

PROJECT TITAL
Restaurant Billing System

Submitted in partial fulfillment of the requirements
Post Graduate Diploma in Advanced Computing
March 2022
By

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Certificate

This is to certify that this is a bonfire record of project entitled "**Restaurant Billing System**". Barole Rameshwar (PRN: 220360820006), Bharskar Yogesh T.(PRN 220360820009) has completed project work as part of Diploma in Advanced Computing (September-2021-Batch), a PG course offered by C-DAC Chennai. They have completed project work under the supervision of Mrs. Pal Amutha his Performance found to be good.

Signature of Project guide
(Mr. Prakash)

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Abstract

A billing system can be very useful within a business environment. Instead of making bills manually or to sum up the total manually, it is very much time consuming and also may have some human errors like adding up the wrong total or adding wrong items into the bill. When making a hand written bill the owner and customer both have to repeatedly check the total, items added, etc. It also sometimes results into a Bad Impression towards the Restaurant from a Customer. Ideally, user should be able to generate bill without any mistakes and quickly, enabling them to fasten or improve their process. To overcome this problem, we have come up with this project, that is, Restaurant Billing System Using java.

1. Introduction

1.1 Purpose

The purpose of this project is to provide Restaurant Billing System more effectively than the existing system. There are some disadvantages of the existing Restaurant Billing System like TALLY software . These disadvantages are overcome by the Restaurant Billing System. And it can be made handily available to every person. Previously people to learn the TALLY software and the software is hard to use for any new user and for handling this type of billing system the billing staff ask for much salary . This type of high working cost software is not useful in small restaurant. This project enables the user to keep track of all the activities of a purchase order. It maintains order history and order time.

The Main Objective of this project is To Provide a User-Friendly Interface To maintain the Daily Basis sales Activity happens in the Restaurants & Whatever we were going to do with the paperwork, we will now do with the System. This is the reason we are going to develop a software which helps to manage these tasks more efficiently and effectively.

The currently used system contains the following problems which are listed below:

- Manual operator control
- Lots of paperwork
- Difficult to record information systematically
- Difficult to retrieve information in time
- Wastage of paper

1.2 Document Conventions

This document is printed on A4 paper in Times New Roman font .Normal text is size is 12 black ,while section heading are size also 14 black but in bold. Subheadings are bolded size 12 black..

1.3 Project Scope

The software has a lot of features and advantages over the paper-based billing system. It has the following scopes:

- This project will help the client in fast billing.
- Quality and faster service can be given to the customers.
- Easy to maintain in future prospect.
- This project enables client to maintain a great database of information regarding the billing.

1.4. Admin Module:

Features:

1. Efficient Management
2. Eliminates Error
3. GST Support System
4. Marketing Tool
5. The Application has a very user-friendly Interface, thus client will be easily work on it.
6. All the transaction of restaurant stored permanently in the database admin can see the data in the availability of any information, whatever needed.
7. To add and maintain records of available menu.

1.5. Functional Requirements :

Make order –The staffs can record orders by simply selecting the category and type of the item or meal. The order will be Placed for the Respective table.

Billing – The orders made can be billed as well. The staffs as well as the admin can make bills of the orders made by the customers easily.

Menu management – The admin can manage the menu of the restaurant. He can add, delete, update or view the menu of the restaurant.

Order history –History of the billing or transaction can be viewed easily.

To-do list – Users can add tasks to be done as well as clear the task from the list after its completion. Once the bill is COMMIT for the respective table, that table number get available to the next customer.

1.6. Non-Functional Requirements :

Consistency- This system provides consistency user interface design to the user. The design of the screen are standardized and consistent that make the client feel comfortable to use it.

Convenience - The system gives convenience to the user to perform different activities like making order, menu-managing, etc.

Usability – The RBS software is ready to use system. The users will feel easy to use the system without much technical expertise.

Security – This RBS provides the password security access control to avoid unauthorized user to login to the system.

Reliability – The restaurant billing system provides effective method to maintain the back-end of the system. All the orders are managed by this system effectively.

1.7. System Requirements & Specifications:

Here we are including the software's and hardware's used for developing the project and implementing the project:

A . Back-end Software Requirements :

- 1) WebJava
- 2) MySQL for storage and data.

B . Front-end Software Requirements :

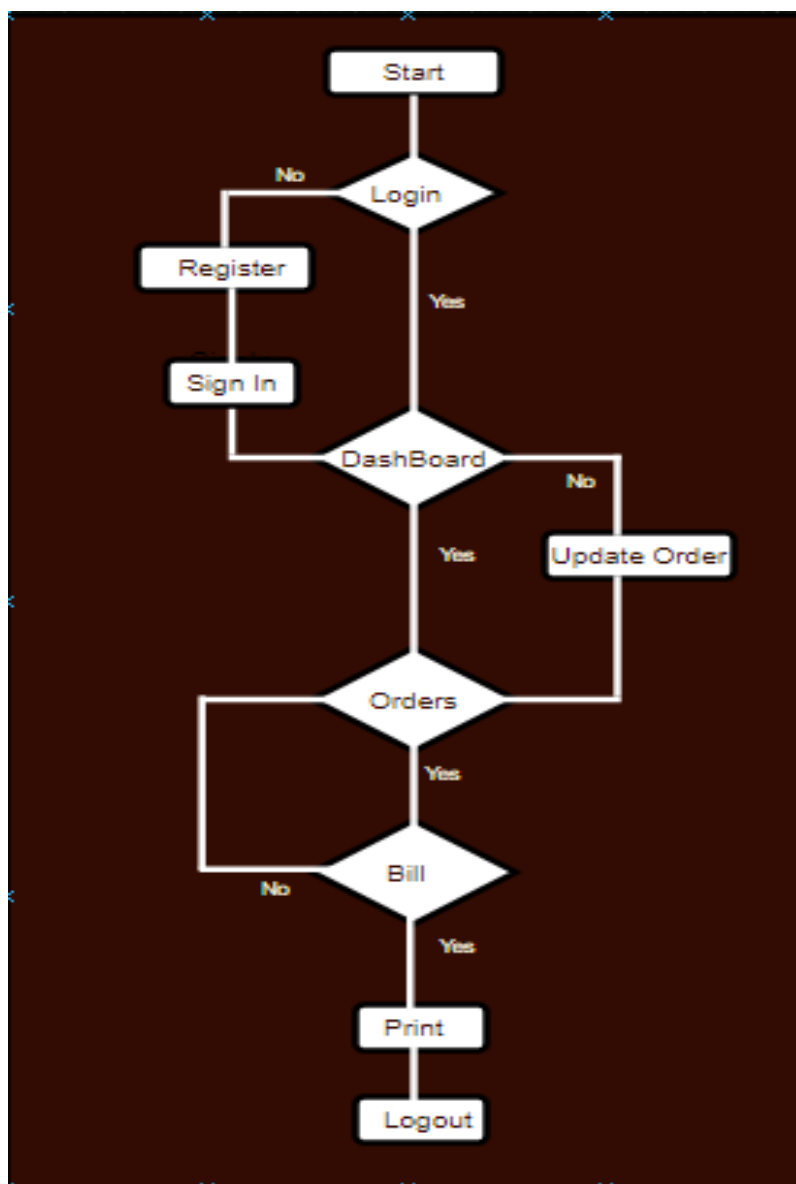
- 1) HTML / CSS / JavaScript

C. Hardware Requirements :

- 1) 2 GB RAM or above
- 2) Intel i3 Processor or above
- 3) 32 Bit System or above

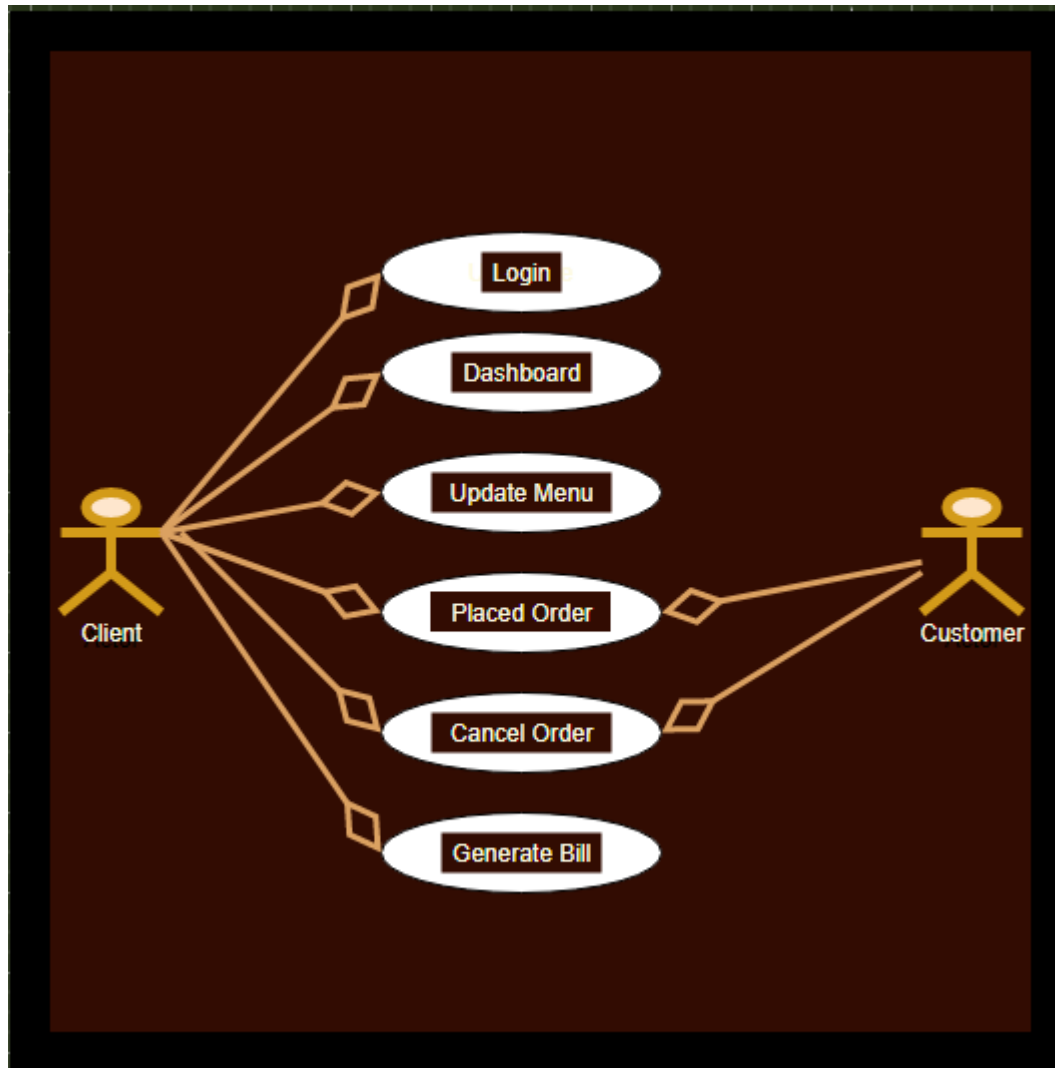
2. Diagram

2.1 Flow Chart:



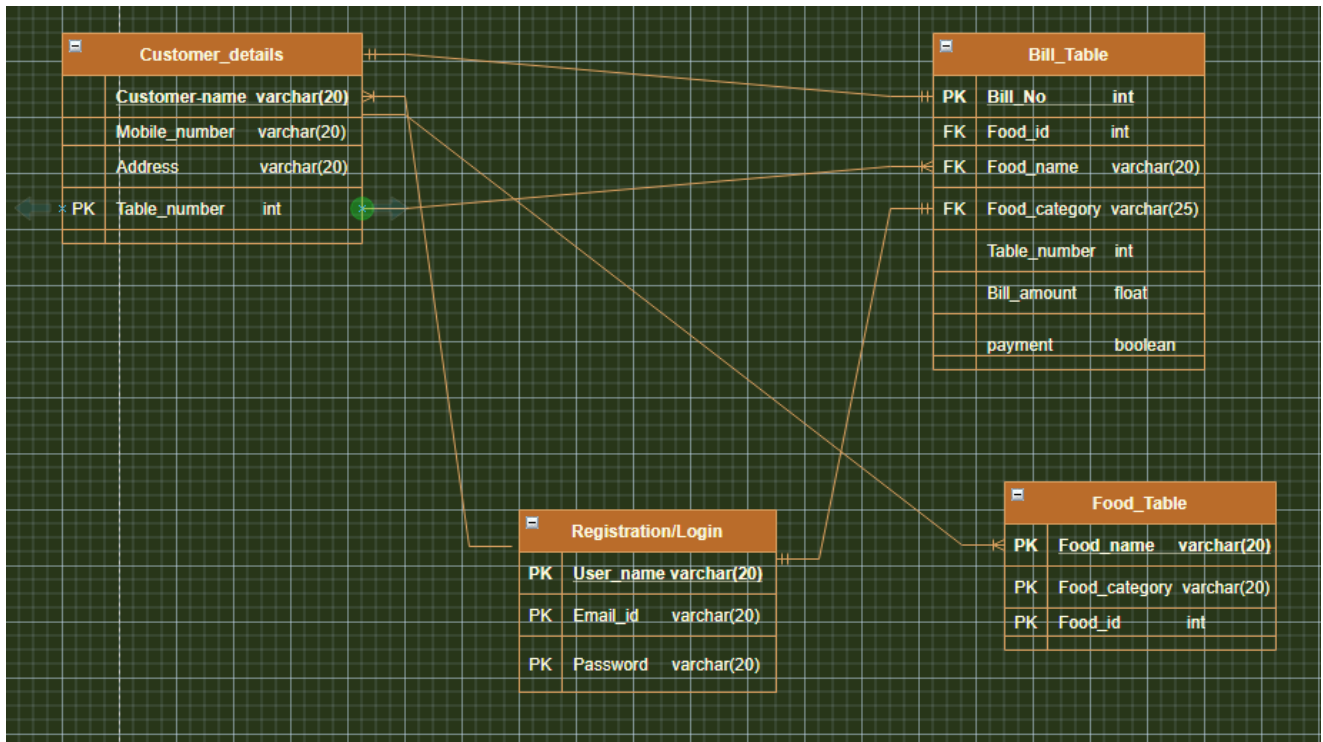
Restaurant Billing System is developed using java. While using this billing management system, you can easily calculate total bill of the customer. Moreover, the total bill is calculated including service charges and state tax. All you need to do is just fill up the blank boxes with item quantities and click on total button. The program will display your total bill. This system can be used in restaurants, cafe and food truck for calculating bills in a short period of time and it's not time consuming. It's easy to operate and understand by users. There is no any error and warning contents in the project. The design is so simple that user won't find it difficult to use and navigate. To ease the use of the user we even have a calculator added to our system which performs all basic operations like Addition, Subtraction, Division and Multiplication. We'll display Menu, Order no., Total and Reset. We assure that the project is bug free and easy to use. Since the program is for restaurant or providing services. It will add services charges and state taxes respectively.

2.1 Use Case Diagram:



A use case diagram is a graphical representation of the interaction among the elements of a system. A use case is a methodology used in a system analysis to identify, clarify and organize system requirements.

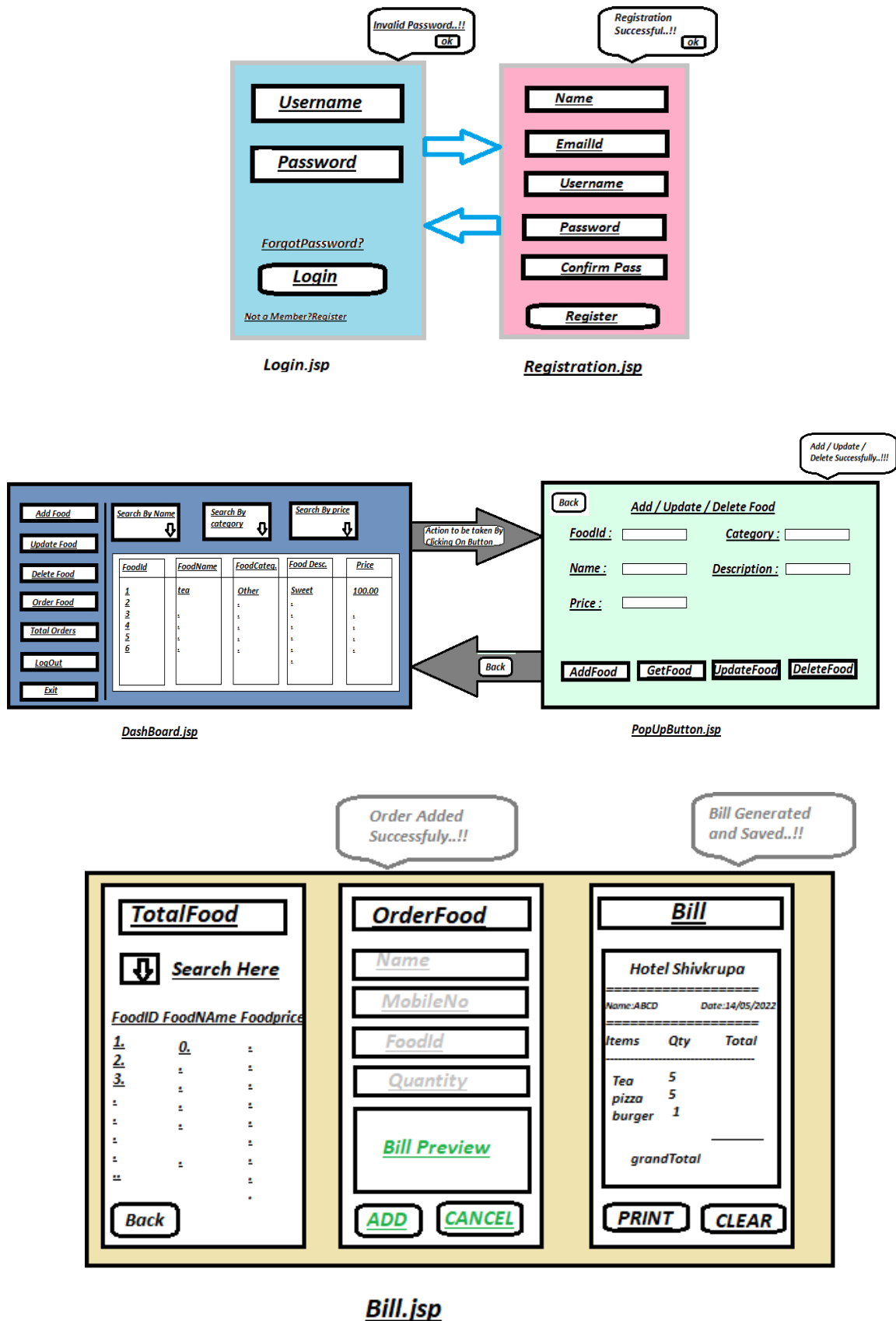
2.3 ER Diagram:



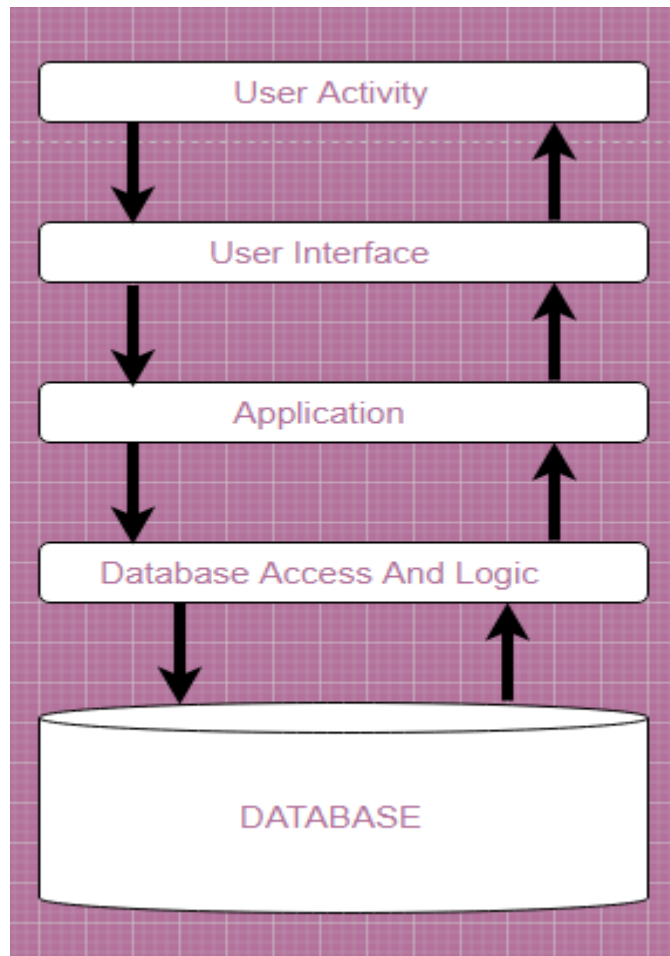
ER Diagram of RBS With Features :

- This System used to store and retrieve information and conduct transaction related to rental, or other activities.
- This system is built to have an easier way to save information to the database and secure the information as well.
- Access the details in smooth operations.
- To have a transaction to the costumer appropriately and productively.

2.4 Ui Diagram:



2.5 General Architecture



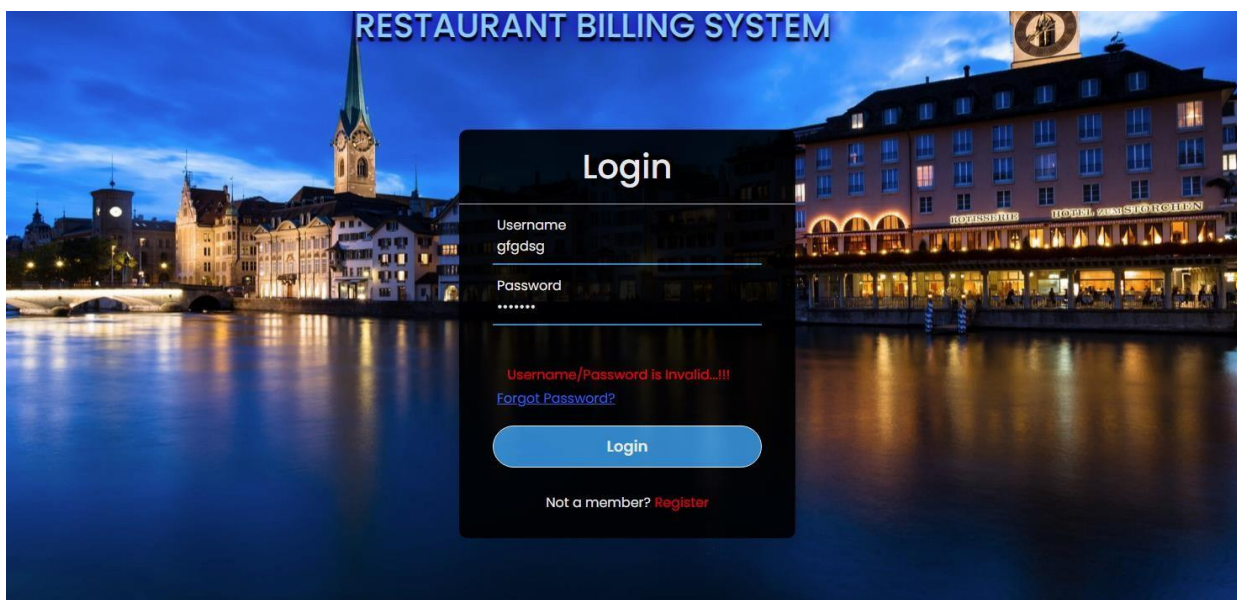
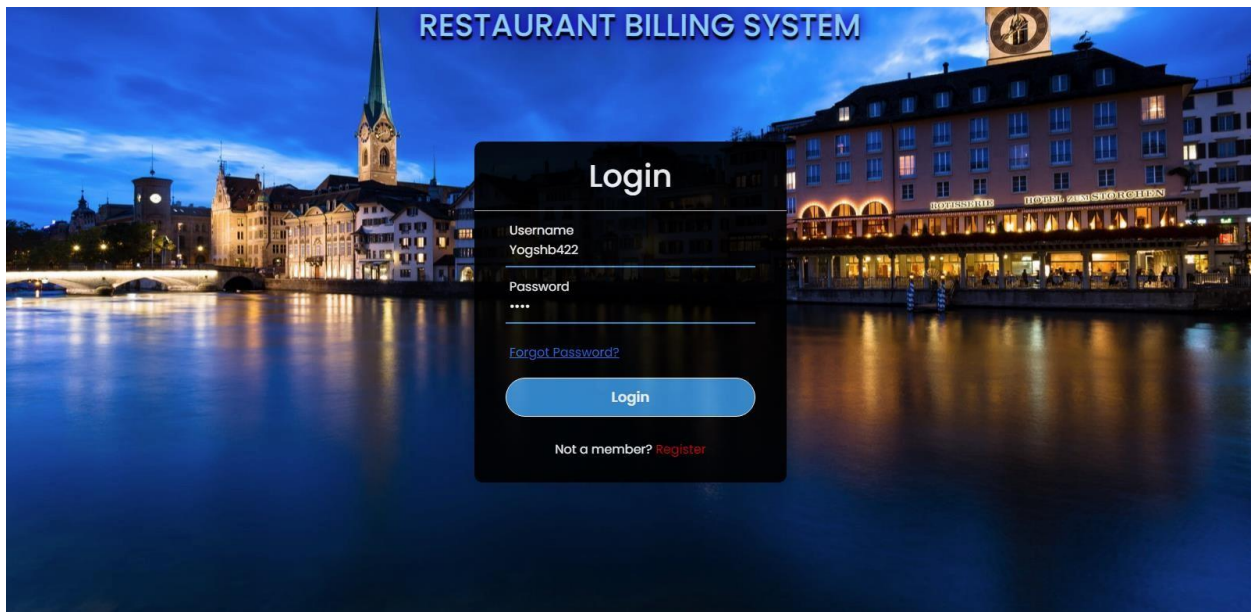
Web application architecture defines the interactions between applications, middleware systems and databases to ensure multiple applications can work together. When a user types in a URL and taps “Go,” the browser will find the Internet-facing computer the website lives on and requests that particular page.

The server then responds by sending files over to the browser. After that action, the browser executes those files to show the requested page to the user. Now, the user gets to interact with the website. Of course, all of these actions are executed within a matter of seconds. Otherwise, users wouldn’t bother with websites.

What’s important here is the code, which has been parsed by the browser. This very code may or may not have specific instructions telling the browser how to react to a wide swath of inputs. As a result, web application architecture includes all sub-components and external applications interchanges for an entire software application.

Of course, it is designed to function efficiently while meeting its specific needs and goals. Web application architecture is critical since the majority of global network traffic, and every single app and device uses web-based communication. It deals with scale, efficiency, robustness, and security.

2.6 Wire Diagram:



Software Requirement Specification

The image displays two screenshots of a web application interface, likely for food management, running on a local host (localhost:3000).

Top Screenshot: Update Food

The interface shows a form titled "Update Food" with the following fields:

- Food Name: VEG THALI
- Food Category: LUNCH
- Food Prize: 140

At the bottom of the form are two buttons: "Save" (green) and "Cancel" (red).

Bottom Screenshot: Add Food To Active List

The interface shows a form titled "Add Food To Active List" with the following fields:

- Food Name: Food Name
- Food Category: Food Category
- Food Prize: Food Prize

At the bottom of the form are two buttons: "Save" (green) and "Cancel" (red).

Software Requirement Specification

React App

localhost:3000/register

REGISTRATION FORM

Enter First Name
First Name

Enter Last Name
Last Name

Enter Email-Id
Your EmailId

Enter UserName
Username

Enter Password
Password

Re-Enter Password
Repeat your password

☐ I agree all statements in [Terms of service](#)

Register

React App

localhost:3000/forgot

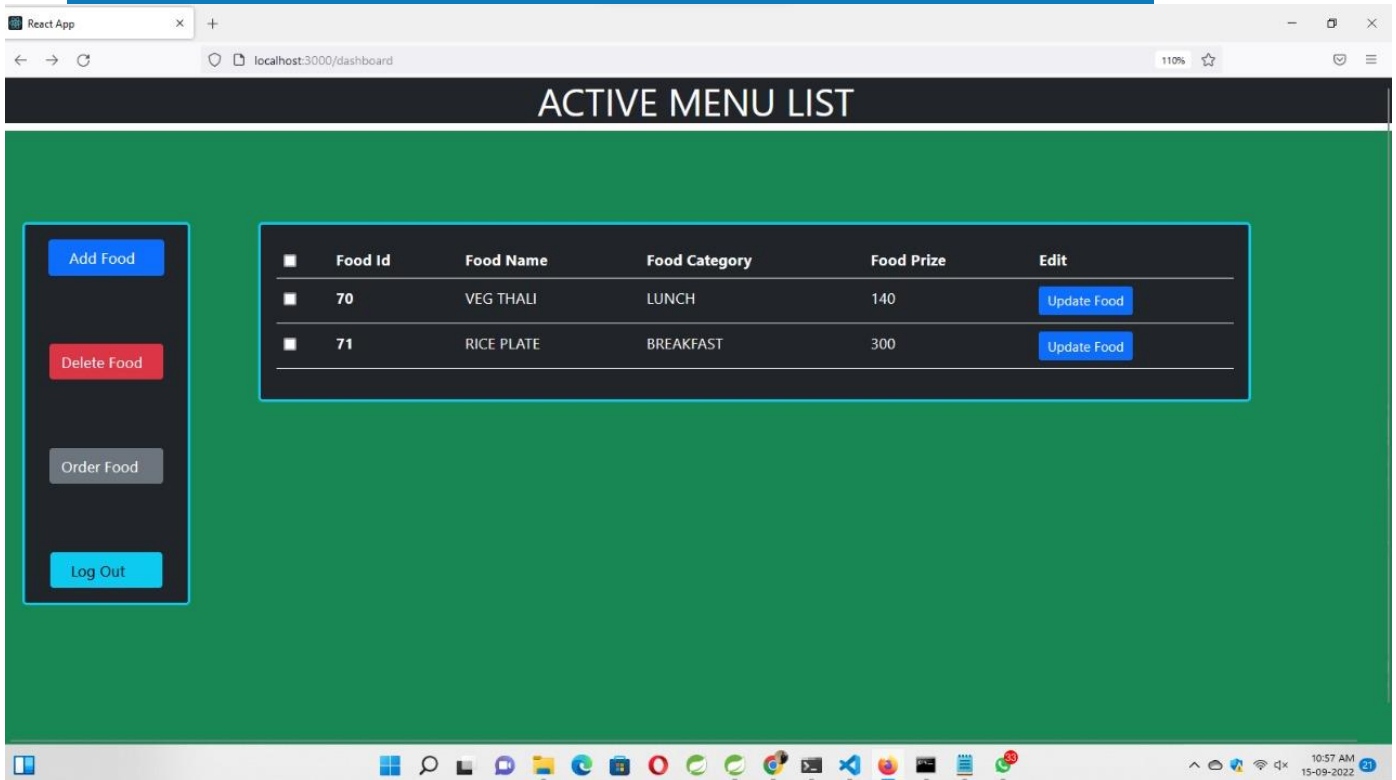
CHANGED PASSWORD

Enter UserName
Username

Enter New-Password
New Password

Change Pasword

Software Requirement Specification



3. Future Work

In future, this application can be updated with some more food items. Many other latest features will be added. Project will surely be enhanced with respect to looks and appearance and also as per user requirements. Many more functionalities will be added. Some enhancement can also be done with calculator. For now, this application generates the bill but with respect to future application it will be enhanced that it will also print a bill. It can also be used on a large scale. Many more modification can do with menu or prices or tax as well. It will be easy to use and bug free to all future or upcoming users. This can also be enhanced in future as per customer requirements. Many more features can be added. This will surely help users instead of making a bill manually