

Project Report Format

1. INTRODUCTION

1.1 Project Overview

The project focuses on developing a Restaurant Recommendation System that addresses the challenges faced by new establishments entering Bengaluru's vibrant food industry. With over 12,000 restaurants, competition is fierce, and understanding the local demographics and preferences becomes crucial for success.

1.2 Purpose

The purpose of this project is to empower new restaurants with data-driven insights, helping them make informed decisions regarding location, themes, menus, and pricing. By leveraging machine learning and data analysis, the Restaurant Recommendation System aims to provide strategic support to emerging businesses.

2. LITERATURE SURVEY

2.1 Existing Problem

The existing problem revolves around the difficulties encountered by new restaurants, including high costs, competition, and the need for precise insights into the local market. References from analyses such as "Finding the best restaurants in Bangalore" and "Zomato Bangalore Restaurant Rating Prediction" guide the project.

2.2 References

"Finding the best restaurants in Bangalore"

"Zomato Bangalore Restaurant Rating Prediction"

2.3 Problem Statement Definition

The project addresses challenges related to understanding demographic influences, competitive landscapes, and strategic decision-making for new restaurants entering the Bengaluru market.

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

An empathy map canvas is utilized to understand the needs, thoughts, and feelings of both restaurant owners and customers, guiding the ideation process.

3.2 Ideation & Brainstorming

The project involves brainstorming sessions to generate innovative solutions for restaurant recommendations based on user preferences and market dynamics.

4. REQUIREMENT ANALYSIS

4.1 Functional Requirement

User registration and authentication

Search and recommendation functionality

User feedback and rating system

4.2 Non-Functional Requirements

Scalability for handling a large number of restaurants and users

Security measures for user data protection

5. PROJECT DESIGN

5.1 Data Flow Diagrams & User Stories

Detailed data flow diagrams and user stories outline the flow of information and user interactions within the system.

5.2 Solution Architecture

The solution architecture incorporates machine learning algorithms, recommendation engines, and a user-friendly interface.

6. PROJECT PLANNING & SCHEDULING

6.1 Technical Architecture

Detailed technical architecture, including server infrastructure, databases, and APIs, is outlined.

6.2 Sprint Planning & Estimation

The project is divided into sprints, each focusing on specific features and functionalities. Planning and estimation ensure timely delivery.

6.3 Sprint Delivery Schedule

A sprint delivery schedule outlines milestones and expected completion dates for each sprint.

7. CODING & SOLUTIONING

7.1 Feature 1

Description of the first major feature added to the project, along with relevant code snippets.

7.2 Feature 2

Description of the second major feature, highlighting its contribution to the overall functionality.

7.3 Database Schema (if Applicable)

The database schema, if applicable, is explained to provide insights into data storage and retrieval.

8. PERFORMANCE TESTING

8.1 Performance Metrics

Metrics for evaluating the system's performance, including response time, scalability, and resource utilization