Project Report Format

1. INTRODUCTION

1.1 Project Overview:

The cafeteria menu display project is a web-based application that allows users to view and manage daily menu items through a dynamic React frontend and a Node.js/MongoDB backend.

1.2 Purpose:

The purpose of the project is to provide a user-friendly platform for displaying and managing cafeteria menu items in real time.

2. IDEATION PHASE

2.1 Problem Statement:

Manual menu updates and lack of real-time visibility make it difficult to efficiently manage and communicate cafeteria offerings to users.

2.2 Empathy Map Canvas: The Empathy Map Canvas captures users' thoughts, feelings, needs, and frustrations, helping design a cafeteria menu system that is intuitive, informative, and responsive to their daily dining decisions.

2.3 Brainstorming:

Brainstorming involved generating ideas for intuitive UI design, efficient menu management, role-based access, mobile responsiveness, and real-time updates to enhance the cafeteria experience.

3. REQUIREMENT ANALYSIS

3.1 Customer Journey map: The Customer Journey Map outlines the user's experience from logging in and browsing the cafeteria menu to making food choices and providing feedback, highlighting key touchpoints and pain points.

3.2 Solution Requirement:

The solution requires a responsive web app with secure login, dynamic menu display, admin controls for menu management, and real-time updates backed by a scalable database.

3.3 Data Flow Diagram:

The Data Flow Diagram illustrates how user inputs flow from the frontend to the backend, are processed by the server, stored in MongoDB, and returned as dynamic menu data for display.

3.4 Technology Stack:

The technology stack includes React for the frontend, Node.js with Express for the backend, MongoDB for the database, and JWT for authentication.

4. PROJECT DESIGN

4.1 Problem Solution Fit:

The problem-solution fit is achieved by replacing manual cafeteria menu processes with a digital system that offers real-time updates, easy management, and improved user accessibility.

4.2 Proposed Solution:

The proposed solution is a web-based cafeteria menu display system that enables real-time menu updates, user-friendly viewing, and efficient admin management.

4.3 Solution Architecture:

React frontend communicating with a Node.js/Express backend via REST APIs, with MongoDB as the database and JWT-based authentication for secure access.

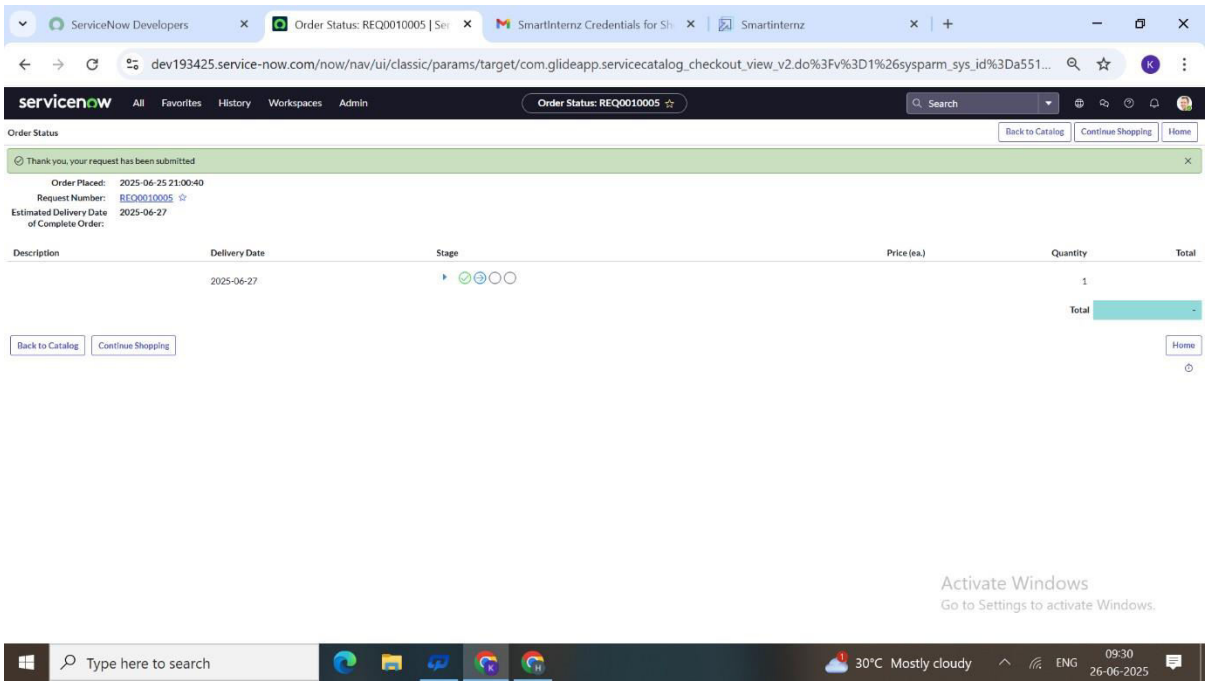
5. PROJECT PLANNING & SCHEDULING

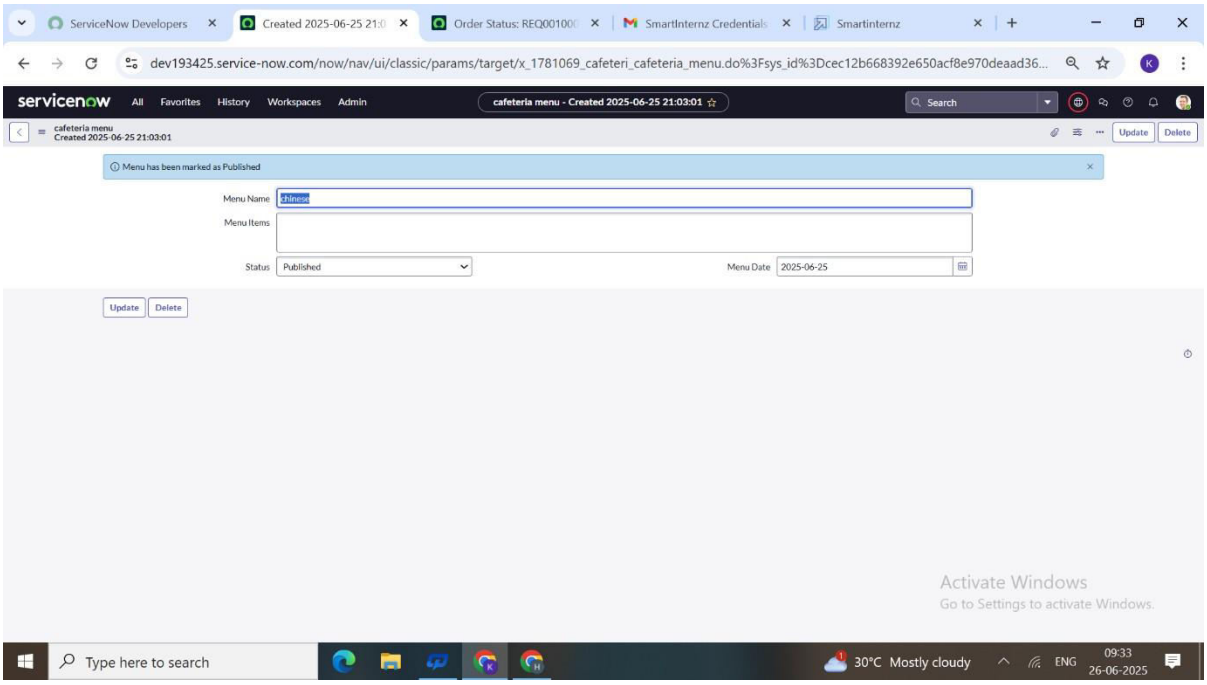
Project planning involves defining key milestones such as requirement gathering, design, development, testing, and deployment, with timelines and responsibilities clearly allocated across team members.

6. FUNCTIONAL AND PERFORMANCE TESTING

Performance testing is conducted using tools like Postman and JMeter to evaluate API response times, system load handling, and ensure the application performs efficiently under various conditions**.**

7. RESULTS





8. ADVANTAGES & DISADVANTAGES

The system offers advantages like real-time updates, easy access, and efficient management, but has disadvantages such as dependency on internet connectivity and potential security risks if not properly secured.

9. CONCLUSION

In conclusion, the cafeteria menu display system effectively streamlines menu management and enhances user experience through a responsive, real-time digital platform.

10. FUTURE SCOPE

The future scope includes integrating mobile apps, AI-based meal recommendations, multi-language support, and analytics for tracking user preferences and food consumption trends.

11.DEMO LINK

https://drive.google.com/file/d/12td567E9HxKF4ZC4WsQvsl1NDWU7gyPb/view?usp=drivesdk