



# DYNAMIC WEBSITE FOR SINHGAD INSTITUTES MESS SERVICES AND IMPLEMENTATION

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***Abstract - Normally, the long queues and crowds can be seen at the canteens/messes whenever there is a lunch break in an organization or within a campus. This project proposes a solution for eliminating the queue system and introduces the facility to remotely place food orders. This Project connects the mess services provider with customers to provide quality food. This system is totally secure and safe after every user is provided with a user id and password so there is no chance of any unauthorized access. In this project, there is implementation of a role-based mess management system that efficiently manages the entire functionality of the mess owner and customer. It also handles mess bill payments according to the mess charges. Food waste is minimized as the customer will have food that the customer prefers to eat from the range of available menu items from various messes. This will help to reduce food wastage and save the owner money. This will result in a working web application that will speed up the ordering process.***

***Keywords: Web Page, Core Java, Servlet, JSP, SQL.***

## I. Introduction

As a large workforce in India moves out of their homes for the purpose of employment, managing their daily meals becomes quite challenging for most of them. People prefer messes for their food requirements as they aim for home-cooked and budget-friendly daily meals. Traditionally these messes have relied on registers/book entry systems for the management of mess services of their clients. It becomes difficult for the mess owners to manage each and every customer's data. With the advent of smartphones and other communication facilities, many messes are switching over to the digital platform. Currently, there is a requirement for creating a digital platform, which is able to address local issues in this regard so that the mess services can be managed effectively and

efficiently. We aim to implement a fully functional Mess Management System which will be able to achieve the said purpose. In this system, we have created an entire workflow for managing a range of activities of the customers and the mess owner.

The choice of programming language was Java as it is one of the most popular languages for dynamic web development and also supports a large number of libraries that can be simply imported into the project on a requirement basis. In this system, an online mess system framework is proposed by using a server-side Java programming model which provides a standard, open, robust, cross-platform, and multivendor solution. Three main Java server-side technologies which construct the Model-View-Controller design patterns: Servlets (the Controller), JSPs (the View), and JavaBeans (the Model) are discussed in providing a suitable framework for constructing a web-based shopping system.

## II. Methodology

### A. Block Diagram

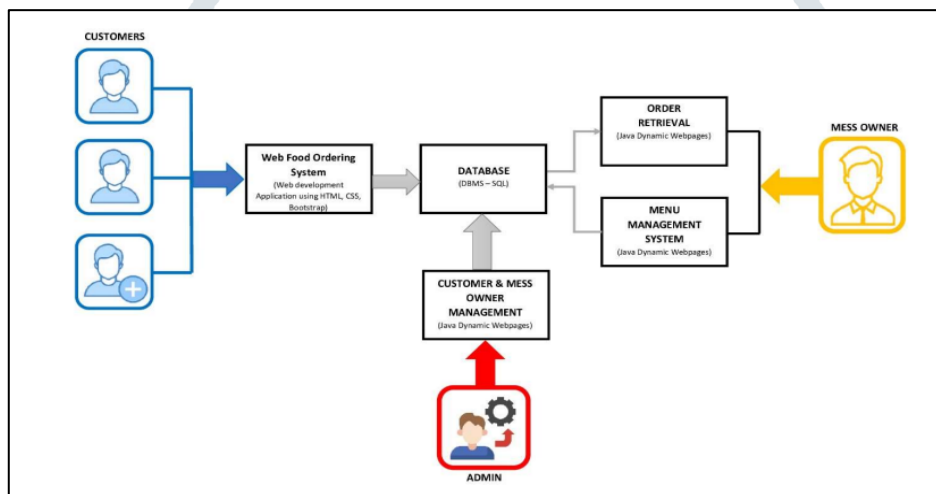


Fig. 1 Block Diagram of Online Mess Management System

This will include the Front-end (User Interface) which is user-friendly. Users can register and log in and search for messes and menus from this. The front-end technologies will be HTML, CSS, and Bootstrap. Database - With the help of DBMS (Database management system) the data will be handled and will be used for future reference. There will be two different databases. One for Messes and another for customers. In the customer database, customers' data will be handled and in messes databases, the mess database will be handled. SQL will be used for database management. Order Retrieval - This page will be handled by the mess owner. The orders will be displayed here to the mess owner. That means when a user will order something then the mess owner will get the orders. To make this dynamic the concept from Advance Java(Servlet) will be used. Menu Management System - This page will also be handled by mess owner. Here the mess owner will be able to add or update the menu on that day. To make this dynamic the concept from Advance Java(Servlet) will be used. Customer & Mess Owner Management System - This block will be handled by admin. Where admin will then be able to handle both databases and can make changes accordingly.

## B. Flow Diagram

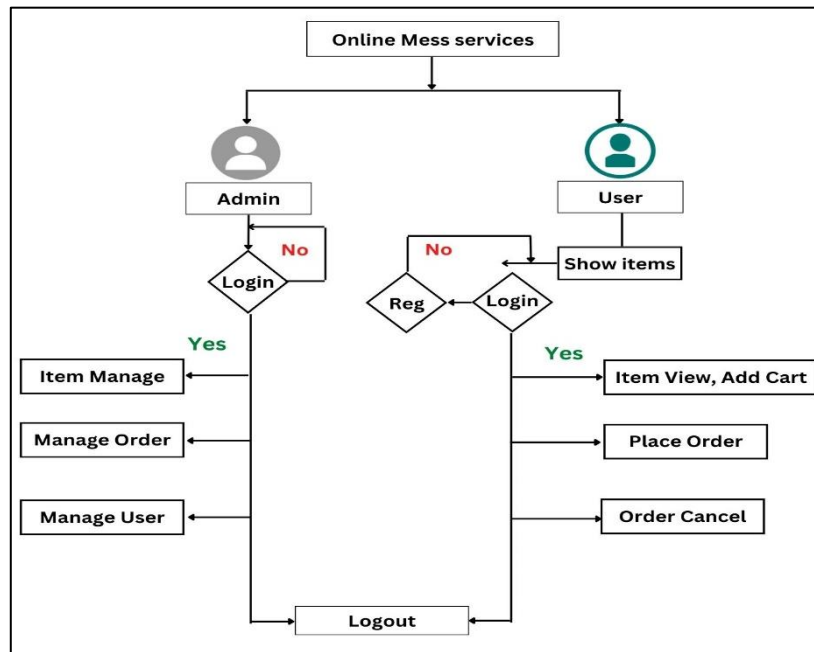


Fig. 2 Flow Chart

On the Admin Side, firstly the user will have to login with provided credentials, if it matches it will be redirected to the Home Page.

On that page, admin will allowed to handle various aspects like the Item Management, Manage the Orders, Payment Management and also the User Management.

On the User Side, user will be provided with various options like View Items, Add to Cart, Place Order, Order Cancel and Payment only after successfully registering and login.

In this project, Figma tool is used to make UI design of the website. The Figma tool is used by developers to make the front-end designs. The designs used are made using Figma and same designs are implemented in the website using HTML, CSS and Bootstrap.

## C. System Requirement

Java, Advance Java, HTML, CSS, SQL

Eclipse (2022-03)

Visual Studio Code

MySQL

Figma (Designing)

### III. Experimentation

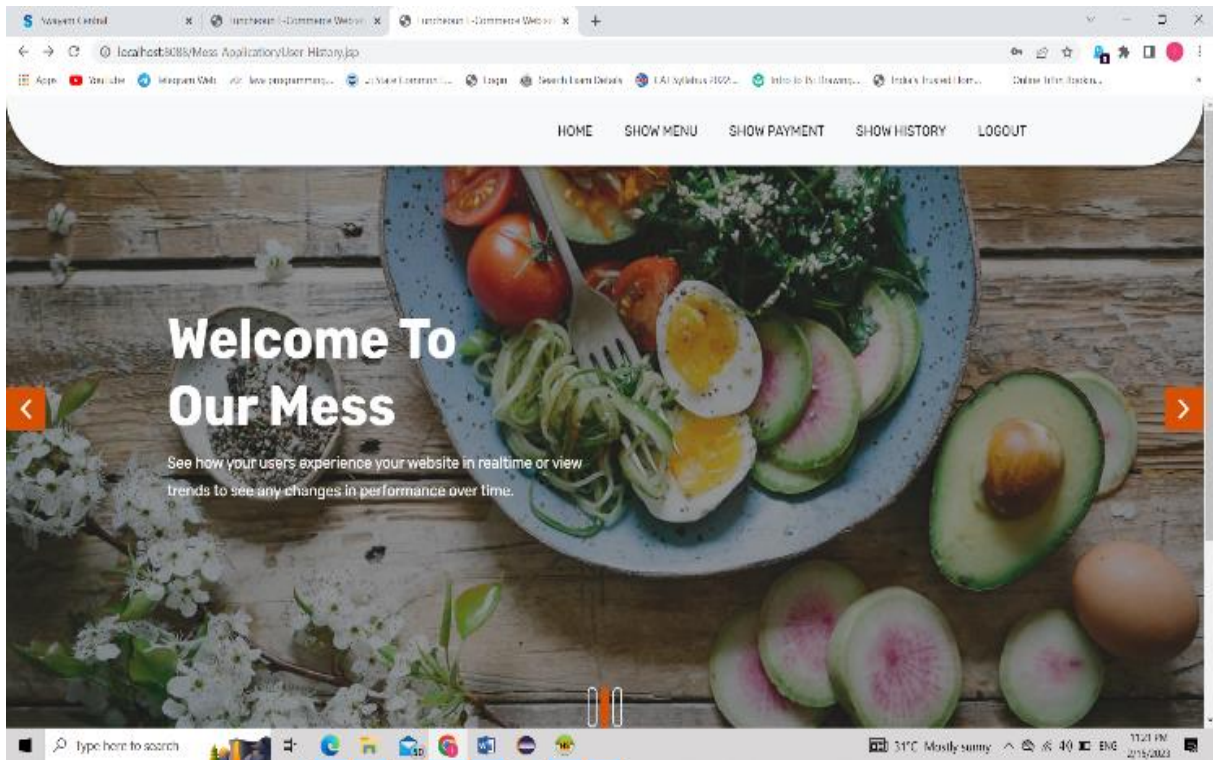


Fig. 3

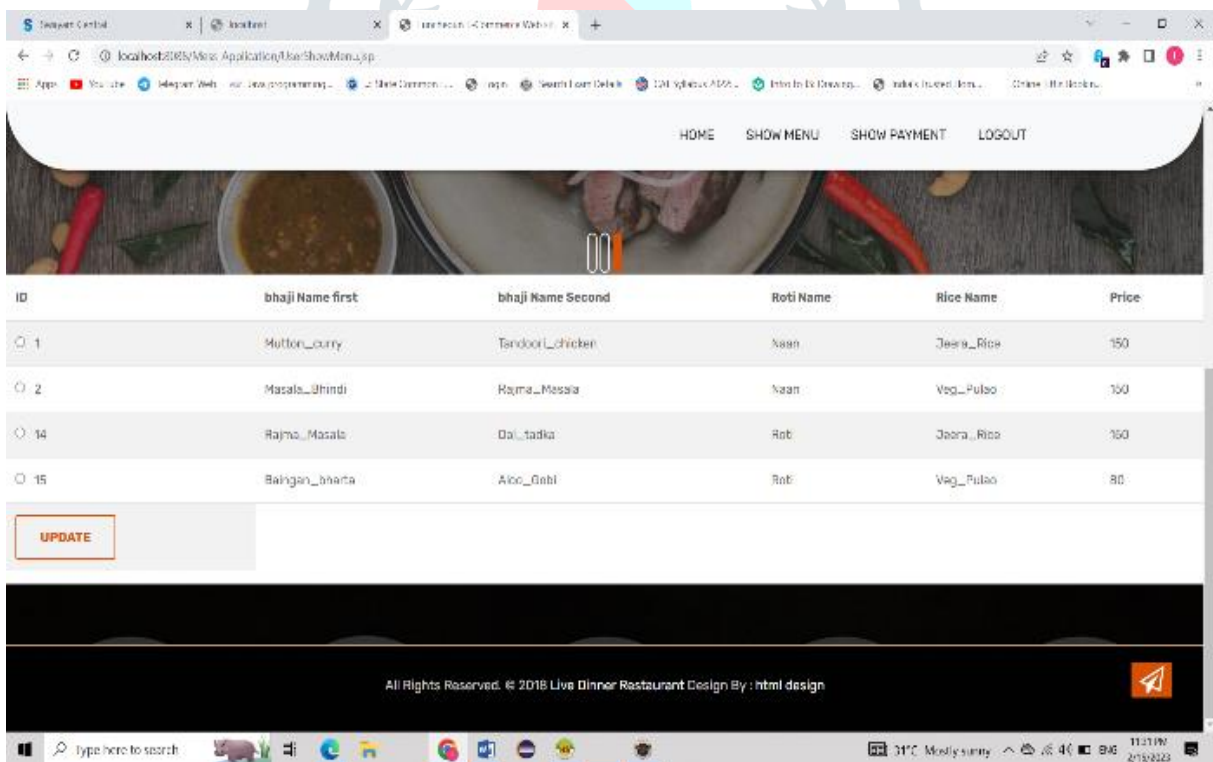


Fig. 4

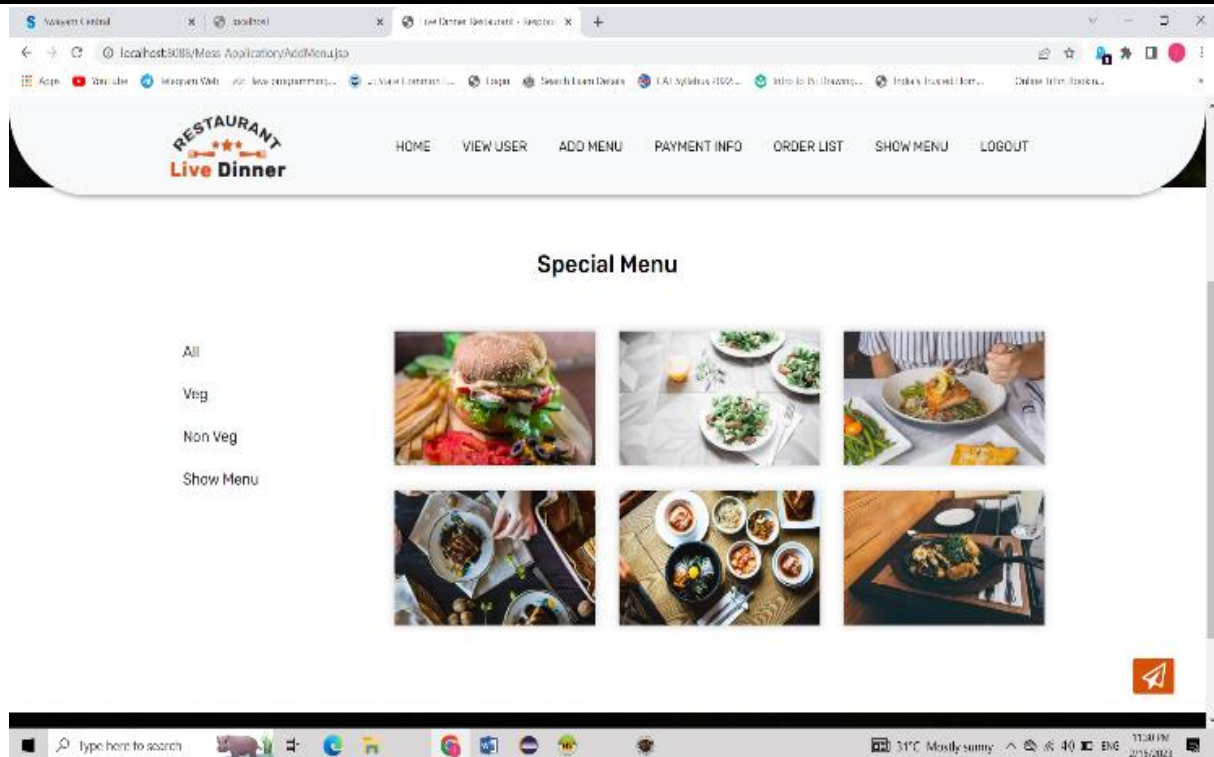


Fig. 5

This figure tells us about the experimentation and end results.

Figure 3 - Home Page of User and Owner. This will be the page user will be landing after sign up.

Figure 4 - In this page, user can see the menu

Figure 5 - In this fig, the user and owner can see the payments done by the user and get by the owner.

#### IV. Conclusion

In the proposed system, a Java-based web application is developed to automate the daily canteen/mess functionalities.

This ensures to enable the end-user to register online, select the food they plan to have for their lunch from the e-menu card and place the order online by selecting the food that aims to reduce the load in the canteen/mess.

Here, the entire process of taking the order and serving the food is automated at the utmost time in our day-to-day life.

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