Project Initialization and Planning Phase

Date	10 JUNE 2024
Team ID	740675
Project Title	Restaurant Recommendation System
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.

Project Overview	
Objective	The primary goal is to develop a system that suggests restaurants to users based on their preferences, location, and other relevant factors. The system should provide personalized recommendations to enhance user experience.
Scope	A restaurant recommendation system helps users discover new dining options based on their preferences and past behavior.
Problem Statement	
Description	A restaurant recommendation system leverages data-driven algorithms and machine learning techniques to suggest restaurants to users. The primary goal is to enhance user satisfaction by providing personalized recommendations based on individual preferences, behavior, and contextual factors such as location and time.
Impact	The impact of a restaurant recommendation system can be significant for various stakeholders, including users, restaurants, and the overall dining industry. Here's a breakdown of its potential impacts
Proposed Solution	

Approach	Developing a restaurant recommendation system involves a multi-step approach, encompassing data collection, algorithm development, user interface design, and continuous improvement. Here's a structured approach.

Key Features	Real-time Prediction: These predictions are made available through an API, allowing integration with dashboards and alert systems for stakeholders. Adaptive Learning: The model will continually learn from new data, improving its accuracy. Scalability: Designed to handle large volumes of transactions without compromising performance.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask , sklearn , metrics
Libraries	Additional libraries	e.g., scikit-learn, pandas, numpy
Development Environment	IDE, version control	e.g., s, Git , spyder, Google co lab
Data		
Data	Source, size, format	e.g., Kaggle dataset, 500 images , CSV