Project Initialization and Planning Phase

Date	10 July 2024
Team ID	740092
Project Title	Credit card approval prediction using ML
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report

The proposal report aims to transform credit card approval using machine learning, boosting efficiency and accuracy. It tackles system inefficiencies, promising better operations, reduced risks, and happier customers. Key features include a machine learning-based credit model and real-time decision-making. Automating the credit approval process using machine learning can significantly benefit financial institutions by enhancing accuracy and efficiency. This project aims to develop a robust predictive model that can be seamlessly integrated into existing systems, thereby improving the overall credit approval process. This proposal outlines a comprehensive approach to developing a credit approval prediction model using machine learning. By following this plan, we aim to create a reliable and efficient solution for financial institutions.

Project Overview	
Objective	The primary objective is to revolutionize the credit card approval process by implementing advanced machine learning techniques, ensuring faster and more accurate assessments.
Scope	The project comprehensively assesses and enhances the credit card approval process, incorporating machine learning for a more robust and efficient system.
Problem Statement	
Description	Addressing inaccuracies and inefficiencies in the credit card approval prediction adversely affects operational efficiency and customer satisfaction.
Impact	Solving these issues will result in improved operational efficiency, reduced risks, and an overall enhancement in the lending process, contributing to customer satisfaction and organizational success.
Proposed Solution	

Approach	Employing machine learning techniques to analyze and predict creditworthiness, creating a dynamic and adaptable credit card approval system.
Key Features	- Implementation of a machine learning-based credit assessment model.
	Real-time decision-making for quicker credit card approvals. Continuous learning to adapt to evolving financial landscapes.

Resource Requirements

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, seaborn
Development Environment	IDE	Jupyter Notebook, pycharm
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv