/Allocation |
|---|---|---|
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | 2 x NVIDIA V100 GPUs |

| Memory | RAM specifications | 8 GB |
|---|---|---|
| Storage | Disk space for data, models, and logs | 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | seaborn,matplotlib,tenserflow,keras, scikit-learn, pandas, numpy |
| Development Environment | IDE, version control | Jupyter Notebook, GitHub |
| **Data** | | |
| Data | Source, size, format | Property transaction datasets, historical property data in various formats (CSV, JSON, etc.) |