Project Initialization and Planning Phase

Date	24 April 2024
Team ID	Team-738315
Project Title	Online Payment Fraud Detection using Machine Learning
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report

The proposal report aims to transform loan 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.

Project Overview	
Objective	The primary objective is to analyze transaction data,identify patterns Of fraudulent behaviour,and develop a system capable of detecting and preventing fraudulent transactions in online payment system.
Scope	The project scope includes collecting transaction data, preprocessing it, training machine learning models, and integrating them into online payment systems.
Problem Statement	
Description	Detect and prevent fraudulent transactions in online payments by leveraging machine learning algorithms to analyze transaction data for anomalies.
Impact	Enhance security, minimize financial losses, and instill trust in online payment systems by effectively detecting and preventing fraudulent transactions.
Proposed Solution	

Approach	Employ supervised/unsupervised ML algorithms to analyze transaction data, identify patterns, and build models for real-time fraud detection.
Key Features	- Real-time decision-making for quicker loan 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	16 GB
Storage	Disk space for data, models, and logs	512 GB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, numpy, matplotlib, seaborn,joblib,flask
Development Environment	IDE	Jupyter Notebook
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv