

Project Design Phase-I

Solution Architecture

Date	19 October 2023
Team ID	Team-592805
Project Name	Restaurant Recommendation System
Maximum Marks	4 Marks

Solution Architecture:-

The purpose of this system is to let people get ideas about which restaurant will be great for them. This system can give people some suggestions. This system is designed for people to search the information you send, and response all those restaurants matched the customers' request. In this site, the customer need to search restaurants by their names. They will get a page describing the related names of the restaurants and their type and ratings.

In this instance, we're building a recommendation system around content. The idea is to develop a content-based recommender system where, upon entering the name of a restaurant, the system will peruse other restaurants' ratings to find similar establishments, prioritizing the highest-rated establishments. Travelers who are unfamiliar with a city will be the primary beneficiaries of this suggestion system. During their visit to a city, the majority of tourists always enjoy dining at renowned restaurants. If not, residents in the same city might utilize it extensively to check if any new restaurants are suggested based on their behaviour.

These steps are needed for the solution

- Data Collection
- Pre- processing:- Data Pre-processing includes the following main tasks
 - Import the Libraries.
 - Importing the dataset.
 - Analysis the data
 - Taking care of missing Data
 - Exploratory Data Analysis
 - Data Visualization.
 - Splitting Data into Train and Test

- Model Building:- Model Building Includes:

- Import the model building libraries
- Initialising the model
- Training the model
- Model evaluation
- Save the model

- Restaurants Recommendations

- Application Building:- Application Building will include

1. Create an HTML file
2. Build a Python Code
3. Run the app in local browser
4. Show casting the prediction on UI

Solution Architecture Diagram:-

