



## **Project Initialization and Planning Phase**

Date	10 JUNE 2024
Team ID	739727
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			