Project Initialization and Planning Phase

Date	05 July 2024
Team ID	Team-739867
Project Title	SmartLender – Envisioning Success: Predicting University Scores With Machine Learning
Maximum Marks	3 Marks

Project Overview	
Objective	• Develop a machine learning model that can predict university scores with high accuracy. • Identify the most important factors that influence student performance.
Scope	The "Envisioning Success: Predicting University Scores With Machine Learning" project aims to develop a machine learning model that can predict university scores on various student attributes.

Problem Statement

Project Proposal (Proposed Solution) template

The proposed solution is to develop a CatBoost model, which is a gradient boosting algorithm that can handle categorical features effectively. The model will be trained using a dataset of student information and will predict university scores based on the input features.

Description	University scores are a critical factor in determining an academic score success. Predicting the scores can challenging due to the complexity of factor involved. A machine learning-based approach can provide a more accurate and efficient solution.
Impact	The impact of predicting university scores is positive, as the benefits of improved student outcomes, enhanced student experience, and increased efficiency outweigh the negative consequences.it is essential to address the negative consequences by ensuring that predictive models are fair, transparent, and unbiased, and that human judgment and oversight are used in conjunction with technology.

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	T4GPUs

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, seaborn
Development Environment	IDE	Jupyter Notebook, Spyder

Data

Data	Source, size, format	Kaggle dataset, csv

Proposed Solution

Approach	
	The project team can develop an accurate and reliable machine learning model that can predict university scores and provide valuable insights to students, educators, and administrators.

Key Features	• This includes high university grades, GPA, standardized test scores like SAT or ACT, and any additional academic achievements. • For certain programs, research experience or projects can be a significant factor. • Relevant work experience or internships can demonstrate practical skills and dedication. • Some universities conduct interviews to assess a student's fit.

Resource Requirements