Deccan Education Society's
Fergusson College (Autonomous), Pune
Department of Computer Science

A

Project Report
on

"Online Food Order System"

In partial fulfillment of Post Graduate course

in

M.Sc. Computer Applications – I

(Semester -II)

CSA4212 Computer Applications Project - I

SUBMITTED BY

NAME OF THE STUDENT (ROLL NO –)

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CERTIFICATE

This is to certify that the project entitled Online Food Order System submitted by

Atharva Niranjan Naik

in partial fulfillment of the requirement of the completion of M.Sc. (C.A)-I [Semester-II], has been carried out by them under our guidance satisfactorily during the academic year 2022-2023.

Place: Pune
Date: / /2022

Dr. Kavita Khobragade
Head,
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Fergusson College (Autonomous), Pune

Project Guide:

1. **Mrs. Uma Madje**

Examiners Name	**Sign**
1. _____	_____
2. _____	_____

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1.Introduction

- **Problem Definition**

An online food order system (FoodiBaba) is a web-based application that enables customers to place food orders from their preferred restaurants through the internet. This system provides a convenient and hassle-free way for customers to order food from the comfort of their homes or offices.

The system typically includes a user-friendly interface that allows customers to browse menus, select items, specify special requests, and add items to their virtual cart. Customers can then complete their orders by providing their delivery address, contact information, and payment details.

On the restaurant side, the online food order system provides an easy way to manage and process incoming orders. Restaurants can receive and process orders in real-time, track delivery status, and generate reports on order history and sales data.

Overall, an online food order system offers a streamlined and efficient way for customers to order food and for restaurants to manage their orders, leading to increased customer satisfaction and business efficiency.

1.1 Existing System

In the present scenario, people have to physically visit the hotels or restaurants for eating food, and have to make payment through cash mode due to unawareness of advanced technologies. This traditional food ordering procedure is not efficient enough for hotels and restaurant, as they have to deal with crowd and maintain data record and accounts in physical file. This is cumbersome and tedious work, and full of risk as anyone can access it and modify the data.

There are several existing systems for online food ordering, some of the most popular ones are:

1. GrubHub: GrubHub is one of the most popular online food ordering systems. Customers can search for restaurants near them, browse menus, place orders, and make payments online.
2. Uber Eats: Uber Eats is another popular online food ordering system. It allows customers to order food from local restaurants, track the delivery in real-time, and pay through the app.

1.2 Need of the System

The online food order system has become increasingly popular in recent years due to several reasons. Here are some of the key benefits of using an online food order system**:**

1. Convenience: Online food ordering allows customers to order their favourite meals from the comfort of their homes or offices. Customers can browse menus, place orders, and make payments online, eliminating the need to visit the restaurant physically**.**

2. Time-saving: With online food ordering, customers can save time by avoiding long queues and waiting times at restaurants. They can place their orders in advance and choose the pick-up or delivery time, which reduces the waiting time.
3. Improved customer experience: Online food ordering systems can provide a more personalized experience for customers. They can save their preferences, order history, and payment information for a more streamlined and convenient ordering process

Overall, the online food order system offers several benefits for both customers and restaurants. It improves efficiency, reduces waiting times, and enhances the overall customer experience.

1.3 Overview of the Project

An online food order system (FoodieBaba) is a web-based platform that allows customers to order food from restaurants or food outlets via the internet.

1. User registration and login: Customers can create an account and log in to the system to access personalized menus and order history.
2. Selecting Cuisines: Customers can Choose Cuisines and According to their Cuisines Food Item is Display.
3. Browse menus: Customers can browse menus from restaurants, view pictures, descriptions, and prices of food items.
4. Select items: Once a customer finds a restaurant and menu item they like, they can add it to their cart.
5. Order placement and payment: Customers can place orders and pay for their meals using a variety of payment methods, such as credit cards or digital wallets.

An online food ordering system can benefit both customers and restaurants by providing a convenient, user-friendly interface for ordering and delivering food. The system can also help restaurants streamline their operations and manage orders more efficiently.

2. Analysis

2.1.1 Technical feasibility

For this feasibility study, we studied complete functionality to be provided in the system, as described in the System Requirement Specification (SRS) and checked if everything was possible using different type of frontend and backend platforms

2.1.2 Economical Feasibility

We decided the technology based on minimum possible cost factor. All hardware and software cost has to be borne by the organization. Overall, we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

2.1.3 Operational feasibility

No doubt the proposed system is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory even to a layman. Besides, a proper training has been conducted to let know the essence of the system to the users so that they feel comfortable with new system

2.2 Hardware and Software requirement

Hardware requirements:

- Processor: Intel i3 10th gen/Core i3
- Memory: Min 4GB Ram
- Disk space: Min 1GB

Software requirements:

- Python3
- Django
- SQLite3
- HTML-5&CSS-3
- Java Script
- Bootstrap

3. Design

3. 1 Database Table designing

1.Admin:

Sr Name	Field Name	Field Type	Description
1	Admin_id	Int	Admin ID
2	Admin_Name	Varchar (40)	Admin's Name
3	Admin_Pass	Varchar (40)	Admin's Password

2.Customer:

Sr Name	Field Name	Field Type	Description
1	Username	Varchar (40)	Customer's Name
2	email	email	Customer's Email
3	Phone_no	Int (11)	Customer's Ph no
4	Password	Varchar (40)	Customer's Password
5	State	Varchar (40)	Customer's State
6	Zipcode	Int (10)	Customer's Zipcode

3.Dish:

Sr Name	Field Name	Field Type	Description
1	D_Title	Varchar (40)	Title
2	D_price	Float	Price
3	D_Image		Dish Image
4	D_Category	Varchar (20)	Category
5	D_Composition	Varchar (40)	Composition
6	D_Description	Varchar (100)	Description

4.Cart:

Sr Name	Field Name	Field Type	Description
1	D_Title	Varchar (40)	Title
2	D_price	Float	Price
3	D_Description	Varchar (100)	Description
4	D_Image		Dish Image

5.Orders:

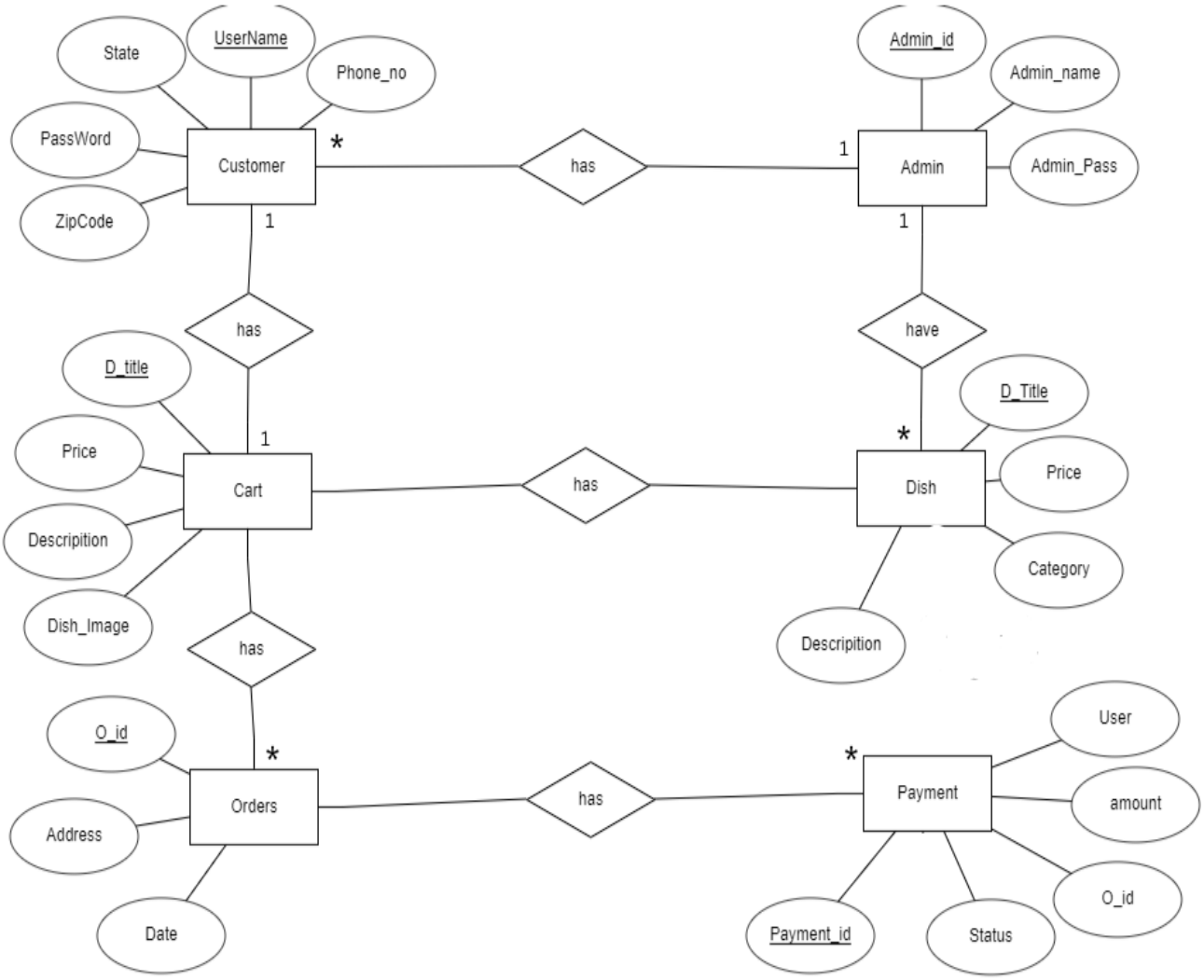
Sr Name	Field Name	Field Type	Description
1	O_id	Int (40)	Order ID
2	Address	Varchar (100)	Delivery Address
3	Date	Date Time	Order Date

6.Payemnt:

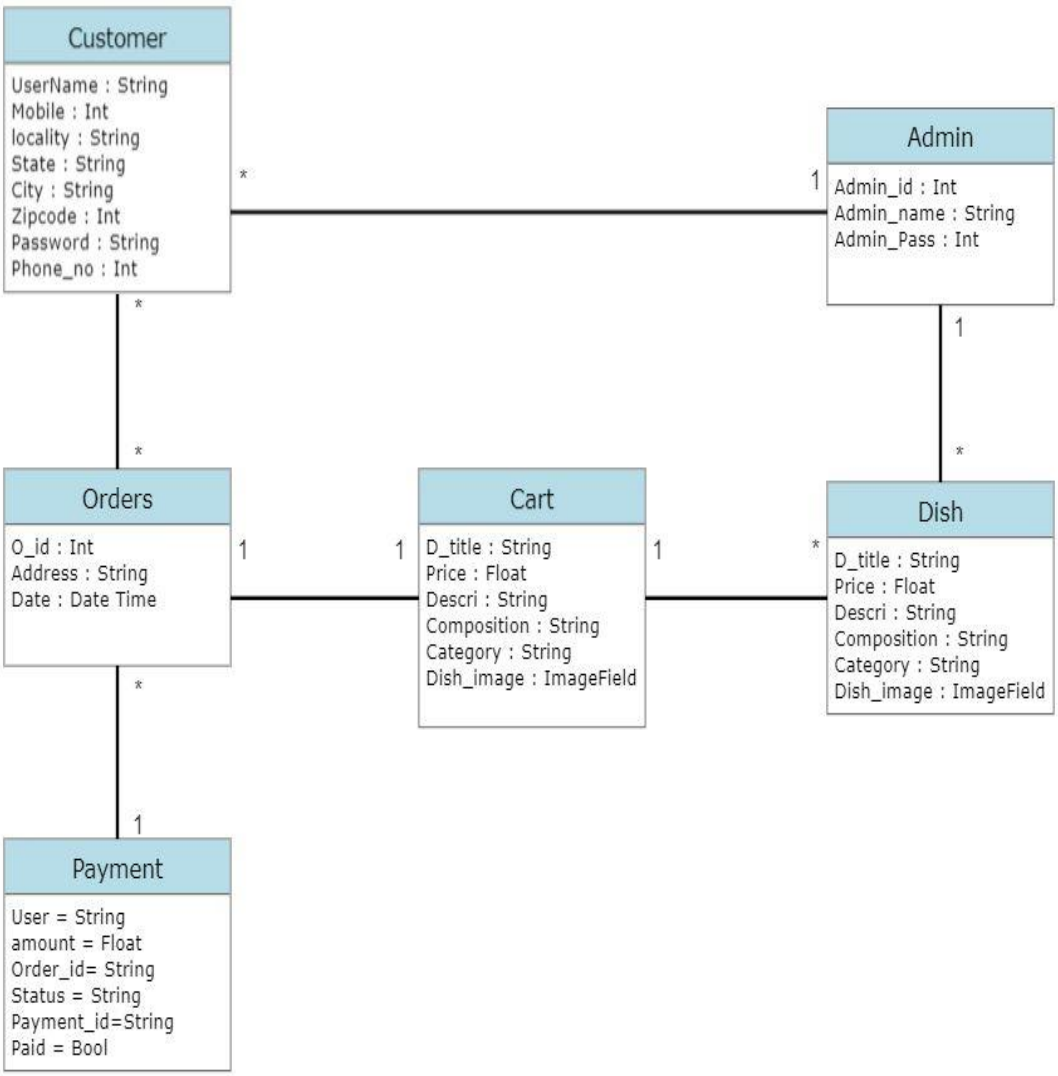
Sr Name	Field Name	Field Type	Description
1	Payment_id	Int (40)	Payment ID
2	Status	Varchar (20)	Payment Status
3	O_id	Int (40)	Order Id
4	Amount	Float	Total Amount
5	Username	Varchar (40)	UserName

3.2 Software Engineering Diagrams

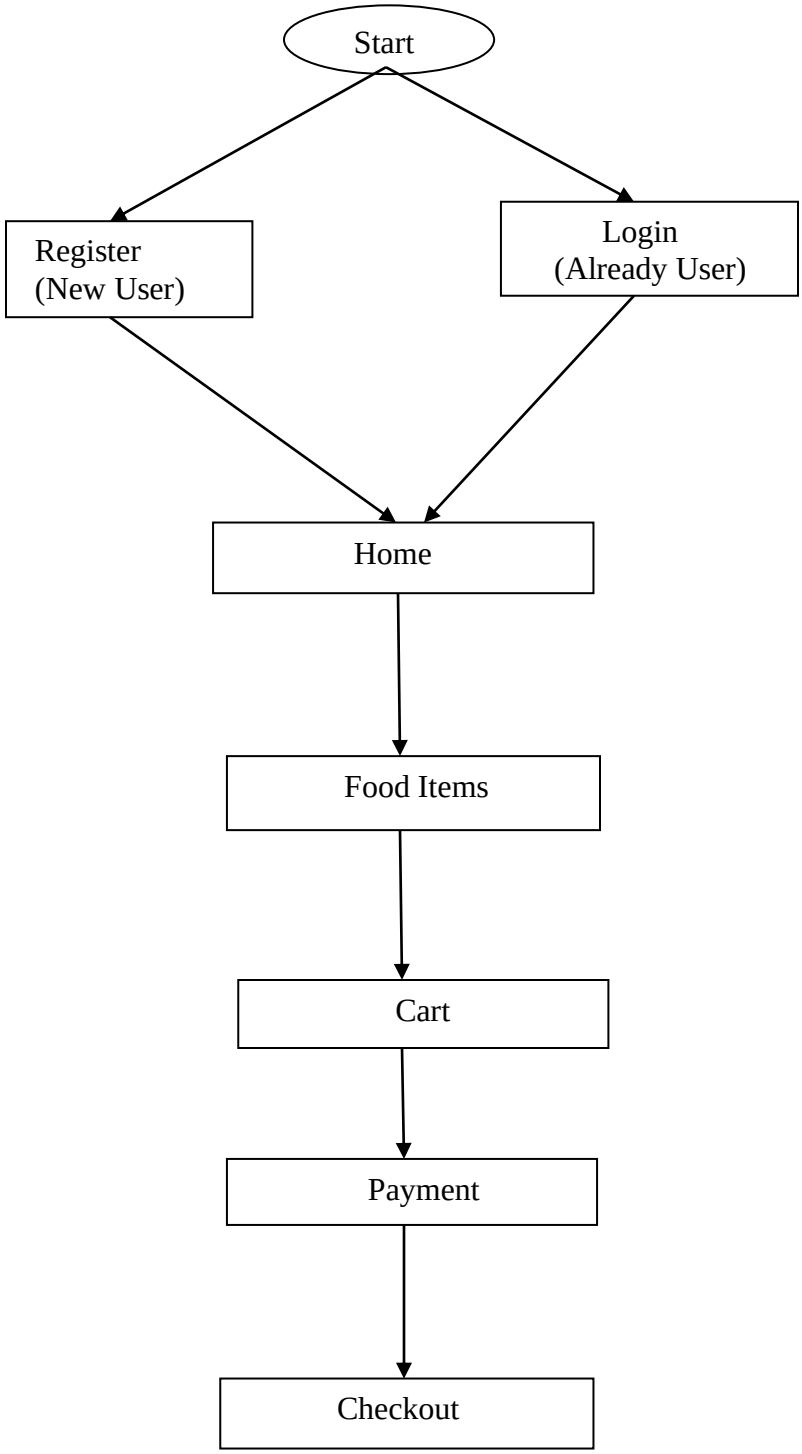
3.2.1 ER-Diagram



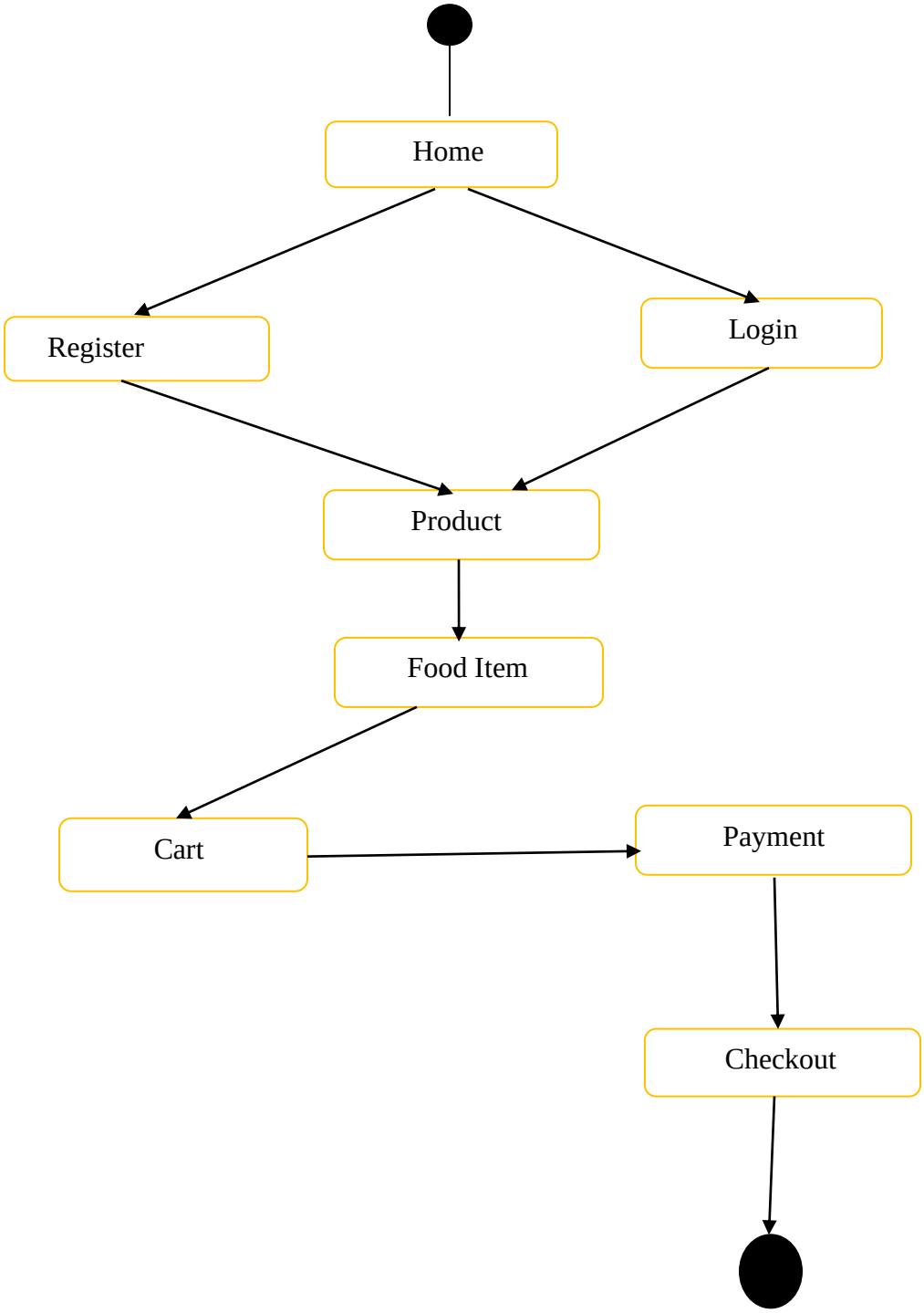
3.2.2 Class Diagram



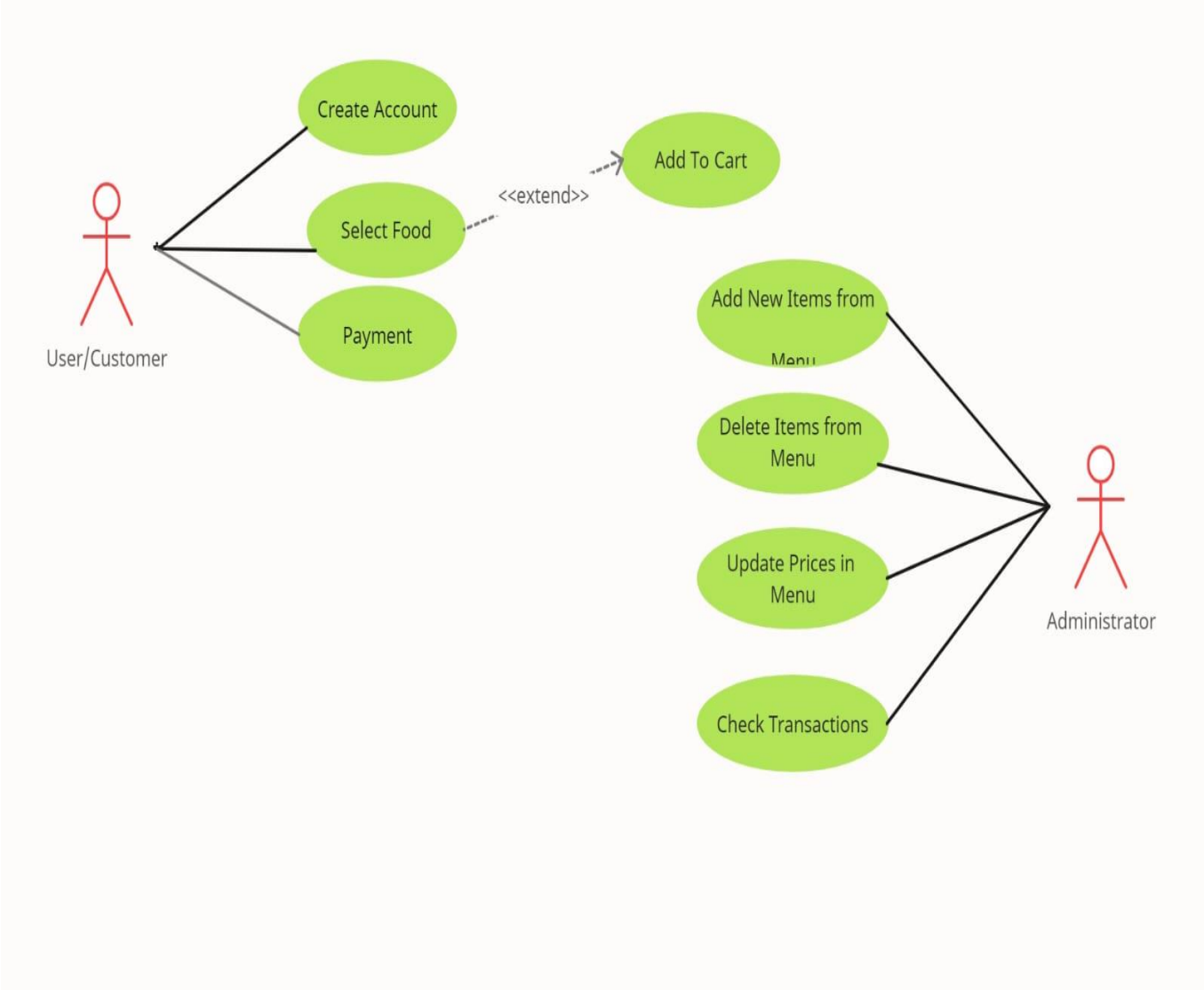
3.2.3. Activity Diagram



3.2.3 State Diagram



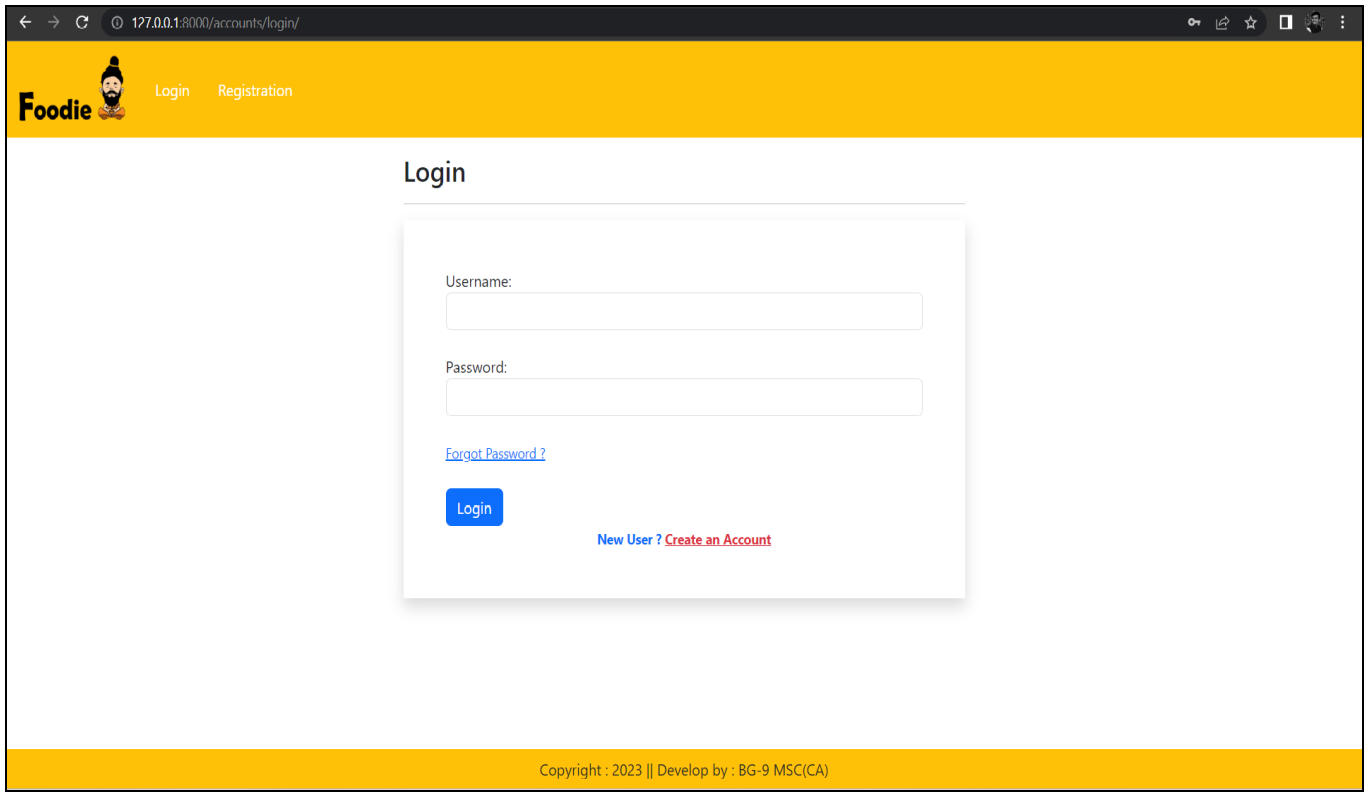
3.2.4. Use Case Diagram



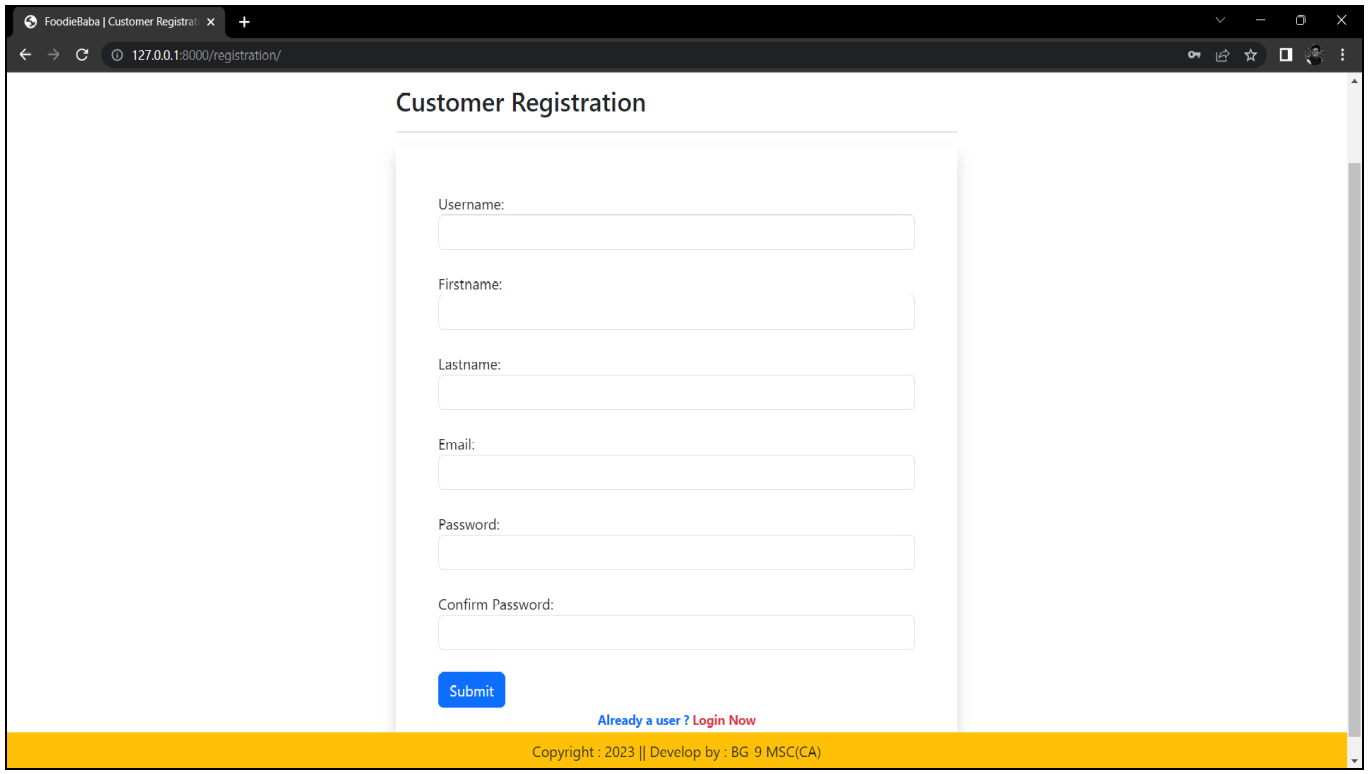
3.3 Input / Output Screens

1. Home Screen

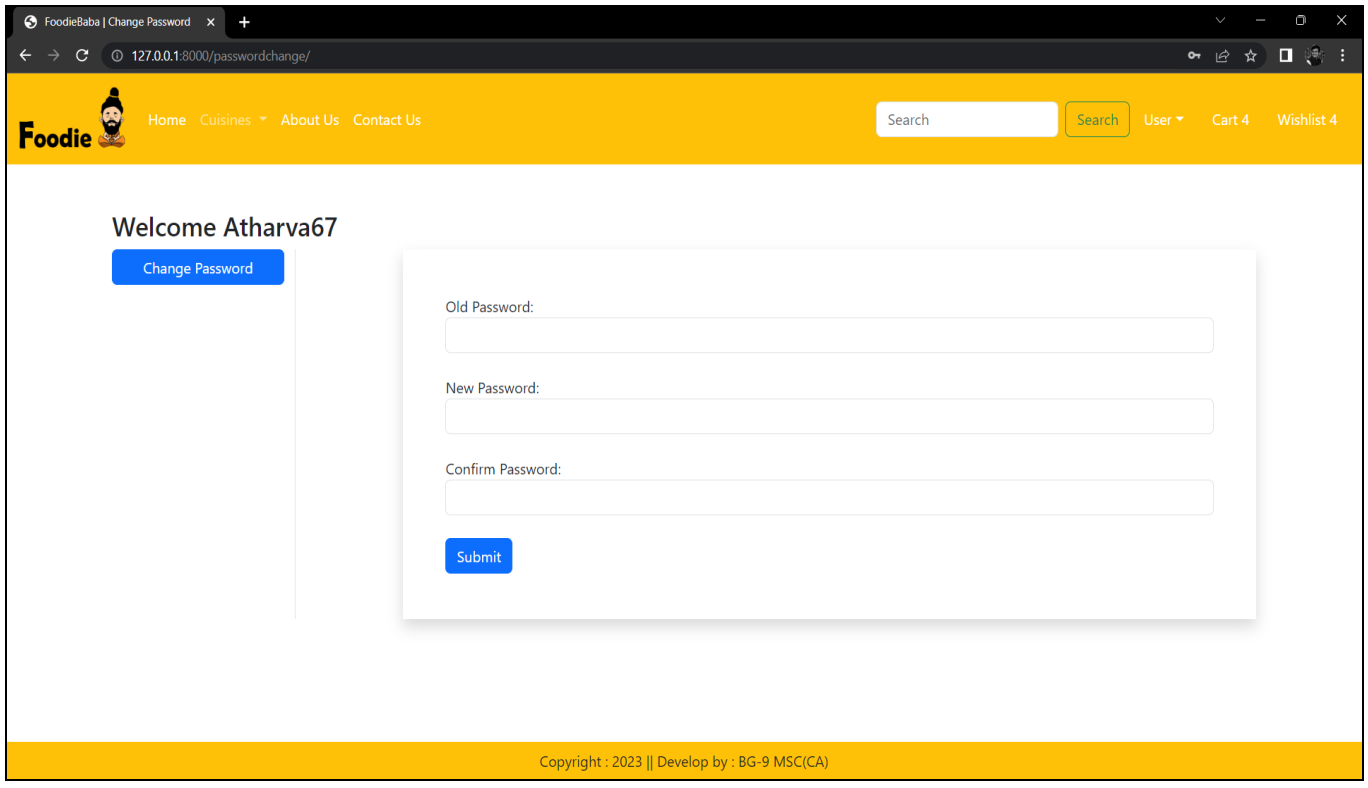
2. Login Screen



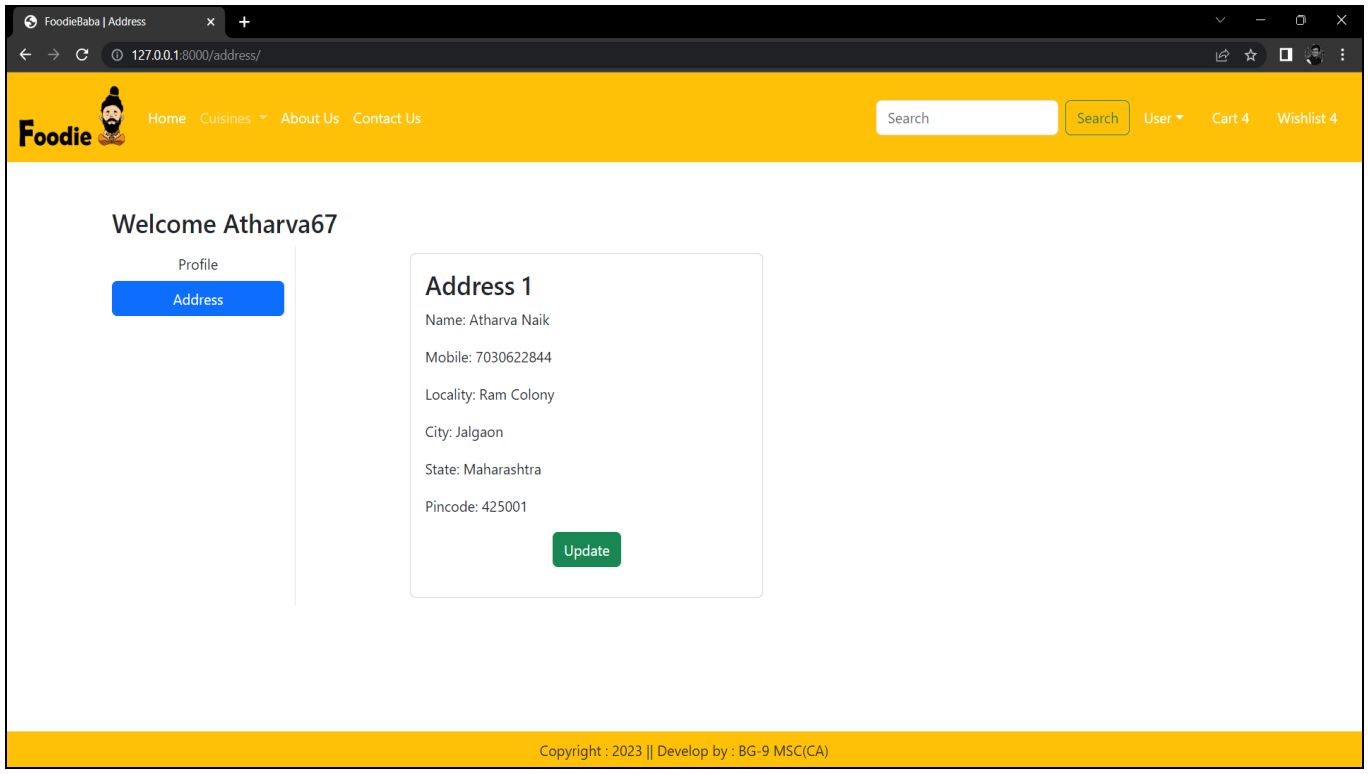
3. Register User (New User) Screen



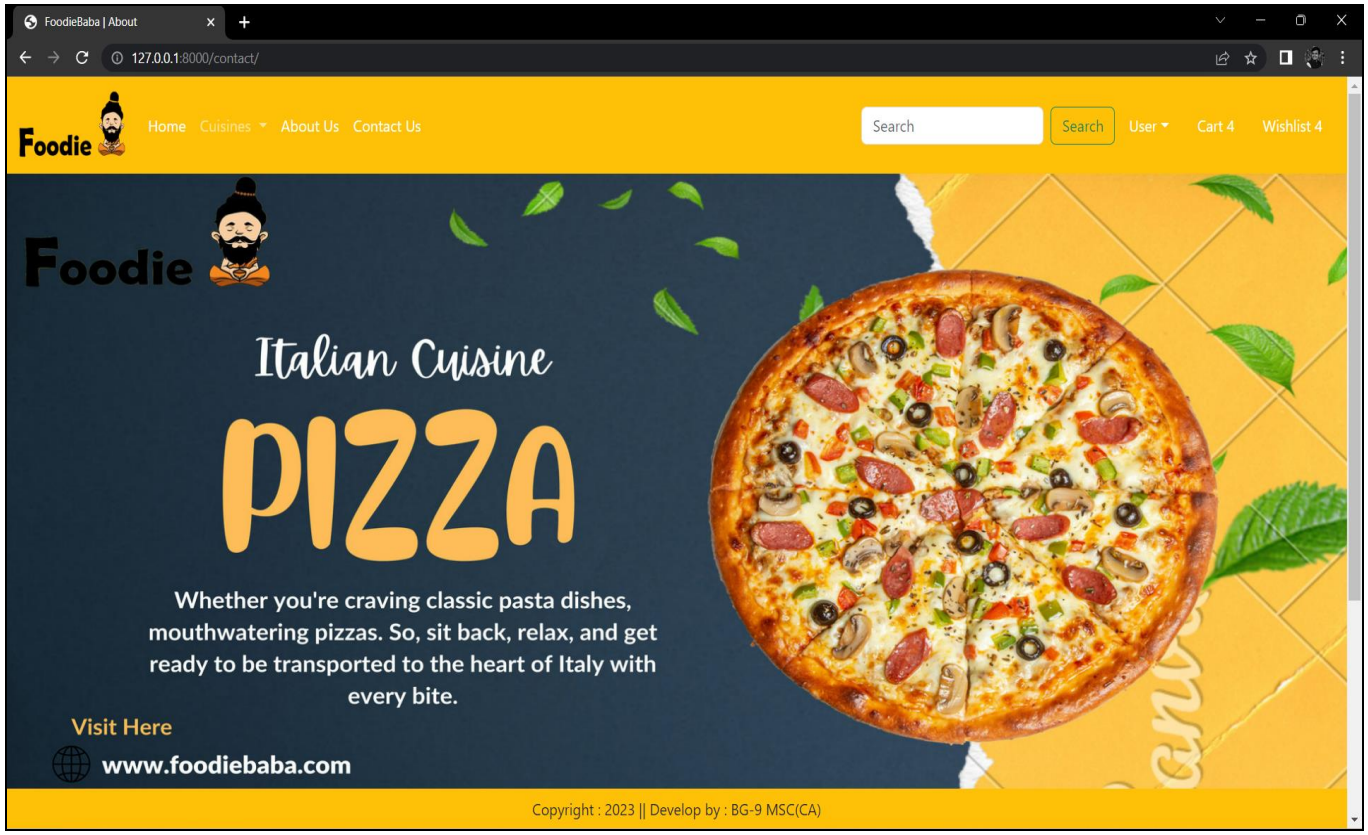
4.Forgate Password Screen



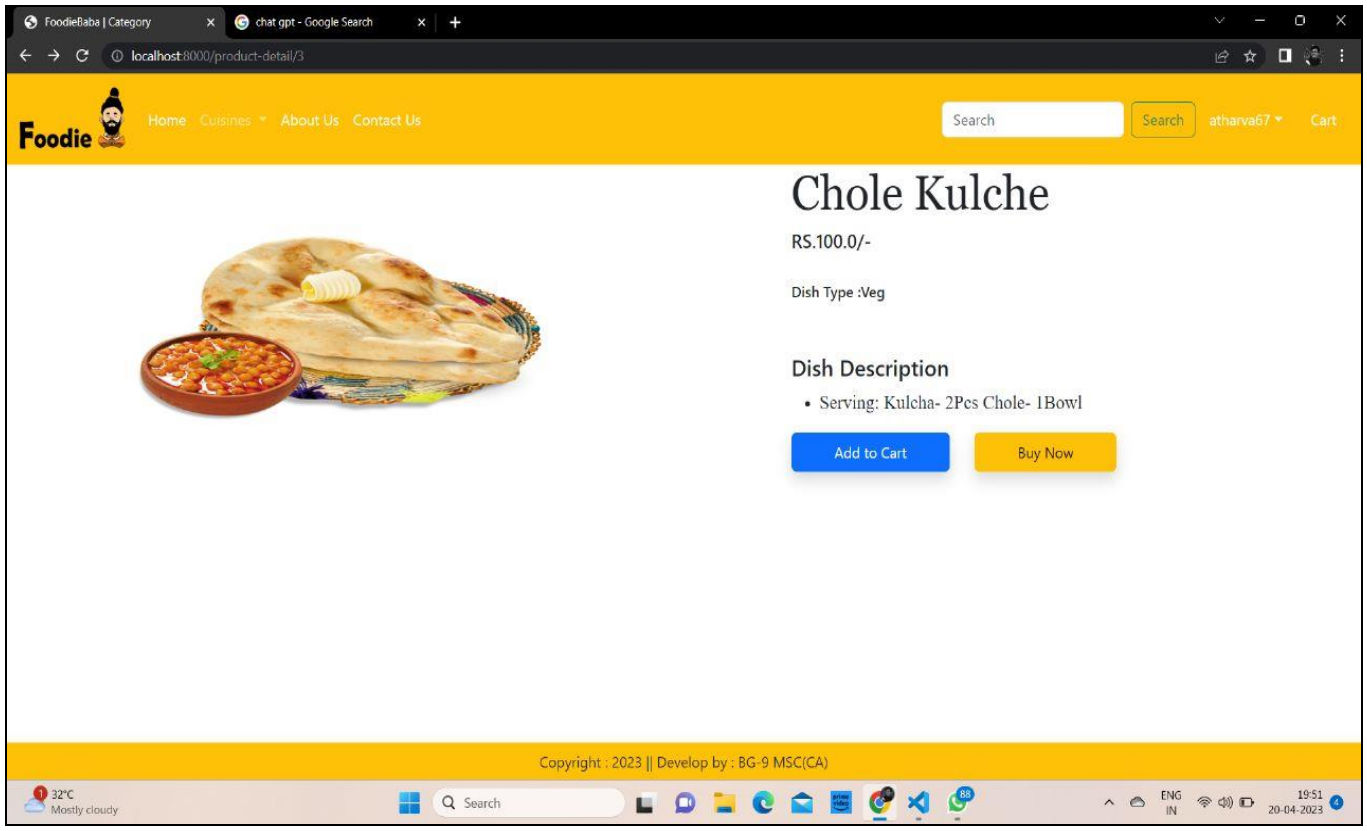
5. User Profile Screen



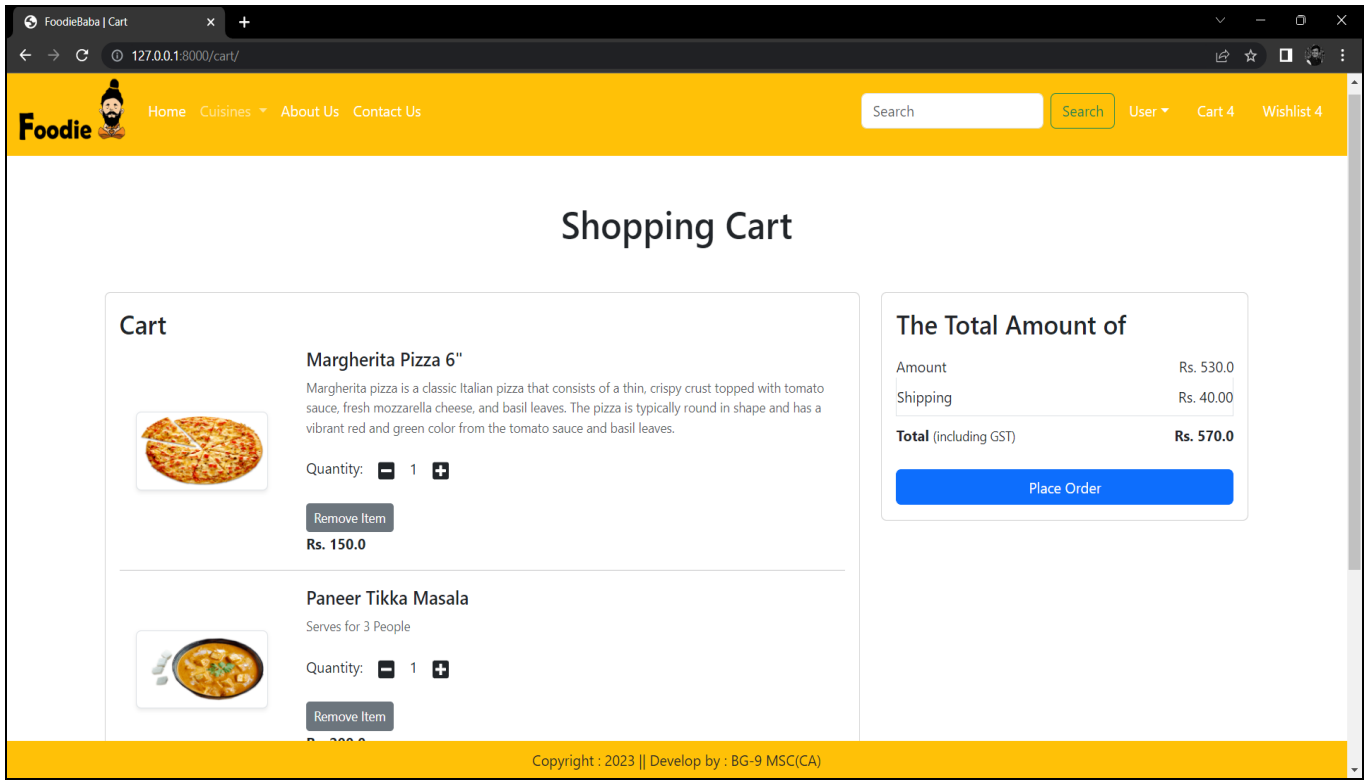
6.User Home Page Screen



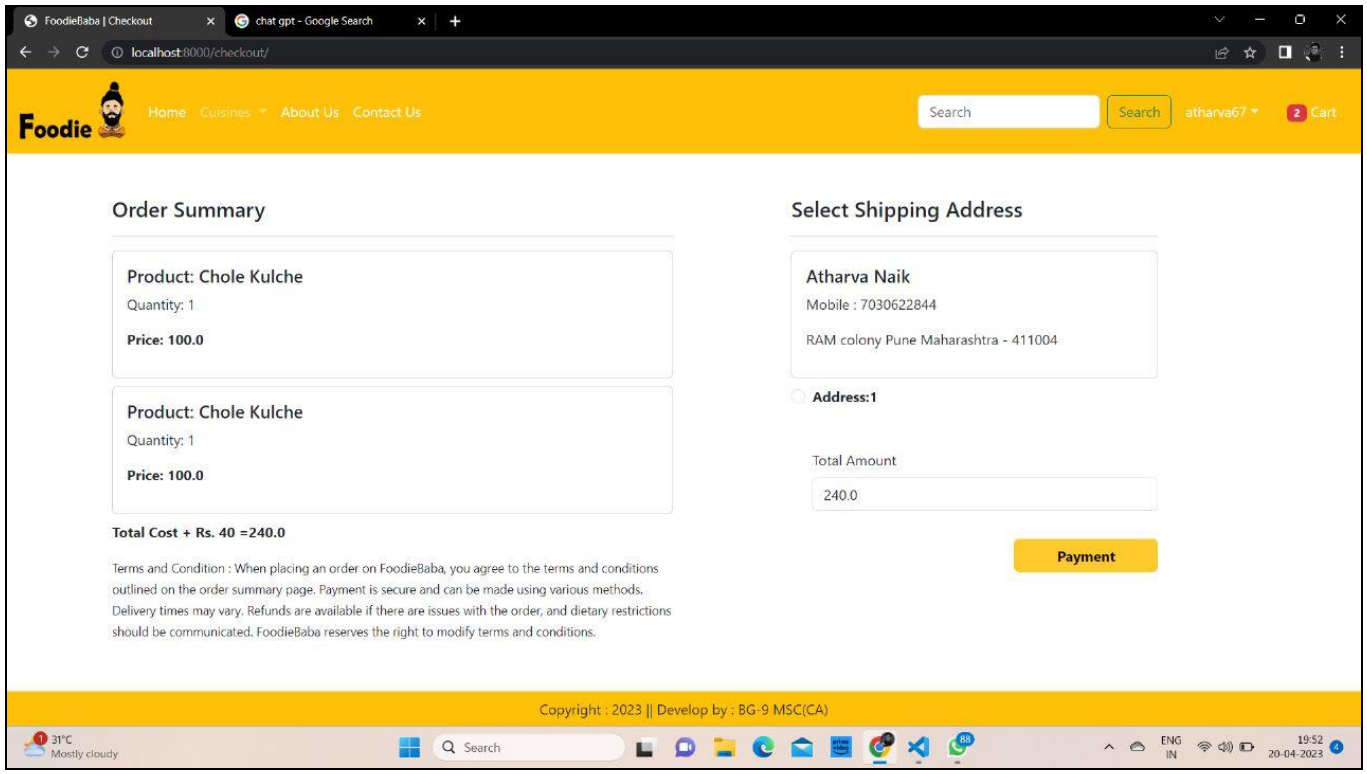
7.Food Order



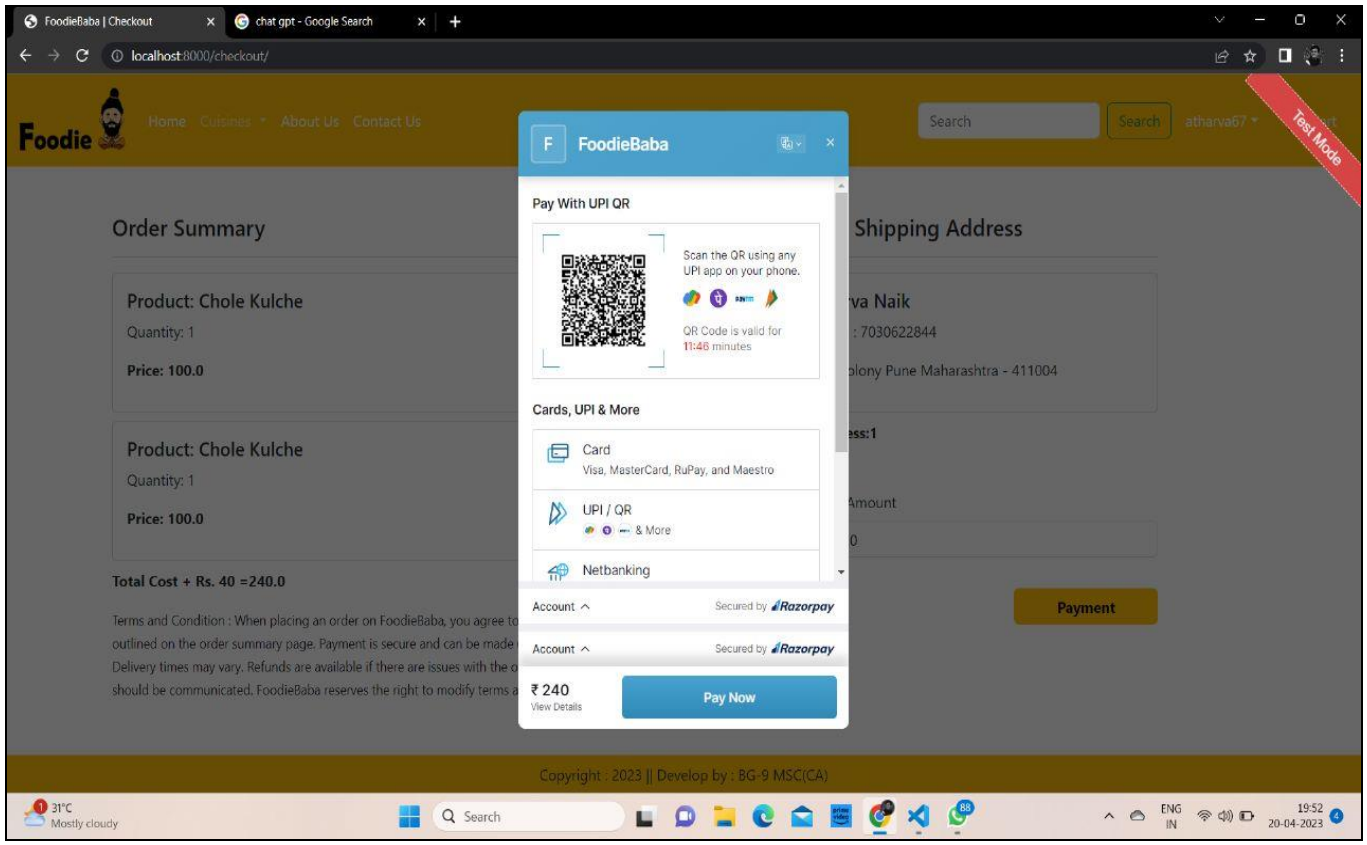
8.Cart Box Screen



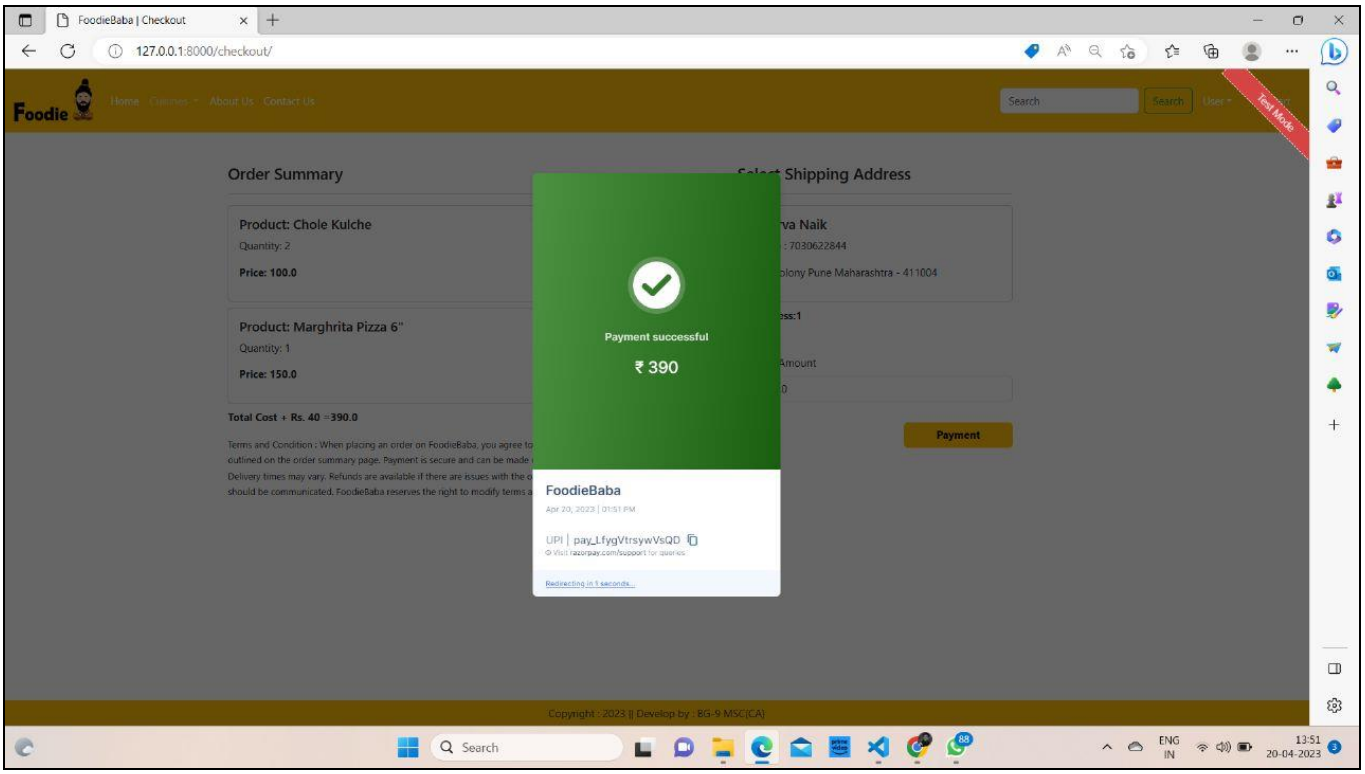
9.Order Summery



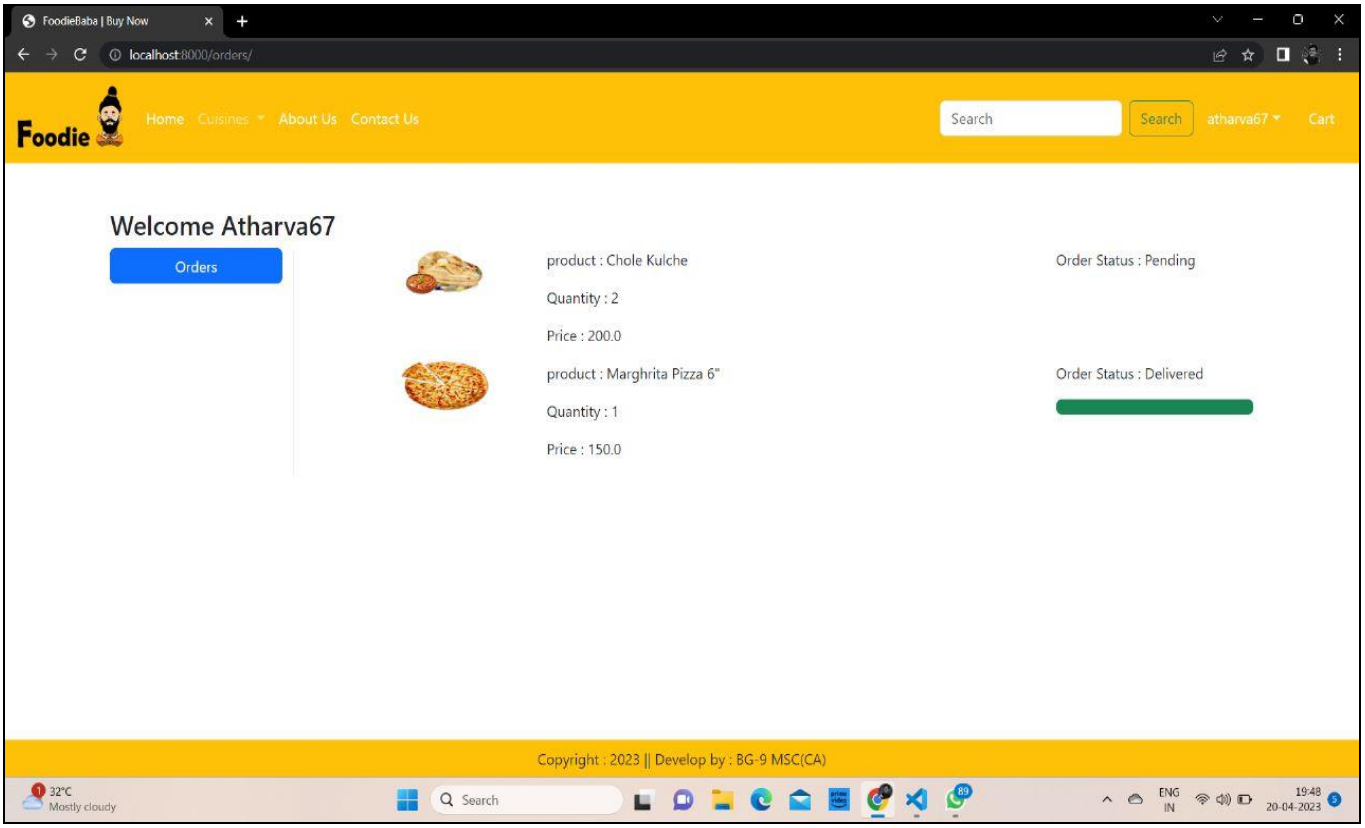
10.Payment Gateway



11.Payment Status



12.Order Status



4. Testing

4.1 Importance of testing

Testing is crucial in any software project, and an online food order project is no exception. Testing ensures that the project meets the expected quality standards and that the user has a seamless and satisfactory experience**.** Here are some reasons why testing is important in an online food order project:

1.Ensures Functionality: Testing helps ensure that all features and functionalities of the online food order project are working correctly. This includes the ordering system, payment gateway, user account creation, and other features. It ensures that users can access all features and complete their orders without any errors or technical glitches.

2. Ensures Security: Online food order projects deal with sensitive information such as user's personal and financial details. Testing helps ensure that these details are secure and protected from unauthorized access. It ensures that the payment gateway is secure and that users can safely make transactions without fear of data theft.

3.Ensures Usability: Testing helps ensure that the online food order project is user-friendly and easy to use. It ensures that the ordering process is intuitive, the website is responsive, and the user interface is easy to navigate. Usability testing helps identify any areas of the website that might be confusing to users and helps make necessary improvements**.**

4. Ensures Compatibility: Testing helps ensure that the online food order project works seamlessly across different devices and platforms. It ensures that the website is compatible with different browsers, operating systems, and devices such as desktops, laptops, and mobile devices. Compatibility testing ensures that all users can access the website and place orders without any issues.

In conclusion, testing is essential in an online food order project to ensure that it meets the quality standards, is secure, easy to use, and works seamlessly across different platforms. It helps identify any issues or bugs and helps make necessary improvements to provide a better user experience.

4.2 Types of testing (testing which are performed for your project)

1. Functional Testing: This type of testing is performed to ensure that the website's features and functions are working as expected. It involves testing the ordering process, payment gateway, user account creation, search functionality, and other features.

2. Usability Testing: Usability testing is performed to ensure that the online food order system is easy to use and user-friendly. It involves testing the user interface, navigation, and user experience to ensure that users can easily place their orders.

3. Security Testing: Security testing is performed to ensure that the online food order system is secure and protected from unauthorized access. It involves testing the website's authentication and authorization mechanisms, data encryption, and other security features to ensure that user data is protected.

4. Regression Testing: Regression testing is performed to ensure that any changes or updates made to the online food order system do not affect its existing features and functionalities. It involves testing the entire system after any updates or changes to ensure that it still works as expected.

4.3 Test cases

Sr.no	Test Code	Input	Excepted		Status
1.	Registration of User in System	**Enter** • Username • First Name • Last Name • Email-id • Phone no • Password • Retype Password	All the Entries in the Table has to be Appropriate	• if entries are appropriate go to the Next Page • If not then print one of your fields is empty	Pass
2.	User Login	**Enter** • Username • Password	All the Entries in the Table has to be appropriate	• If Entries are appropriate go to the Next page • If not then print one of your fields is empty	Pass
3.	Login into admin	**Enter** • Username • Password	All the Entries in the table has to be appropriate	• If Entries are appropriate go to the Next page • If not then print one of your fields is empty	Pass

4.	Search Food Item	**Enter** • Food Item Name	Entries in the table has to be appropriate	• If Entries is not Found in food Menu, then show Error	Found
5.	Logout				Pass
6.	Order	Enter • Address	Entries in the table has to be appropriate	• Address must be Required	Pass
7.	Payment	Enter • UPI Id or Other payment method	Entries in the table has to be appropriate	• If Entries are appropriate go to the Next page • If not then print one of your fields is empty	Pass

5. Drawbacks and limitations

1.Limited scalability: An online food ordering system implemented in Python may have limitations in terms of scalability, particularly if the restaurant grows in popularity and attracts a large number of customers. The system may not be able to handle a high volume of traffic, resulting in slow performance or crashes.
2.Limited Scope: - Foodie Baba is a Web Based Application Created Only for One Restaurant.
3.Cash on Delivery: - Cash on Delivery is not Available in this System.

6.Future enhancement

There are several potential future enhancements that could be made to an online food ordering system project. Here are a few ideas:

1. Mobile app development: Developing a mobile app for the food ordering system would make it more accessible and convenient for customers to order food on-the-go. The app could also include features such as push notifications for order updates, a loyalty program, and personalized recommendations based on order history.
2. Integration with delivery services: Integrating the food ordering system with delivery services like Uber Eats or Door Dash would allow customers to place orders for delivery directly through the restaurant's website or app. This would eliminate the need for customers to switch between multiple apps and could increase sales for the restaurant.
3. Menu customization: Giving customers the ability to customize their orders, such as selecting the level of spiciness or adding extra toppings, would provide a more personalized experience and could increase customer satisfaction.

Conclusion: -

The Online Food Order System Project is an excellent example of how technology can streamline the food ordering process and enhance the customer experience.

1.The online food ordering system provides customers with the convenience of ordering food from anywhere at any time.

2. The system is designed to streamline the ordering process, reducing the workload on staff and minimizing errors

3. By making it easier for customers to order food, the online food ordering system can increase sales for restaurants.

the Online Food Order System Project is a valuable addition to the food industry, providing several benefits to both customers and restaurants. It is an excellent example of how technology can be used to improve the efficiency of business operations and enhance the customer experience.

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