



Green University of Bangladesh

*Department of Computer Science and Engineering (CSE)
Semester: (Spring, Year: 2024), B.Sc. in CSE (Day)*

FoodTake

Course Title: Web programming Lab

Course Code: CSE-302

Section: 213 D2

Students Details

Name	ID
Md. Hosain Rohman Noyon	221902370

Submission Date: 10-06-24

Course Teacher's Name: Muhaimen Khan

Lab Project Status

Marks:

Signature:

Comments:

Date:

Contents

1	Introduction	2
1.1	Overview	2
1.2	Motivation	2
1.3	Problem Definition	2
1.3.1	Problem Statement	2
1.3.2	Complex Engineering Problem	3
1.4	Design Goals/Objectives	3
1.4.1	Objectives	3
1.4.2	ER-Diagram	4
1.5	Application	5
2	Design/Development/Implementation of the Project	6
2.1	Introduction	6
2.2	Project Details	6
2.3	Implementation	7
2.3.1	The workflow	7
3	Performance Evaluation	8
3.1	Simulation Environment	8
3.2	Results Analysis	8
3.3	Results Overall Discussion	15
4	Conclusion	17
4.1	Discussion	17
4.2	Limitations	17
4.3	Scope of Future Work	18
4.4	Reference	18

Chapter 1

Introduction

1.1 Overview

The increasing demand for convenient and quick food delivery services has led to the rise of platforms like FoodPanda, Uber Eats, and DoorDash. In response to this growing trend, my project aims to develop a comprehensive food delivery website. This platform will enable customers to order food from a variety of restaurants, track their orders in real-time, and facilitate seamless delivery by delivery personnel.

1.2 Motivation

The motivation behind developing FoodTake stems from the growing demand for convenient and efficient food delivery services. In today's fast-paced world, people increasingly prefer ordering food online rather than visiting restaurants. By creating FoodTake, I aim to simplify this process and enhance user experience for customers, admins, and delivery personnel.

1.3 Problem Definition

1.3.1 Problem Statement

- Many platforms do not provide adequate features for customer interaction and support.
- Customers frequently experience a lack of real-time updates on their orders.
- This results in inefficiencies and errors in the delivery process.
- Users may find it difficult to navigate and utilize the platform effectively, leading to frustration and potential loss of users.
- Ensuring secure authentication and data protection is a significant challenge.

- Admins face challenges in tracking and assigning orders, leading to potential mismanagement and delays.

1.3.2 Complex Engineering Problem

It is like solving a puzzle for the online ordering system. We want to make things run better and be less confusing. It's not easy, but we're trying to find a smart way to fix the problems and make everyone happy with how the system works.

Table 1.1: Summary of the attributes touched by the mentioned projects

Name of the P Attributes	Explain how to address
P1: Depth of knowledge required	I needed to learn about food delivery service systems and how they work, but it is not very hard.
P2: Depth of analysis required	I needed to analyze what issues can arise, and which information should be stored.
P3: Familiarity of issues	I needed to know the problems well so that I could find the best ways to make things better.
P4: Extent of applicable codes	There were some rules or guidelines I have followed to make sure I solved the problems the right way.
P5: Extent of stakeholder involvement and conflicting requirements	Everyone who cares about the online ordering service might have different thoughts, so I needed to consider what each person wants.
P7: Interdependence	Some things about the bus services are connected, so when we change one thing, it might affect something else. So, I needed to make sure everything worked well together.

1.4 Design Goals/Objectives

1.4.1 Objectives

The main objectives of this project were:

- To develop a user-friendly web application for food ordering and delivery.
- To implement an efficient order management system for administrators.
- To create a seamless process for assigning and tracking deliveries.
- To ensure secure authentication and authorization for all types of users (customers, admins, and delivery boys).
- To provide real-time order status updates for customers and delivery personnel.

1.4.2 ER-Diagram

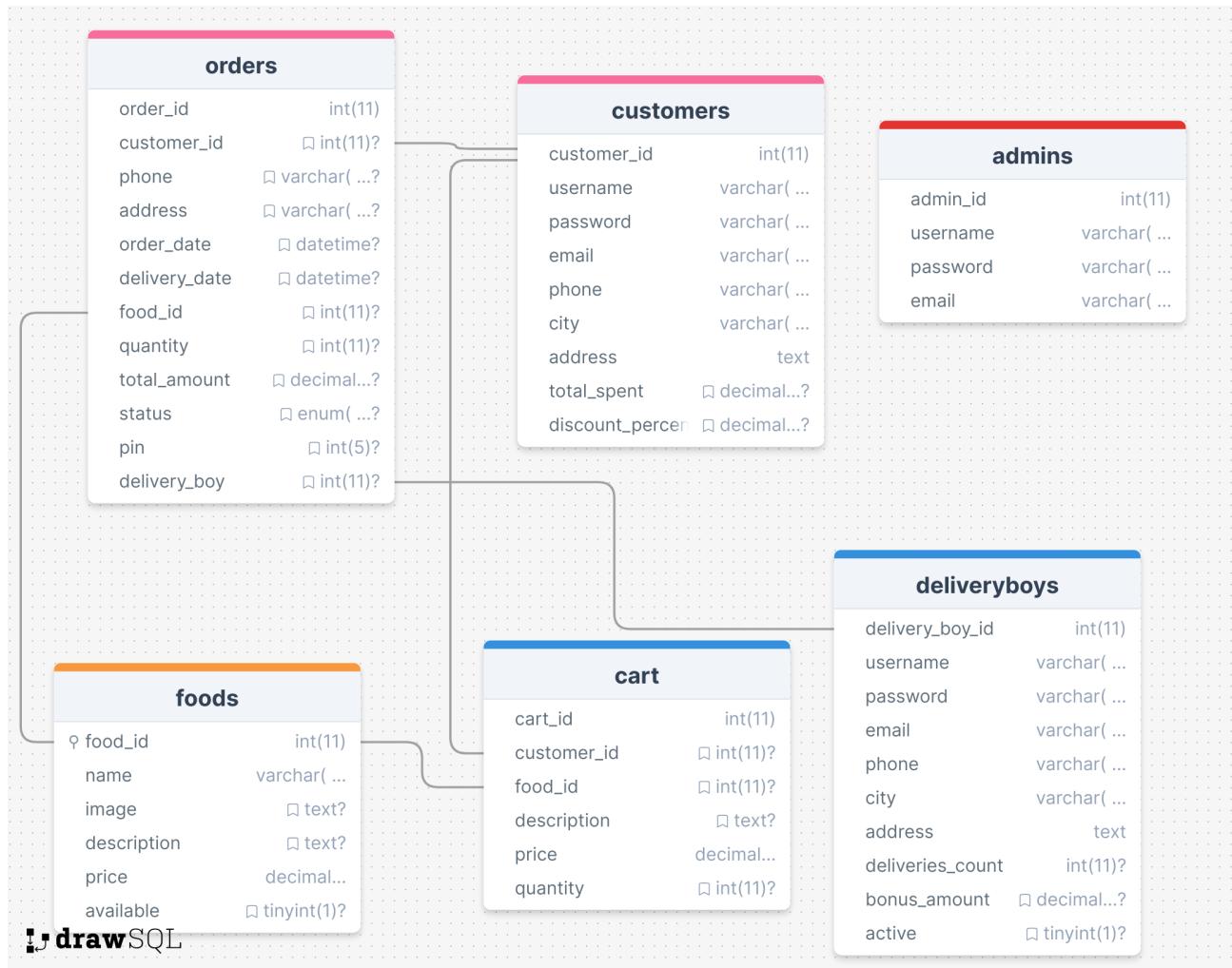


Figure 1.1: ER-Diagram of FoodTake service

1.5 Application

Some applications of the FoodTake system are given below:

1. **Order Placement and Management:** The system allows customers to browse food items, place orders, and manage their cart, providing a seamless ordering experience.
2. **Real-Time Order Tracking:** Customers can track the status of their orders in real-time, from placement to delivery, ensuring transparency and reliability.
3. **Efficient Delivery Assignment:** Admins can manage orders by assigning them to delivery boys based on availability and location, optimizing delivery efficiency.
4. **Order History and Analytics:** Both customers and admins can view order history, helping in analyzing buying patterns and improving future service offerings.
5. **Discount and Promotion Management:** Admins can manage discounts and promotional offers, attracting more customers and boosting sales.
6. **Inventory Management:** The system helps in tracking the availability of food items, ensuring timely restocking and minimizing the risk of stockouts.
7. **User Authentication and Security:** The platform ensures secure authentication processes for customers, admins, and delivery boys, safeguarding user data and preventing unauthorized access.
8. **PIN-Based Delivery Confirmation:** Delivery boys use a PIN provided by the customer to confirm order delivery, ensuring secure and verified order completion.

Chapter 2

Design/Development/Implementation of the Project

2.1 Introduction

The design and development of FoodTake involve creating a robust database schema, developing front-end and back-end functionalities, and integrating various tools and technologies to ensure a smooth user experience.

2.2 Project Details

- FoodTake is an online food ordering and delivery platform built using HTML, CSS, JavaScript, PHP, and MySQL.
- The platform includes separate interfaces for customers, admins, and delivery boys, each designed to cater to their specific needs and tasks.
- Database Schema: The database includes tables for customers, delivery boys, admins, foods, cart items, and orders, ensuring efficient data management and relationships.
- User Authentication: Secure login and registration processes for all types of users.
- Order Management: Customers can place orders, which admins can manage and assign to delivery boys.
- Delivery Tracking: Delivery boys can view and update the status of their assigned orders.

2.3 Implementation

2.3.1 The workflow

- Customer Workflow:
 - Register and log in.
 - Browse and select food items.
 - Add items to the cart and place an order.
 - View order progress and enter a PIN upon delivery.
- Admin Workflow:
 - Log in to the admin panel.
 - View all orders and pending orders.
 - Assign delivery boys to pending orders.
 - Update order status.
- Delivery Boy Workflow:
 - Log in to the delivery account.
 - View assigned orders.
 - Deliver orders and enter the PIN provided by the customer to complete the delivery.

Tools and libraries

- Front-end: HTML, CSS, JavaScript
- Back-end: PHP
- Database: MySQL
- Development Environment: VS Code, XAMPP/WAMP

Chapter 3

Performance Evaluation

3.1 Simulation Environment

The performance evaluation of FoodTake was conducted in a controlled environment using a local server setup (XAMPP). Various scenarios were tested to ensure the functionality and reliability of the platform..

3.2 Results Analysis

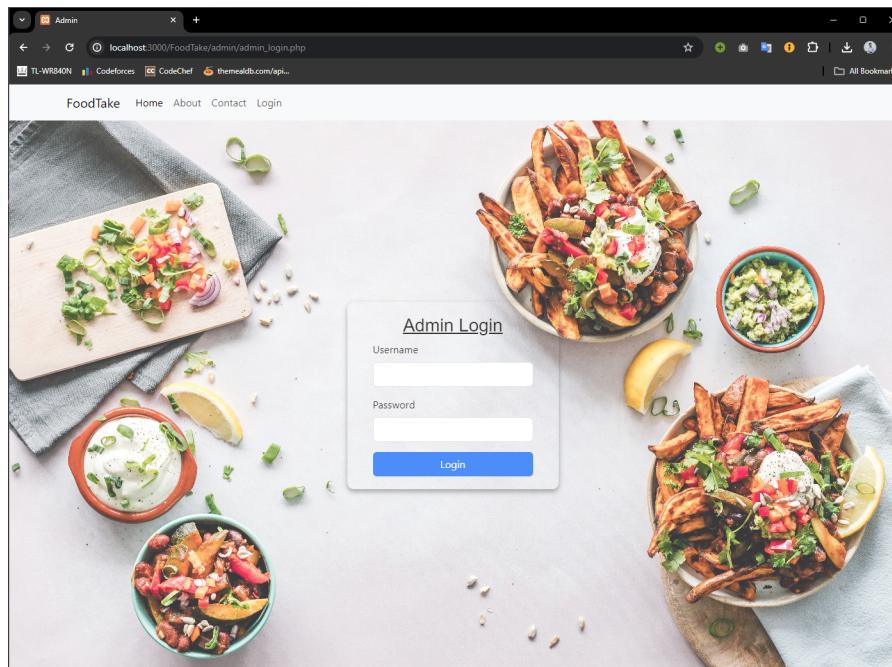


Figure 2.1: Admin sign in page

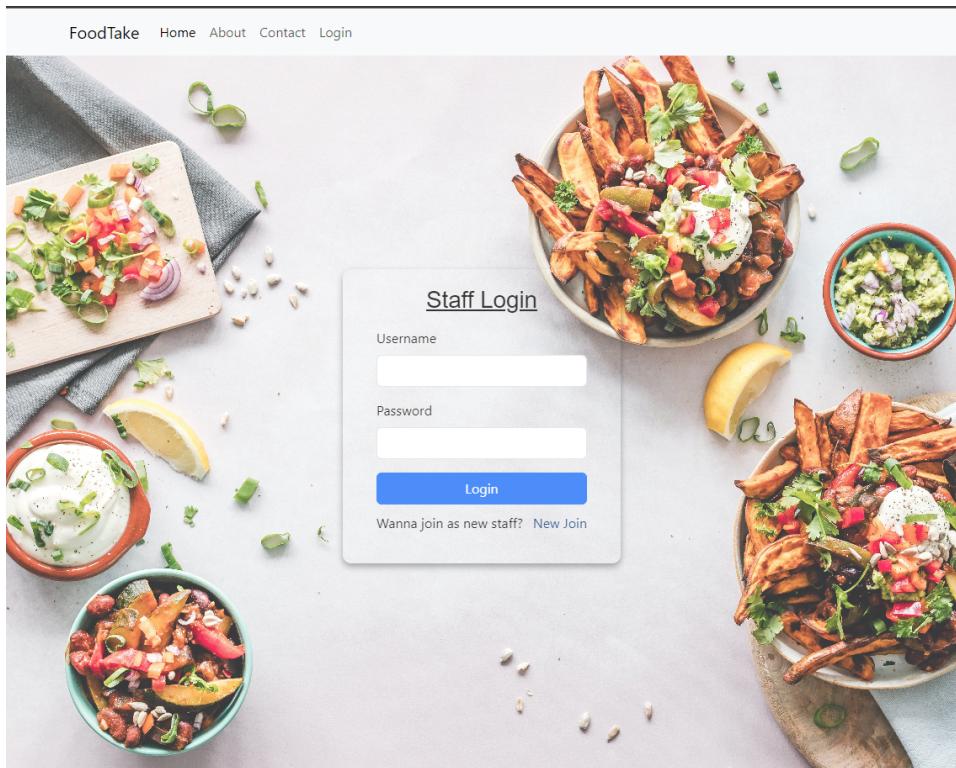


Figure 2.2: Staff login page

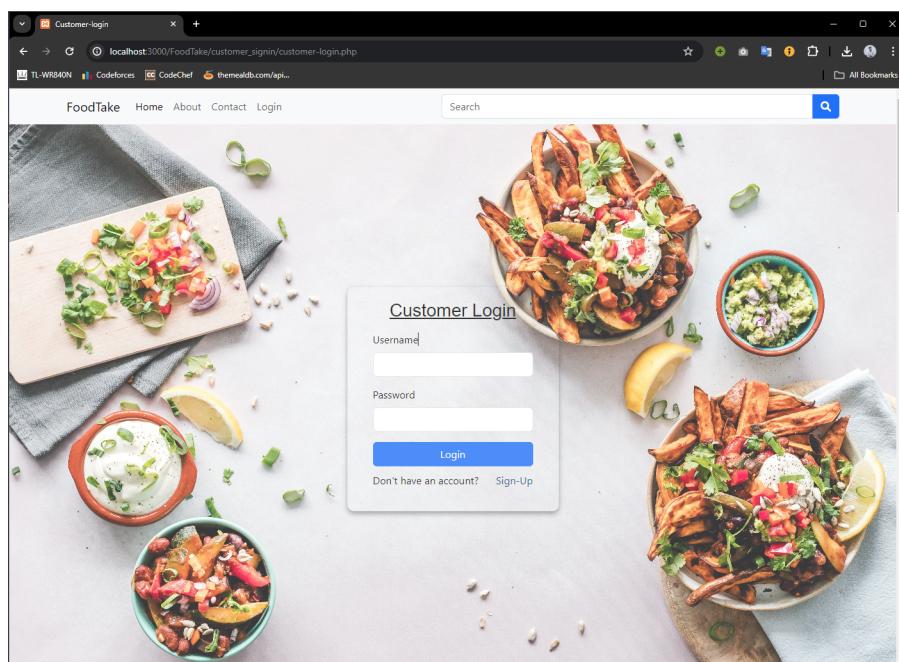


Figure 2.3: Customer login page

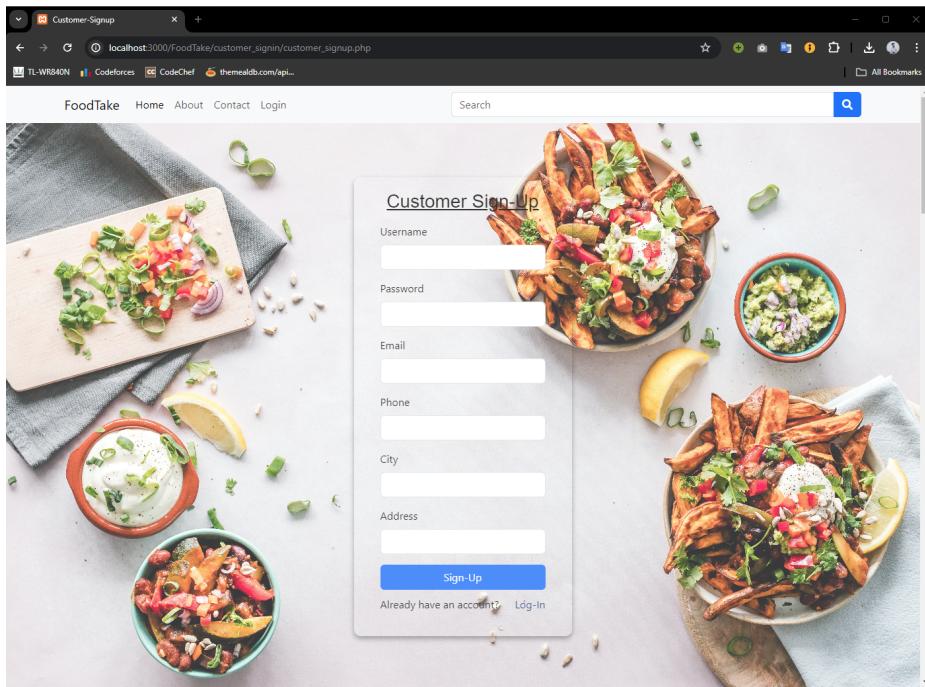


Figure 2.4: Customer Sign up page

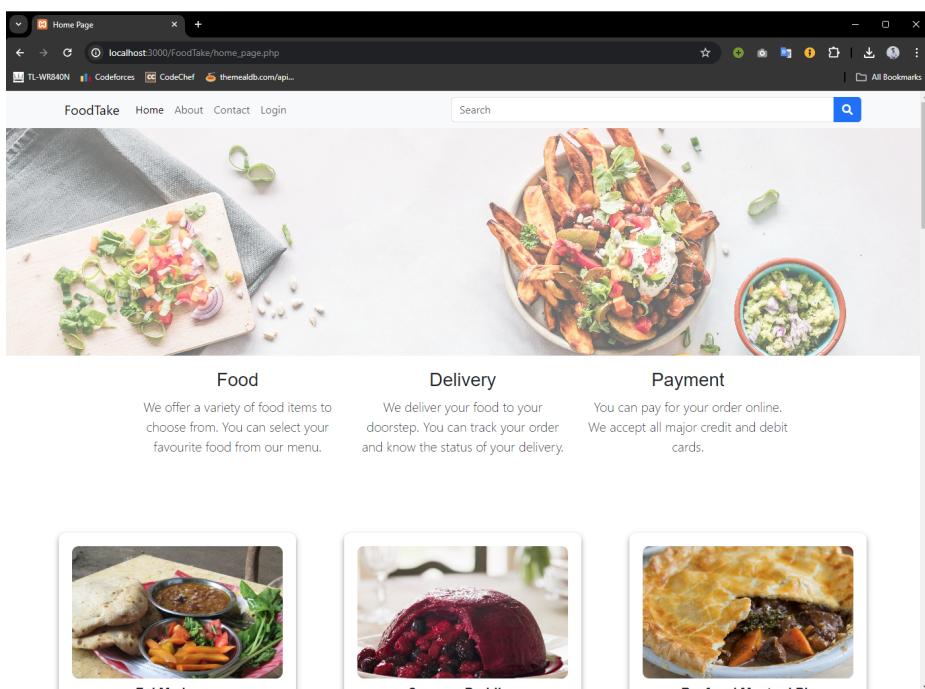


Figure 2.5: Home Page

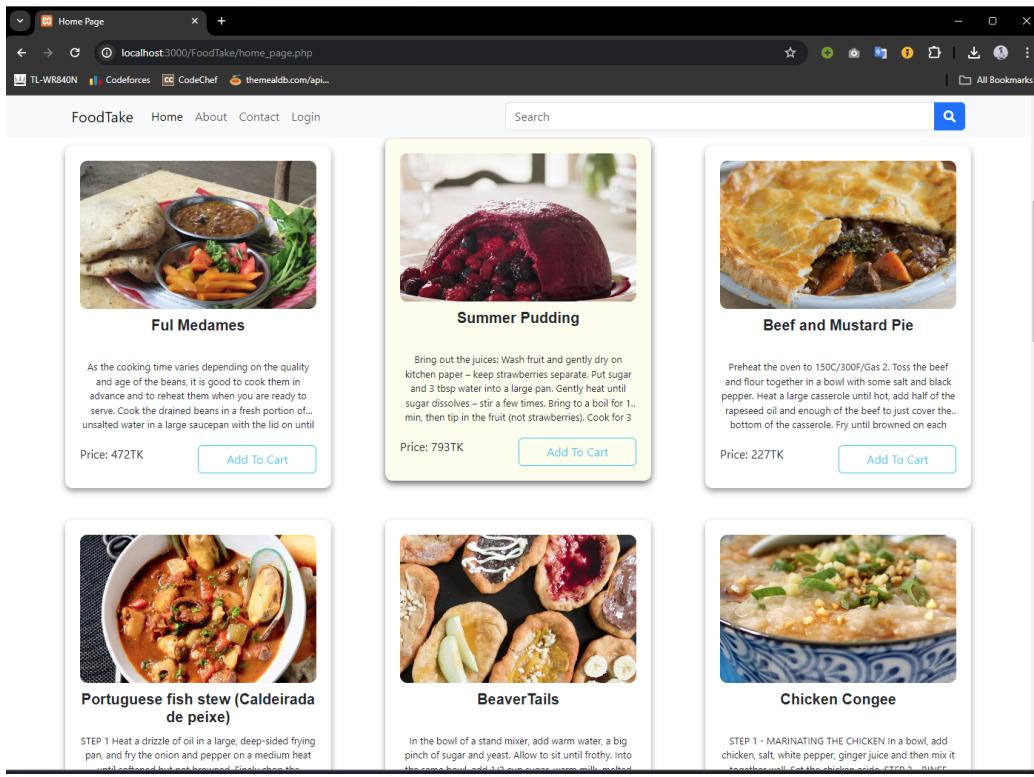


Figure 2.6: Home page food showing

Cart Details					
Food Name	Price	Quantity	Total	Action	
Ful Medames	472.00	1	472 TK	<button>Remove</button>	
Summer Pudding	793.00	2	1586 TK	<button>Remove</button>	
Chicken Ham and Leek Pie	527.00	2	1054 TK	<button>Remove</button>	
Portuguese fish stew (Caldeirada de peixe)	39.00	1	39 TK	<button>Remove</button>	
Lamb Tzatziki Burgers	931.00	1	931 TK	<button>Remove</button>	
Bakewell tart	253.00	1	253 TK	<button>Remove</button>	
Total 4335 TK					<button>Place Order</button>

Figure 2.7: Cart details from customer view

Pending Orders							
Food Name	Quantity	Total_Amount	Order Time	Pin codes	Progress	Action	
Ful Medames	1	472.00	10th June,2024, 03:20:38	54906	pending	<button>Cancel</button>	
Portuguese fish stew (Caldeirada de peixe)	1	39.00	10th June,2024, 03:20:38	21639	pending	<button>Cancel</button>	
Ful Medames	1	472.00	10th June,2024, 02:11:24	73549	delivered	<button>Cancel</button>	
Summer Pudding	1	793.00	10th June,2024, 02:11:24	70527	delivered	<button>Cancel</button>	
Chicken Ham and Leek Pie	1	527.00	10th June,2024, 02:11:24	44949	assigned	<button>Cancel</button>	

Orders History					
Food Name	Quantity	Total_Amount	Order Time	Delivery Time	Progress
Ful Medames	1	472.00	10th June,2024, 02:11:24	10th June,2024, 02:11:24	

Figure 2.8: Order details from customer view

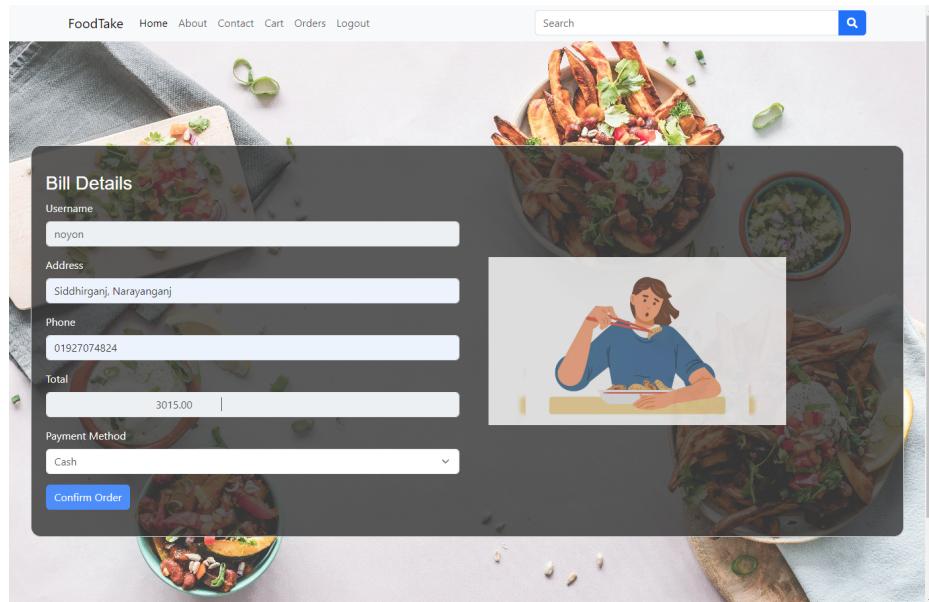


Figure 2.9: Pay Bill page for custoemr

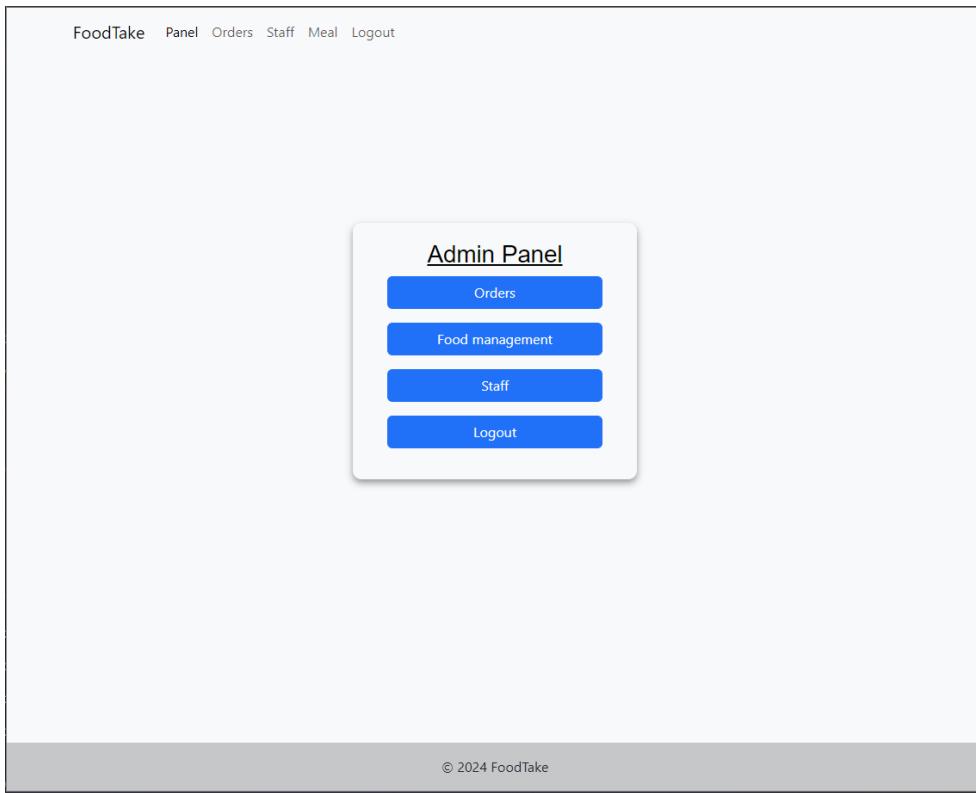


Figure 2.10: Admin panel view

Customer ID	Customer Name	Phone	Address	Food Name	Quantity	Total_Amount	Order Time	Progress	DeliveryMan_ID
1	noyon	01927074824	Siddhirganj, Narayanganj	Chicken Ham and Leek Pie	1	527.00	10th June,2024, 02:11:24	assigned	2
1	noyon	01927074824	Siddhirganj, Narayanganj	Ful Medames	1	472.00	10th June,2024, 03:20:38	assigned	2
1	noyon	01927074824	Siddhirganj, Narayanganj	Portuguese fish stew (Caldeirada de peixe)	1	39.00	10th June,2024, 03:20:38	assigned	1

Customer ID	Customer Name	Phone	Address	Food Name	Quantity	Total_Amount	Order Time	Progress	Delivery Man
1	noyon	01927074824	Siddhirganj, Narayanganj	Ful Medames	1	472.00	10th June,2024, 02:11:24	delivered	a
1	noyon	01927074824	Siddhirganj, Narayanganj	Summer Pudding	1	793.00	10th June,2024, 02:11:24	delivered	a

Figure 2.11: Order details from admin view

Add foods

Food Name

Price

Description

Image
 Choose File No file chosen

Add Food

Figure 2.12: Adding food section

Food Details					
Food ID	Food Name	Description	Price	Remove	
52767	Bakewell tart	 To make the pastry, measure the flour into a bowl and rub in the butter with your fingertips until the mixture resembles fine breadcrumbs. Add the water, mixing to form a soft dough. Roll out the dough on a lightly floured work surface and use to line a 20cm/8in flan tin. Leave in the fridge to chill for 30 minutes. Preheat the oven to 200C/400F/Gas 6 (180C fan). Line the pastry case with foil and fill with baking beans. Bake blind for about 15 minutes, then remove the beans and foil and cook for a further five minutes to dry out the base. For the filling, spread the base of the flan generously with raspberry jam. Melt the butter in a pan, take off the heat and then stir in the sugar. Add ground almonds, egg and almond extract. Pour into the flan tin and sprinkle over the flaked almonds. Bake for about 35 minutes. If the almonds seem to be browning too quickly, cover the tart loosely with foil to prevent them burning.	980.00TK	Delete	
52771	Spicy Arrabiata Penne	 Bring a large pot of water to a boil. Add kosher salt to the boiling water, then add the pasta. Cook according to the package instructions, about 9 minutes. In a large skillet over medium-high heat, add the olive oil and heat until the oil starts to shimmer. Add the garlic and cook, stirring, until fragrant, 1 to 2 minutes. Add the chopped tomatoes, red chile flakes, Italian seasoning and salt and pepper to taste. Bring to a boil and cook for 5 minutes. Remove from the heat and add the chopped basil. Drain the pasta and add it to the sauce. Garnish with Parmigiano-Reggiano flakes and more basil and serve warm.	980.00TK	Delete	
52776	Chocolate Gateau	 Preheat the oven to 180°C/350°F/Gas Mark 4. Grease and line the base of an 8 in round spring form cake tin with baking parchment. Break the chocolate into a heatproof bowl and place over a saucepan of gently simmering water and stir until it melts. (or melt in the microwave for 2-3 mins stirring occasionally) Place the butter and sugar in a mixing bowl and cream together with a	659.00TK	Delete	

Figure 2.13: Food details



© 2024 FoodTake

Figure 2.14: Staff panel

Orders Details							
Progress Orders							
Customer SL.	Name	Phone	Address	Food Name	Total_Amount	Order Time	Progress
1	noyon	01927074824	Siddhirganj, Narayanganj	Chicken Ham and Leek Pie	527.00	10th June,2024, 02:11:24	assigned Enter Pin Completed
2	noyon	01927074824	Siddhirganj, Narayanganj	Ful Medames	472.00	10th June,2024, 03:20:38	assigned Enter Pin Completed

Completed Orders						
Customer SL.	Name	Phone	Address	Total_Amount	Order Time	Delivered Time
1	noyon	01927074824	Siddhirganj, Narayanganj	472.00	10th June,2024, 02:11:24	2024-06-09 22:35:46 ✓
2	noyon	01927074824	Siddhirganj, Narayanganj	793.00	10th June,2024, 02:11:24	2024-06-09 22:40:47 ✓

Figure 2.15: Order details from staff view

3.3 Results Overall Discussion

- User Registration and Login: Successful registration and login for customers, admins, and delivery boys.
- Order Placement: Smooth process for selecting food items, adding to the cart, and placing orders.
- Efficient order tracking and assignment by admins.

- Accurate order assignment to delivery boys and completion using a PIN system.

The testing results indicate that FoodTake performs well under various scenarios, providing a reliable and efficient platform for food ordering and delivery. The user interfaces are intuitive, and the back-end processes are robust, ensuring a seamless experience for all users.

Chapter 4

Conclusion

4.1 Discussion

FoodTake successfully addresses the need for an integrated food ordering and delivery platform. The system facilitates smooth interaction between customers, admins, and delivery boys, ensuring efficient order management and delivery tracking. This system acts as a virtual helper, ensuring that food orders are managed efficiently and delivered promptly. Think of it as a reliable friend who keeps track of all our orders and ensures they reach us on time. My tests have shown that this system is dependable and can adapt well to various situations. It's like having a trusty assistant by your side, making sure everything runs smoothly in the world of food delivery services.

4.2 Limitations

This program has some limitation.

- The current implementation does not support real-time notifications for order updates.
- The platform is tested in a local environment and may need further optimization for scalability in a live production environment.
- The system may face difficulties in handling a large volume of users or data, indicating a need for further scalability optimization.
- The system lacks an optimized or visually appealing user interface, potentially impacting user experience and engagement.
- While extensive testing has been conducted, it may not fully represent all potential real-world challenges and scenarios the system might encounter.

4.3 Scope of Future Work

I want to add more features in upcoming days such as:

- Implementing real-time notifications using web sockets.
- Enhancing the UI/UX design for a more engaging user experience.
- Integrating payment gateways for secure online transactions.
- Adding features for tracking and analyzing order data, including customer preferences, sales trends, and feedback.
- Ensuring the system's architecture can easily scale to accommodate increased usage and data volume.
- Creating a mobile app to expand the system's accessibility and reach a broader audience.

4.4 Reference

W3Schools: <https://www.w3schools.com/>
StackOverflow: <https://stackoverflow.com/>
Bootstrap: <https://getbootstrap.com/>