

Restaurant Website

Web Technology and Applications (IT254) Report

Submitted in partial fulfilment of the requirements for the degree of

BACHELOR OF TECHNOLOGY

In

INFORMATION TECHNOLOGY

by

Alapati Harshini (221IT006)

Bhoomika Deep Mahawar (221IT018)

Sneha Singh (221IT063)



**DEPARTMENT OF INFORMATION TECHNOLOGY
NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA
SURATHKAL, MANGALORE -575025**

March, 2024

Declaration

We hereby *declare* that Web Technology and Applications (*IT254*) *Report* entitled **“Restaurant Website”** which is being submitted to the National Institute of Technology Karnataka Surathkal, in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology in the Department of Information Technology, is a *bonafide report of the work carried out by us*. The material contained in this project report has not been submitted to any University or Institution for the award of any degree.

Alapati Harshini (221IT006)

Bhoomika Deep Mahawar (221IT018)

Sneha Singh (221IT063)

Signatures of Students

Department of Information Technology

Place: NITK, SURATHKAL

Date: 26 March 2024

Certificate

This is to certify that the project entitled “**Restaurant Website**” has been presented by Alapati Harshini (221IT006), Bhoomika Deep Mahawar (221IT018) and Sneha Singh (221IT063), students of IV semester B.Tech.(I.T), Department of Information Technology, National Institute of Technology Karnataka, Surathkal, on 26 March, 2024, during the even semester of the academic year 2023 - 2024, in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Information Technology.

Examiner name: Dr Deepa C

Signature of Examiner with Date:

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Chapter I: Introduction

1.1 Introduction

Online Restaurant Management System is the process of ordering food from a website .The product can be either ready-to-eat food. The aim of developing *Online Restaurant Management* project is to replace the traditional way of taking orders with computerized system. Another important reason for developing this project is to prepare order summary reports quickly and in correct format at any point of time when required.

Online Restaurant Management has a very lot of scope. This PHP project can be used by any restaurants or fast foods for customers for keeping their order records. This project is easy, fast and accurate. It requires less disk space. Online Restaurant Management uses MYSQL Server as backend so there is not any chance of data loss or data security. A customer can choose to have the food delivered or for pick-up. The process consists of a customer choosing the restaurant of their choice, scanning the menu items, choosing an item, and finally choosing for pick-up or delivery. Payment is then administered by paying with a credit card or debit card through the app or website or in cash at the restaurant when going to pickup. The website and app inform the customer of the food quality, duration of food preparation, and when the food is ready for pick-up or the amount of time it will take for delivery

1.2 Objective

The main objective of this system is to manage the details of item category, food, delivery address, order, and shopping cart. It manages all the information about item category, customer,

shopping cart, item category. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose is to build an application program to reduce the managing the item category, food customers. It tracks all the delivery address ordered.

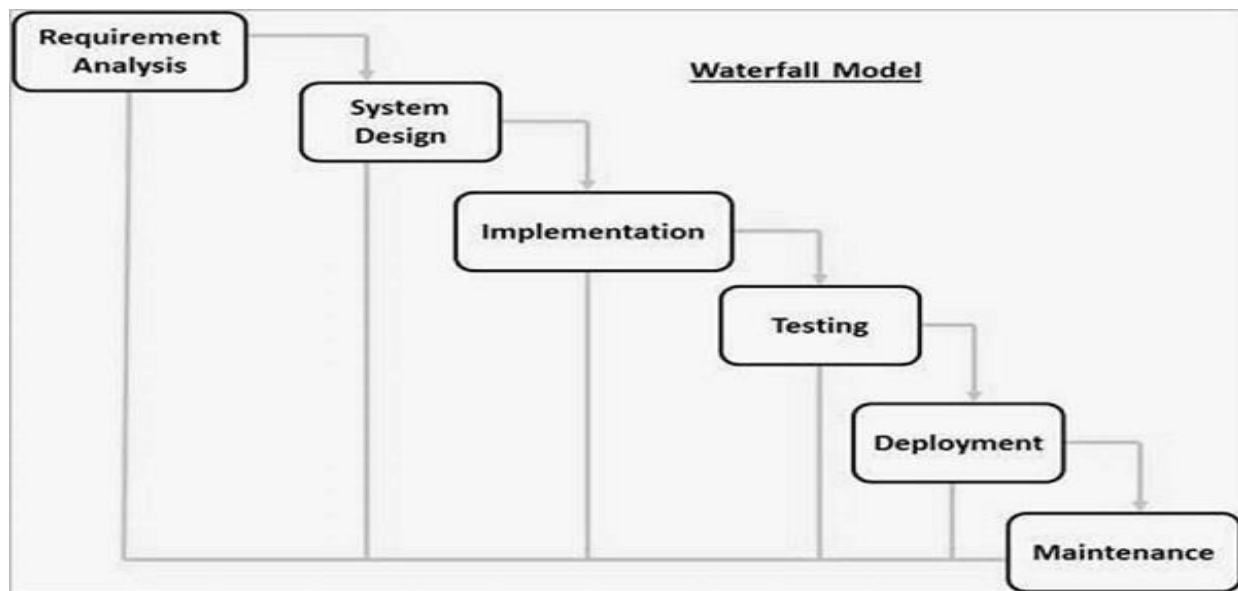
1.3 Scope and Feasibility

This activity is also known as the feasibility study. It begins with a request from the user for a new system. It involves the following:

- Identify the responsible user for a new system
- Clarify the user request
- Identify deficiencies in the current system
- Establish goals and objectives for the new system
- Determine the feasibility for the new system
- Prepare a project charter that will be used to guide the remainder of the Project

Chapter II: Methodology

2.1 Methodology Development Model



The sequential phases in Waterfall model are –

Requirement Gathering and analysis – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

- **System Design** – The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- **Implementation** – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, called Unit Testing.
- **Integration and Testing** – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

- **Deployment of system** – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- **Maintenance** – There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

2.2 Tools and Technique

- Php
- Xampp
- Mysql
- HTML
- Bootstrap
- Sublime text
- Java Script
- CSS

Php:

Hypertext Preprocessor (or simply **PHP**) is a server-side scripting language designed for Web development, but also used as a general-purpose programming language. It was originally created by Rasmus Lerdorf in 1994,¹ the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive acronym *PHP*: Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and

can be used to implement standalone graphical applications.

XAMPP:

XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

Mysql yog:

MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modeling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more. MySQL Workbench is available on Windows, Linux and Mac OS X.

HTML:

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.

Bootstrap:

Bootstrap is a free and open-source front-end framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many web frameworks, it concerns itself with front-end development only.

Java Script:

JavaScript often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.

Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

Sublime Text:

Sublime Text is a proprietary cross-platform source code editor with a Python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugins, typically community-built and maintained under free-software licenses.

CSS:

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate css file, and reduce complexity and repetition in the structural content.

2.3 Flow Chart of Restro Girls

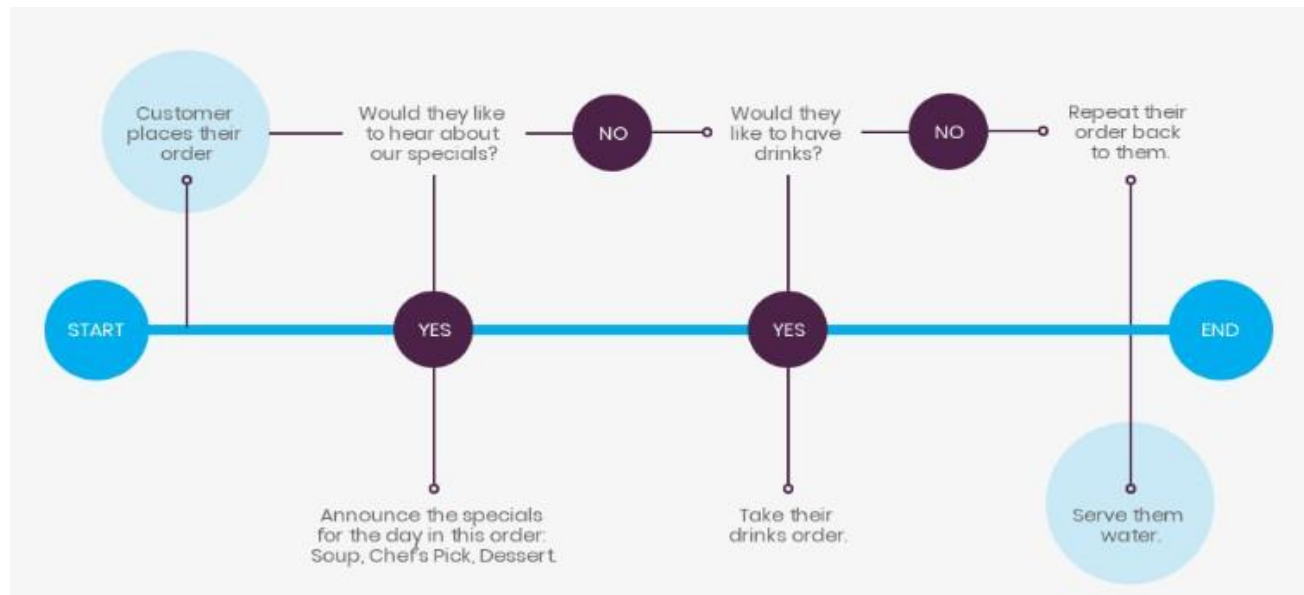


Figure 2.1: Flowchart of Restro Girls

Chapter III: Implementation

This activity includes programming, testing and integration of modules into a progressively more complete system. Implementation is the process of collecting all the required parts and assembling them into a major product.

3.1 Admin login

I.D:

Role: Admin wishes to login to the system

Precondition: Username and Password

Success end Condition: Main option of screen display

Failed end Condition: User has entered incorrect
Username and Password or both

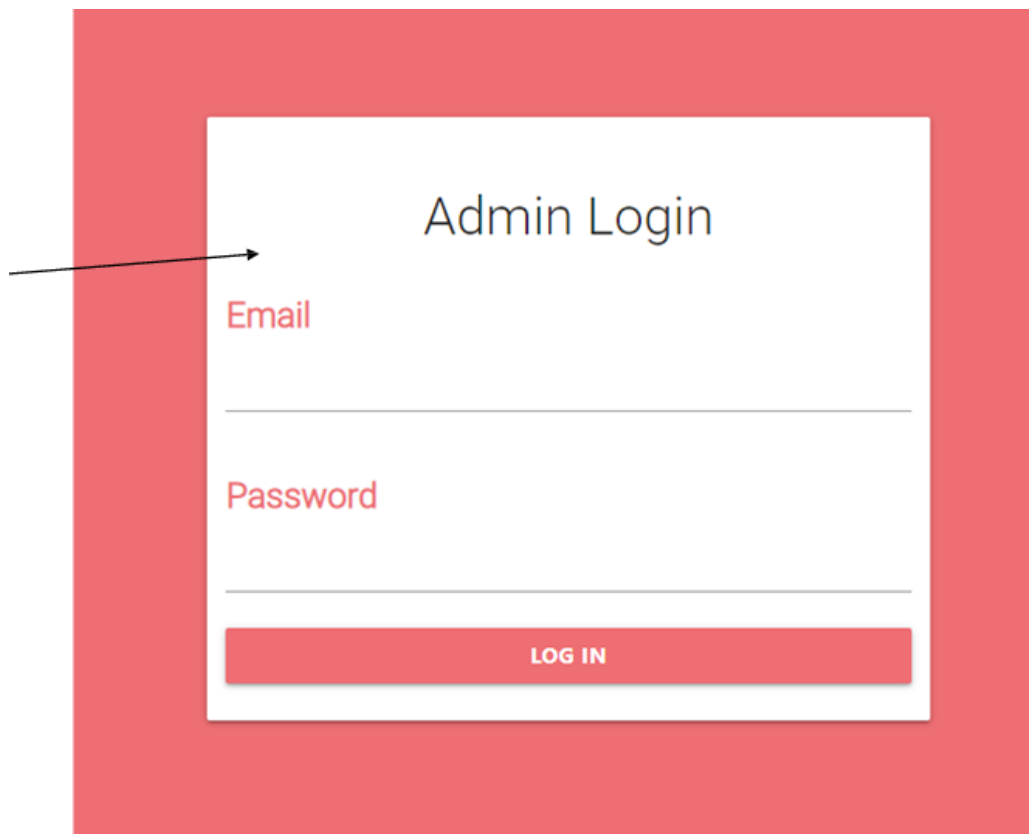
A screenshot of an 'Admin Login' form. The form is a white rectangle centered on a solid red background. It features the title 'Admin Login' at the top. Below the title are two input fields: the first is labeled 'Email' in red text, and the second is labeled 'Password' in red text. Both fields have horizontal lines indicating where to enter text. At the bottom of the form is a red rectangular button with the white text 'LOG IN'. A black arrow points from the left edge of the red background towards the 'Email' input field.

Figure3.1: Admin Login of Restro Girls

Add

ID:

Precondition: User has successfully added new item

Success end Condition: User has successfully made the changes

- 1.To add new item admin needs to click add button
- 2.And then click on' Save' button

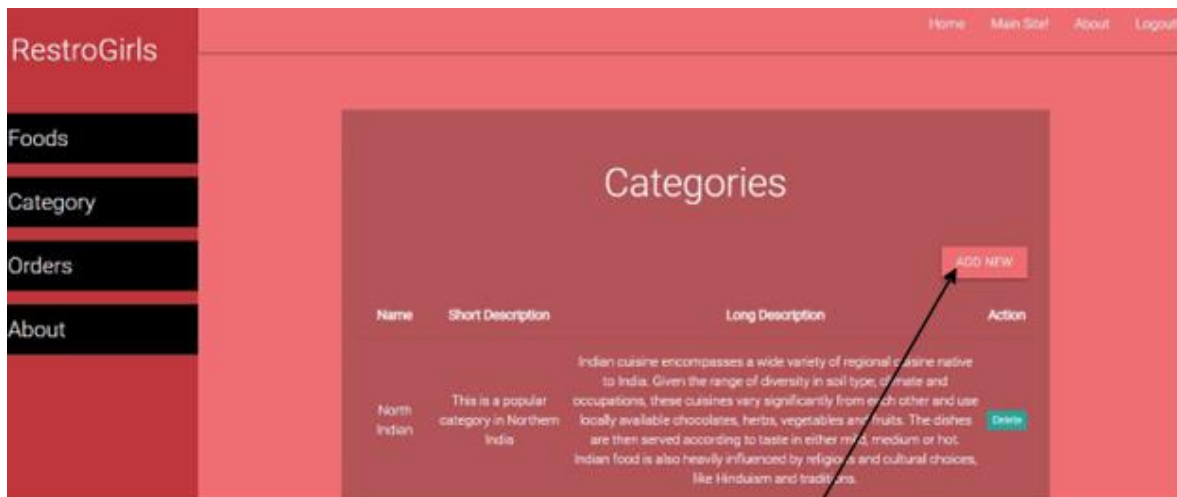


Figure3.2: Admin Add of Restro Girls

3.2 Logical Database

admin

Column	Type	Null	Default	Links to	Comments	MIME
id (<i>Primary</i>)	int(11)	No				
name	varchar(250)	No				
email	varchar(50)	No				
password	varchar(250)	No				

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	id	0	A	No	

categories

Column	Type	Null	Default	Links to	Comments	MIME
id (<i>Primary</i>)	int(11)	No				
name	varchar(250)	No				
short_desc	varchar(250)	No				
long_desc	varchar(500)	No				

Figure3.3: Logical Database of Restro Girls

Data Design

Data Model: A database model is a type of data model that determines the logical structure of a database and fundamentally determines in which manner data can be stored, organized and manipulated.

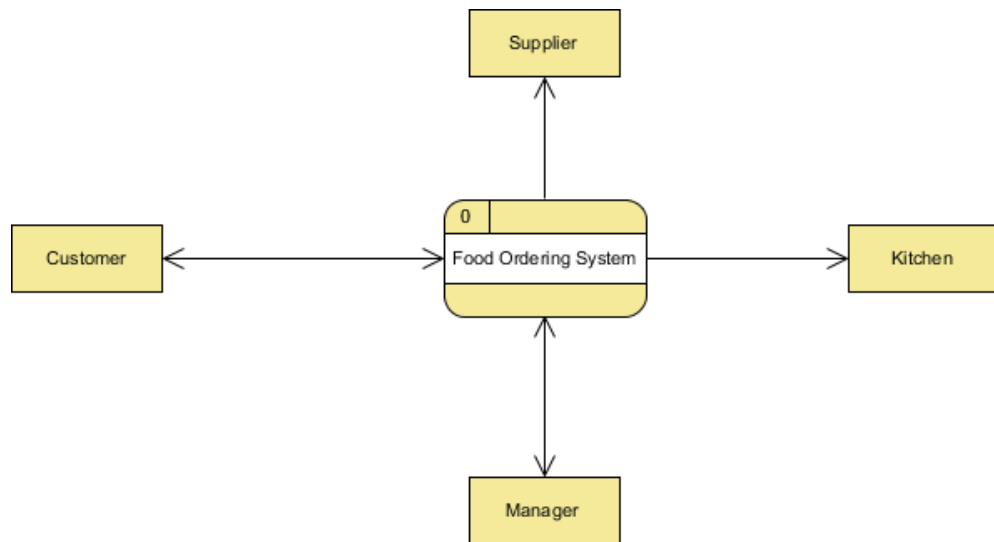


Figure3.4: Data flow of Restro Girls

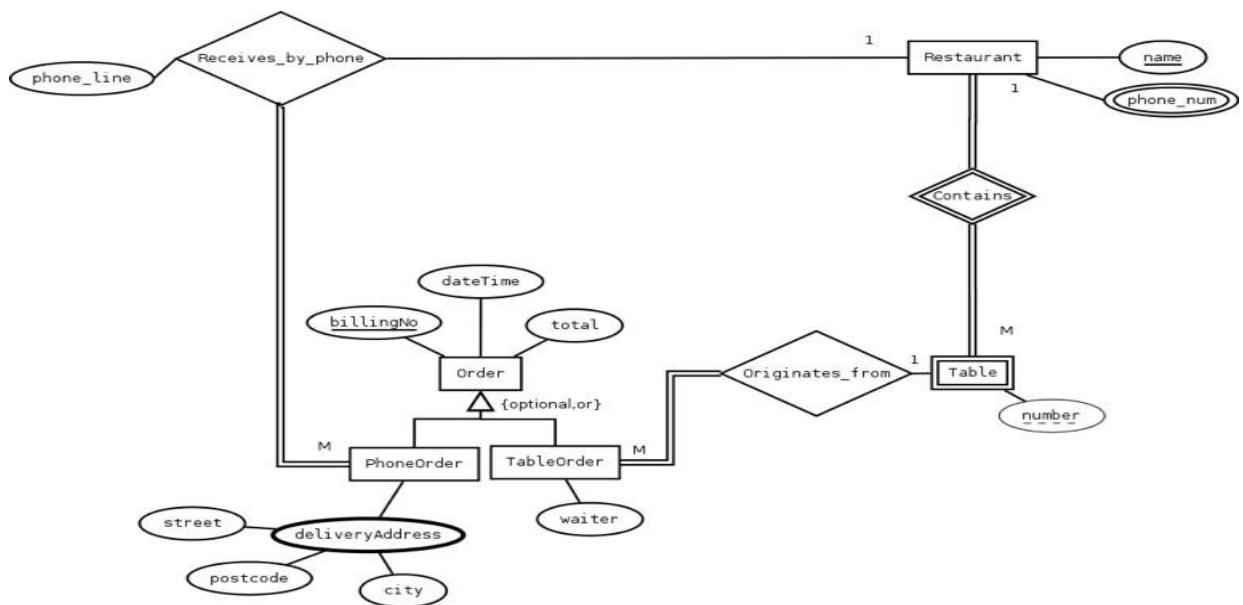


Figure3.5: ER Diagram of Restro Girls

Use Case Diagram

A use case describes a sequence of actions that provide something of measurable value to an actor and is drawn as a horizontal ellipse an actor is a person, organization, or external system that plays a role in one or more interactions with your system.

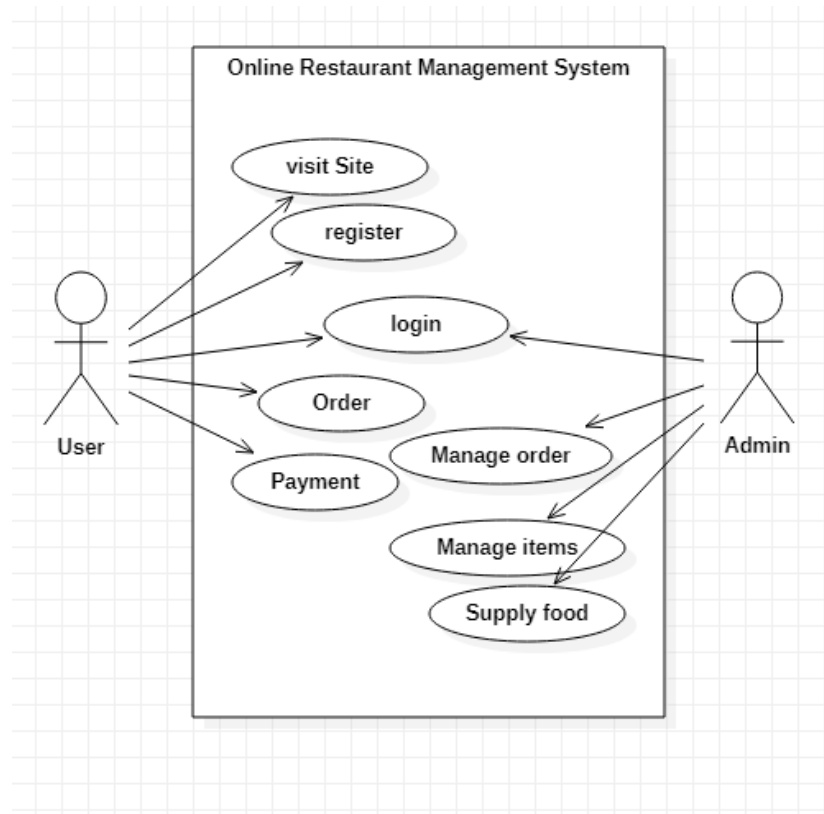


Figure3.6: Use case Diagram of *Restro Girls*

3.3 Schema Diagram

UML sequence diagrams model the flow of logic within your system in a visual manner, enabling you both to document and validate your logic, and are commonly used for both analysis and design purposes. Sequence diagrams are the most popular UML artifacts for dynamic modeling, which focuses on identifying the behavior within your system.

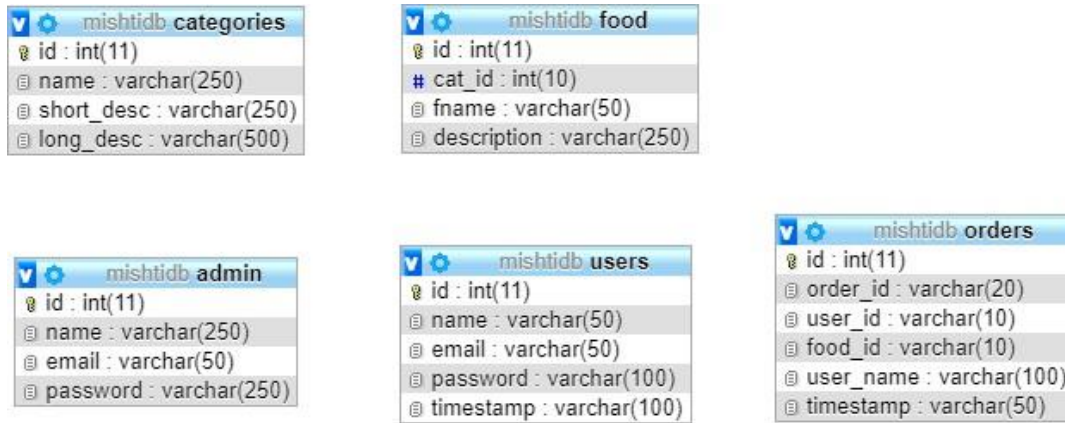


Figure3.7: Schema

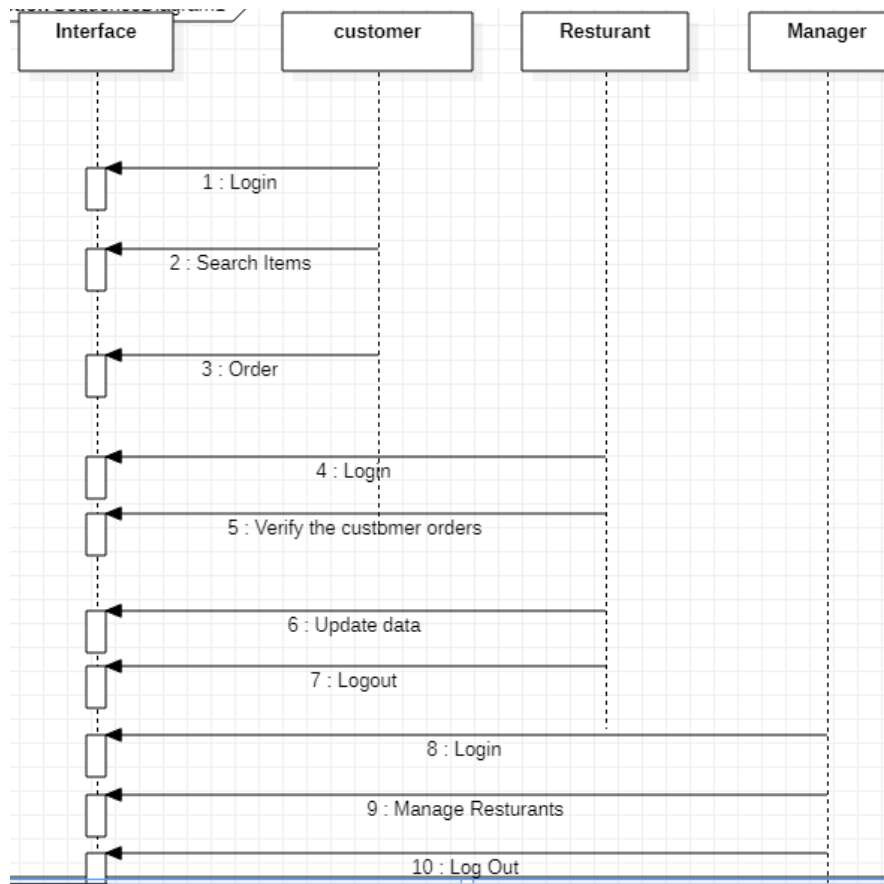


Figure3.8: Scquence Diagram

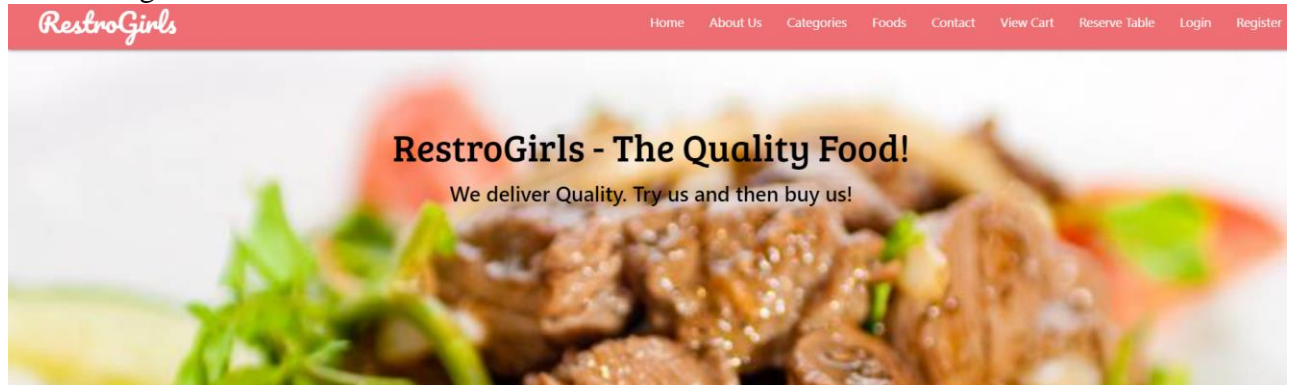
Chapter IV: Result

4.1 Result

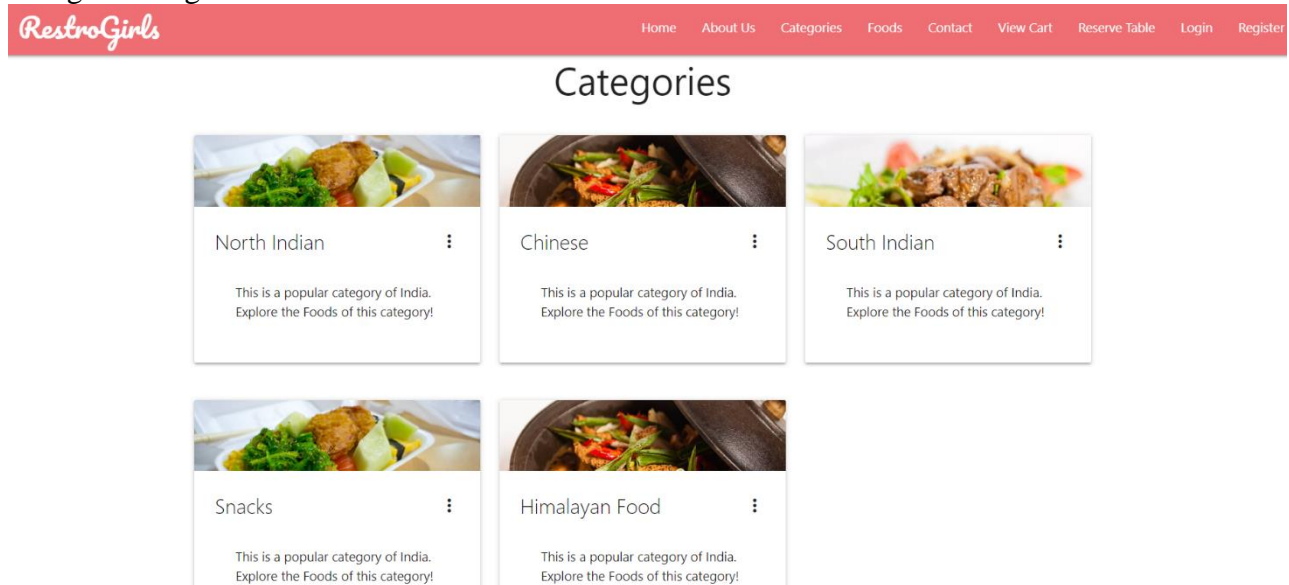
- Description
 - The system will maintain the login information of its user to enter in to the software
- Validating Checks
 - Administrators need to login with the unique id and password.
 - Contact number should have maximum 10 digits.
 - All the details must be filled up.
 - Email address should be in the proper format.
- Sequencing information
 - Login information should be filled in before the user allows it to be allowed.
- Error Handling
 - If the user doesn't fill up validate information, then the system displays error message for user and request to enter the validate information.
- Performance required
- Security
 - System should be Protected from unauthorized access Where the validate Username and Password are required so no other can access.
- Maintainability
 - System should be designed in a maintain order. So, it can be easily modified.

RESULTS:

Home Page



Categories Page



User Login

RestroGirls

[Home](#) [About Us](#) [Categories](#) [Foods](#) [Contact](#) [View Cart](#) [Reserve Table](#) [Login](#) [Register](#)

Good to See You Back!

Email

Password

LOGIN

User Register

RestroGirls

[Home](#) [About Us](#) [Categories](#) [Foods](#) [Contact](#) [View Cart](#) [Reserve Table](#) [Login](#) [Register](#)

Register Here!

Don't leave the fields blank!

Full Name

Email

Password

Confirm Password

REGISTER

View Cart

RestroGirls

[Home](#) [About Us](#) [Categories](#) [Foods](#) [Contact](#) [View Cart](#) [Reserve Table](#) [Hi, Bhoomika](#) [Logout](#)

Your Cart

Item	Price	Quantity	Total Price
Egg Role	40.00	2	80
Chowmin	60.00	1	60
Dosa	50.00	1	50
Total:			190

Check Available and Booked Tables

Table Information

Available Tables	Booked Tables
Table Number: 1 Table Number: 2 Table Number: 4	Table Number: 3

Reserve Table

Reserve Tables

Table Number:

Name:

Email:

Phone:

Reserve

4.2 Discussion

Structure of the project

- ❖ Before Login
 - Login
 - Register
 - About Us
 - Contact Us
- ❖ After Administrator Login
 - Edit Website Details

- Add Food Items
- Remove food Items
- Add Restaurants
- Delete Restaurant
- Logout
- ❖ After User Login
 - My Profile
 - Menu
 - Search Food Items
 - My Cart

Needs of Online Restaurant Management System

Helps customer to order their food at any time. The customers will be able to order their favorite dishes at any point of time, and as we have pointed out earlier, that time is a minimal option, and restaurants must have a specified system through which they can serve a huge number of customers while making their work smoother. Ordering.co is one of the best platforms which provides all of these platforms along with numerous innovative features which has turned countless small and large businesses into an inspiring leader in the online marketplace.

4.3 Future Works

The Online Restaurant Management System (ORMS) has been developed with a focus on efficiency, convenience, and user satisfaction. However, there are several areas where further enhancements and expansions can be considered to improve the system's functionality and meet the evolving needs of users and stakeholders.

- **Integration with Third Party:** In future iterations of ORMS, integration with popular third-party services such as online payment gateways, delivery logistics providers, and customer relationship management (CRM) tools can be explored. This would enhance the overall

functionality of the system and provide users with a seamless experience.

- **Mobile Application Development:** Developing a mobile application companion to the website can further enhance user convenience by providing on-the-go access to order food, track deliveries, and manage accounts from smartphones or tablets.
- **Enhance User Experience:** More features can be added to make it more user friendly. Features like Delete items from cart and during reservation being able to see the location of their seat that can help them more to choose the seat they like.