

**A
Project Report
On
“Food Mine”**

(IT266 – Software Group Project)

Food Mine!

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Submitted at



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Devang Patel Institute of Advance Technology and Research (DEPSTAR)
Faculty of Technology & Engineering (FTE), CHARUSAT
At: Chang, Dist: Anand, Pin: 388421.
April, 2024**

DECLARATION BY THE CANDIDATES

We hereby declare that the project report entitled "**Food Mine (Restaurant Management System)**" submitted by us to Devang Patel Institute of Advance Technology and Research, Changa in partial fulfillment of the requirement for the award of the degree of **B.Tech** in Information Technology, from Department of Information Technology, DEPSTAR-FTE, CHARUSAT is a record of bonafide IT266 Software Group Project carried out by us under the guidance of **Prof. Hitesh Makwana and prof. Dipika Damodar** We further declare that the work carried out and documented in this project report has not been submitted anywhere else either in part or in full and it is the original work, for the award of any other degree or diploma in this institute or any other institute or university.

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Accredited with Grade A+ by NAAC

Accredited with Grade A by KCG

CERTIFICATE

This is to certify that the report entitled "**Food Mine**" is a bonafied work carried out by **Bhargav Chitroda (22DIT009)** under the guidance and supervision of **Prof. Dipika Damodar** for the subject **Software Group Project (IT 266)** of 4th Semester of Bachelor of Technology in **Information Technology** at Devang Patel Institute of Advance Technology and Research (DEPSTAR), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred by the examiner(s).

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CERTIFICATE

This is to certify that the report entitled "**Food Mine**" is a bonafied work carried out by **Hiren Kalsariya (22DIT021)** under the guidance and supervision of **Prof. Hitesh Makwana** for the subject **Software Group Project (IT 266)** of 4th Semester of Bachelor of Technology in **Information Technology** at Devang Patel Institute of Advance Technology and Research (DEPSTAR), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

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On the submission of our thesis report on “Enjoy Eat”, we would like to extend our gratitude and sincere thanks to our supervisor **Assistant Prof. Hitesh Makwana, Dipika Damodar** Department of Information technology or his constant motivation and support during the course of our work in the last four months. We truly appreciate and value his esteemed guidance and encouragement from the beginning to the end of this thesis. We are indebted to him for having helped us shape the problem and providing insights towards the solution.

They altogether provided me favourable environment, and without them it would not have been possible to achieve my goal.

THANKS,

Bhargav Chitroda (22DIT009)
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ABSTRACT

FoodMine is a cross-platform website that makes dining out easier and more convenient than ever before. With our app, you can browse a variety of restaurants and menus, customize your order to your liking, and make secure payments all from the comfort of your own device. No more waiting in long lines or dealing with crowded restaurants – Enjoy Eat allows you to skip the hassle and enjoy a stress-free dining experience.

Our website is built with the latest technologies, including the framework and Dart programming language, and our backend is powered by Firebase for fast and reliable performance. We've also incorporated robust security features to protect your personal and financial information.

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CHAPTER 1: INTODUCTION

1.1 DEFINITION : Introducing a QR-Based Food Menu System for modernizing the dining experience.

Logo :



1.2 OBJECTIVE : Implementing a contactless dining solution to improve efficiency and enhance customer satisfaction.

1.3 MAJOR FUNCTIONALITY :

- Sign up
- Add person
- Select restaurant
- Select Food
- Make payment.

1.4 DESCRIPTION :

Our website Food Mine is really required for avoiding making customers wait, we have created an online table booking tool for all hotels that shows you the current line and estimates how long it will take. All you have to do is specify the number of people you want to seat at a table for.

CHAPTER 2: SOFTWARE REQUIREMENT

2.1 FRONTEND

- **React js** 

React.js is an open-source JavaScript library primarily used for building user interfaces, especially for single-page applications. It was developed by Facebook and later maintained by both Facebook and a community of individual developers and companies. React.js was first deployed in 2011 for Facebook's newsfeed and was later made available to the public in 2013.

At its core, React.js operates around the concept of reusable UI components. These components encapsulate specific pieces of a user interface, making it easier to manage and update them independently. React's declarative approach allows developers to describe how the UI should look based on the current application state, rather than imperatively manipulating the DOM directly.

- **UI/UX Design Tools**

UI/UX design tools are essential software applications used by designers to create intuitive, user-friendly interfaces and experiences for digital products such as websites, mobile apps, and software applications. These tools encompass a wide range of functionalities to support various aspects of the design process, from wireframing and prototyping to visual design and user testing.

- **Frontend Frameworks**

Frontend frameworks are powerful tools used in web development to streamline and enhance the process of creating user interfaces. They provide developers with a structured way to build responsive, interactive, and visually appealing web applications. Here's a brief introduction to some popular frontend frameworks:

- (1) **React.js** : Developed by Facebook, React.js is a JavaScript library for building user interfaces, particularly single-page applications. It allows developers to create reusable UI components and manage their state efficiently. React follows a component-based architecture, enabling developers to compose complex UIs from simple, isolated pieces.

(2) **Angular :** Angular is a TypeScript-based frontend framework maintained by Google.

It offers a comprehensive solution for building large-scale applications with a focus on modularity and dependency injection. Angular provides features like two-way data binding, dependency injection, and routing out of the box, making it suitable for enterprise-level projects.

(3) **Tailwind CSS:** Tailwind CSS is a utility-first CSS framework that provides low-level

utility classes for building custom designs without writing custom CSS. It encourages a more functional approach to styling by composing styles directly in the HTML markup. Tailwind CSS offers a highly customizable and maintainable way to create modern UIs with minimal CSS overhead.

2.2 VISUAL STUDIO CODE

Visual Studio Code is a freeware source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.

Microsoft has released Visual Studio Code's source code on the Behaviour/vscode (Code – OSS) repository of GitHub, under the permissive MIT License, while the releases by Microsoft are freeware.

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In the Stack Overflow 2019 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool, with 50.7% of 87,317 respondents reporting that they use it.

Visual Studio Code was first announced on April 29, 2015, by Microsoft at the 2015 Build conference. A Preview build was released shortly thereafter.

2.3 DATA BASE

- **Mongo DB**

MongoDB is a widely-used, open-source, NoSQL database system designed to handle large volumes of data across distributed systems efficiently. It stores data in flexible, JSON-like documents, making it easy to work with for developers. MongoDB's key features include high scalability, automatic sharding for horizontal scaling, flexible data models, and robust querying capabilities. It's favored for its performance, scalability, and ease of use in building modern applications, particularly those requiring agile development and rapid iteration.

```

{
  "_id": ObjectId("6612dd9ce1452553d4eb5ad0"),
  "name": "Pizza Pepperoni",
  "price": 100,
  "tags": ["Food", "Italian"],
  "favorite": false,
  "stars": 4.5,
  "imageurl": "/foods/food-1.jpg",
  "origins": ["Italy"],
  "cookTime": "10-20",
  "createdat": 2024-04-07T17:53:32.075+00:00,
  "updatedat": 2024-04-07T17:53:32.075+00:00,
  "__v": 0
}

{
  "_id": ObjectId("6612dd9ce1452553d4eb5ad2"),
  "name": "Meatball",
  "price": 90,
  "tags": ["Food", "Italian"],
  "favorite": true,
  "stars": 5,
  "imageurl": "/foods/food-2.jpg",
  "origins": ["Italy"],
  "cookTime": "20-30",
  "createdat": 2024-04-07T17:53:32.082+00:00,
  "updatedat": 2024-04-07T17:53:32.082+00:00,
  "__v": 0
}

```

2.1 Mongo Db Data store page

CHAPTER 3: IMPLEMENTATION

3.1 IMPLEMENTATION

1. Menu Design and Database Setup:

- Design the layout of your digital menu, including categories, items, descriptions, and prices.
- Set up a database to store menu information. This could be a relational database like MySQL or a NoSQL database like MongoDB.

2. Backend Development:

- Create backend APIs (Application Programming Interfaces) to handle requests from the client-side application.
- APIs should include endpoints for retrieving menu data, processing orders, and generating QR codes.

3. Client-Side Application:

- Develop a web or mobile application for users to view the menu and place orders.
- Integrate QR code scanning functionality using libraries like ZXing for Java or JavaScript-based libraries for web apps.

4. QR Code Generation:

- Implement a QR code generation mechanism in your backend system.
- When a customer places an order, generate a unique QR code containing order details (e.g., table number, items, quantities).

5. Order Processing:

- Implement logic to process orders received from the client-side application.
- Update the order status in the database and notify staff about new orders.

6. Integration with POS System :

- Integrate the food menu system with a Point of Sale (POS) system if applicable.
- Ensure that orders placed through the QR menu are reflected in the POS for seamless management.

7. Testing and Deployment:

- Test the system thoroughly to ensure functionality and reliability.
- Deploy the system to production servers or cloud platforms.

8. User Training and Support:

- Provide user training for staff and customers on how to use the QR-based menu system.
- Offer ongoing support to address any issues or questions that arise.

9. Feedback Collection and Iteration:

- Gather feedback from users and stakeholders to identify areas for improvement.
- Iterate on the system based on feedback to enhance usability and performance.

10. Security Considerations:

- Implement security measures to protect customer data and prevent unauthorized access.
- Use HTTPS for secure communication between the client-side application and the backend server.
- Implement user authentication and authorization mechanisms to control access to sensitive features.

CHAPTER 4: SCREENSHOTS OF WEBSITE

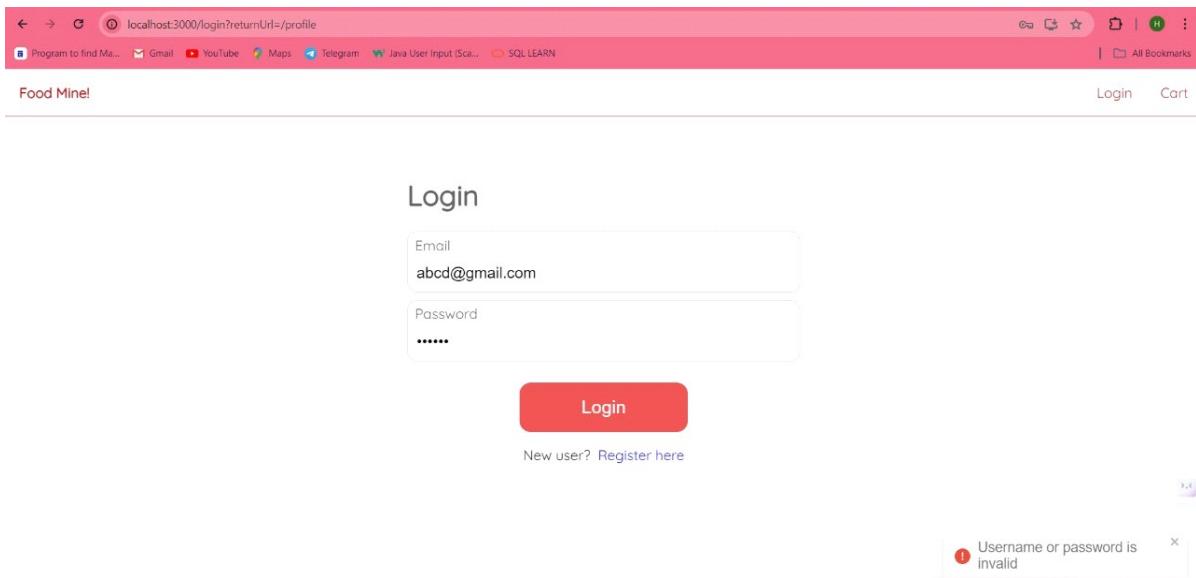
4.1 SCREENSHOTS

The screenshot shows a registration page titled "Register". The page has the following fields:

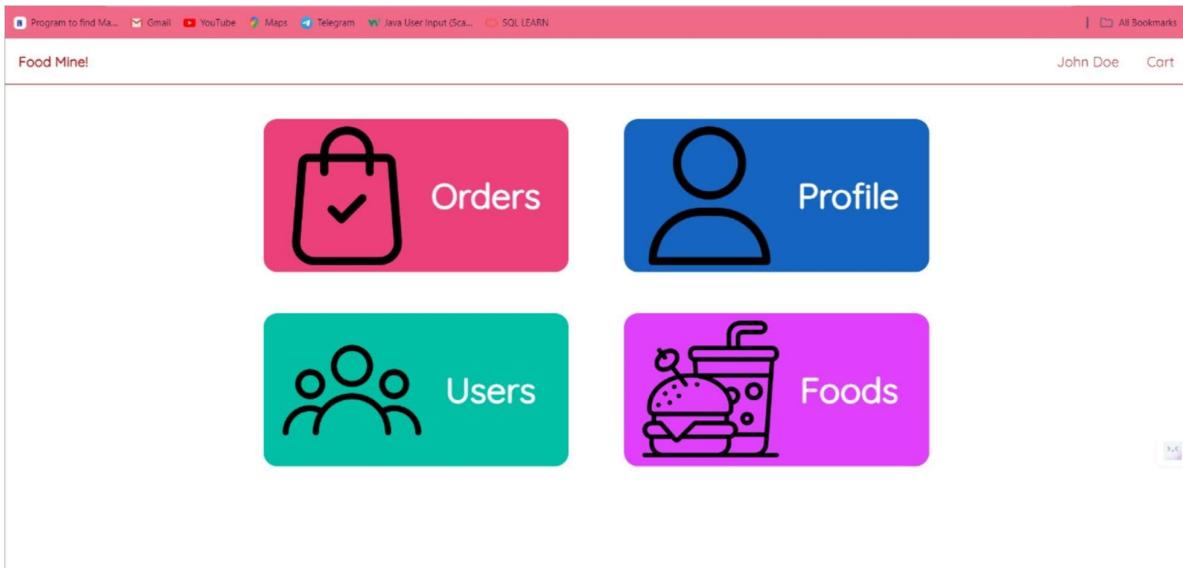
- Name: Hiren Kalsariya
- Email: hiren1234@gmail.com
- Password: (redacted)
- Confirm Password: (redacted) Passwords Do Not Match
- Address: Anand, Gujarat

A large red "Register" button is centered at the bottom. Below the button, a link says "Already a user? Login here".

4.1 register page

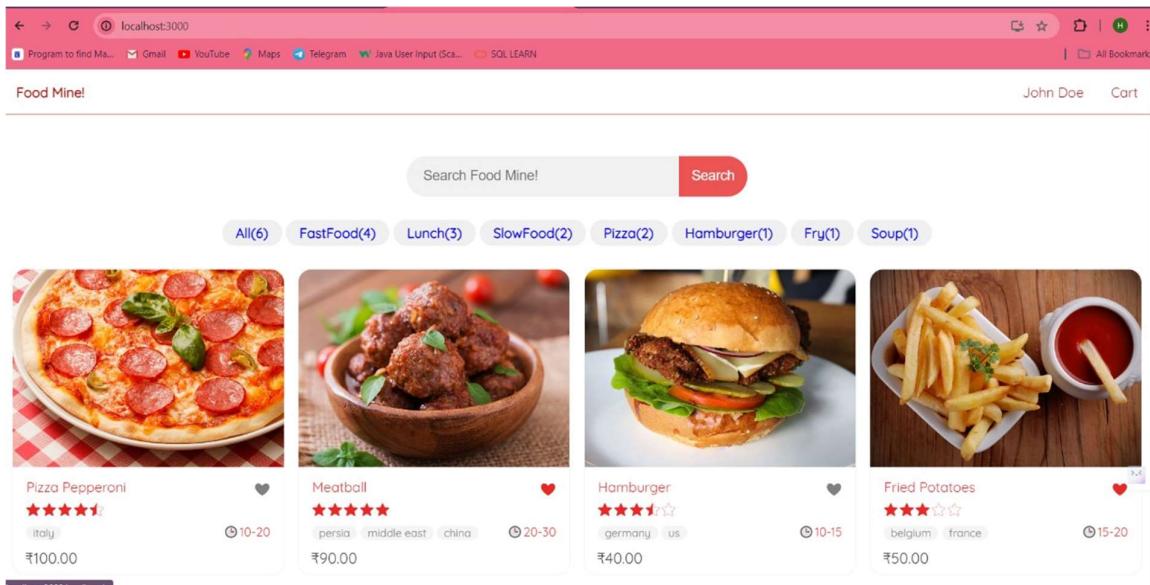


4.2 login page



4.3 first page

CHAPTER 4



4.4 home page

The screenshot shows a web browser window with the URL `localhost:3000/profile`. The title bar says "Food Mine!". The main content area has a heading "Update Profile" and two input fields:

- Name: John Doe
- Address: Dubai

A green "Update" button is below the address field. To the right, there is a "Change Password" section with three input fields:

- Current Password
- Current Password (repeated)
- New Password

4.5 update profile

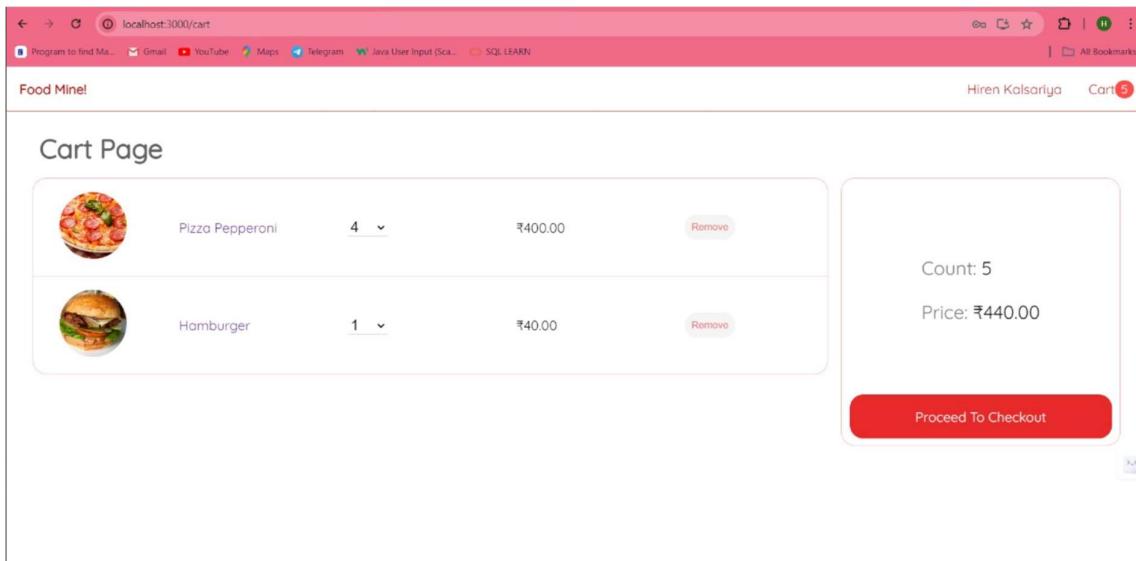
The screenshot shows a web application titled "Food Mine!". At the top right, there are links for "John Doe" and "Cart". Below the title is a search bar with the placeholder "Search Food Mine!" and a red "Search" button. Underneath the search bar is a horizontal navigation menu with buttons for "All(6)", "FastFood(4)", "Lunch(3)", "SlowFood(2)", "Pizza(2)" (which is circled in blue), "Hamburger(1)", "Fry(1)", and "Soup(1)". Below the menu are two pizza images: "Pizza Pepperoni" and "Vegetables Pizza". Each pizza has its name, a star rating, a location ("Italy"), a cooking time ("10-20" or "40-50"), and a price ("₹100.00" or "₹756.00"). A small "View Details" link is visible at the bottom right.

4.6 search bar

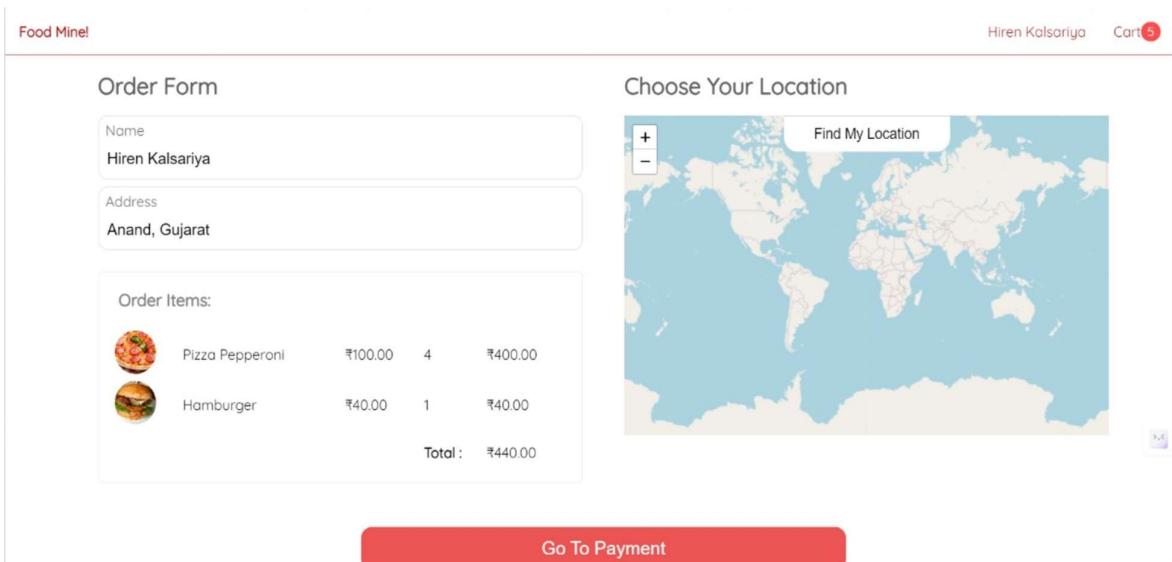
The screenshot shows a detailed view of a food item. At the top, it displays the URL "localhost:3000/food/6612dd9ce1452553d4eb5ad0" and the user "Hiren Kalsariya". Below the header is a navigation bar with links for "Food Mine!", "Cart", and other social media or application icons. The main content area features a large image of a "Pizza Pepperoni". To the right of the image, the product name "Pizza Pepperoni" is shown with a five-star rating. Below the rating are the location "Italy", categories "FastFood", "Pizza", and "Lunch", and a note about cooking time: "Time to cook about 10-20 minutes". The price is listed as "Price: ₹100.00". At the bottom right is a prominent red "Add To Cart" button.

4.7 add to cart page

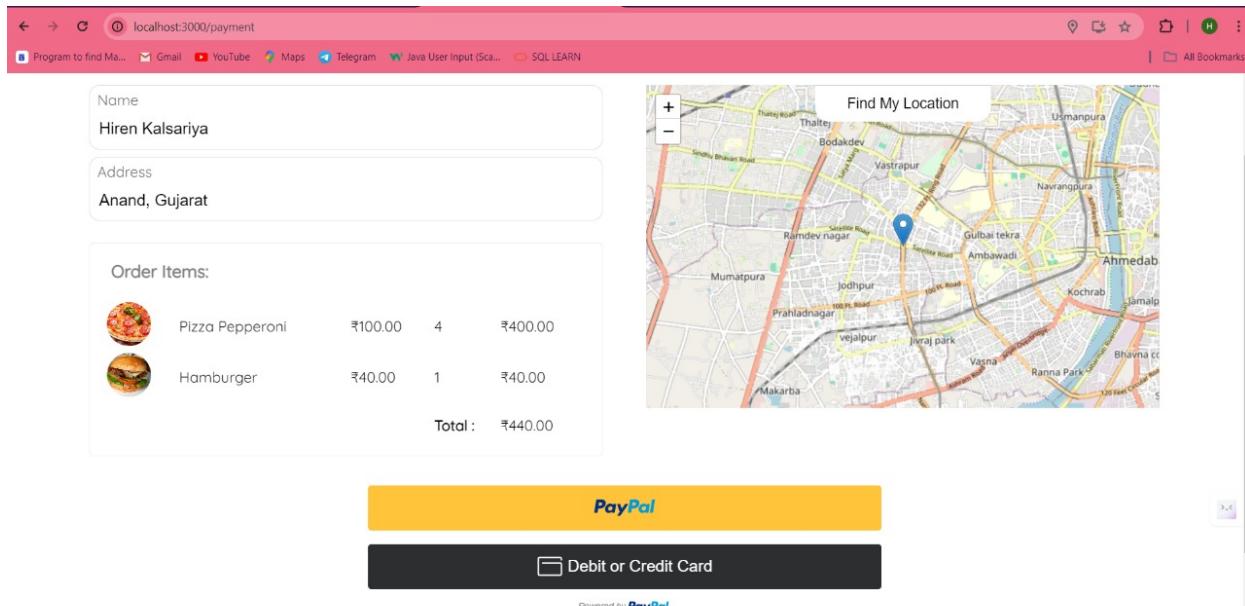
CHAPTER 4



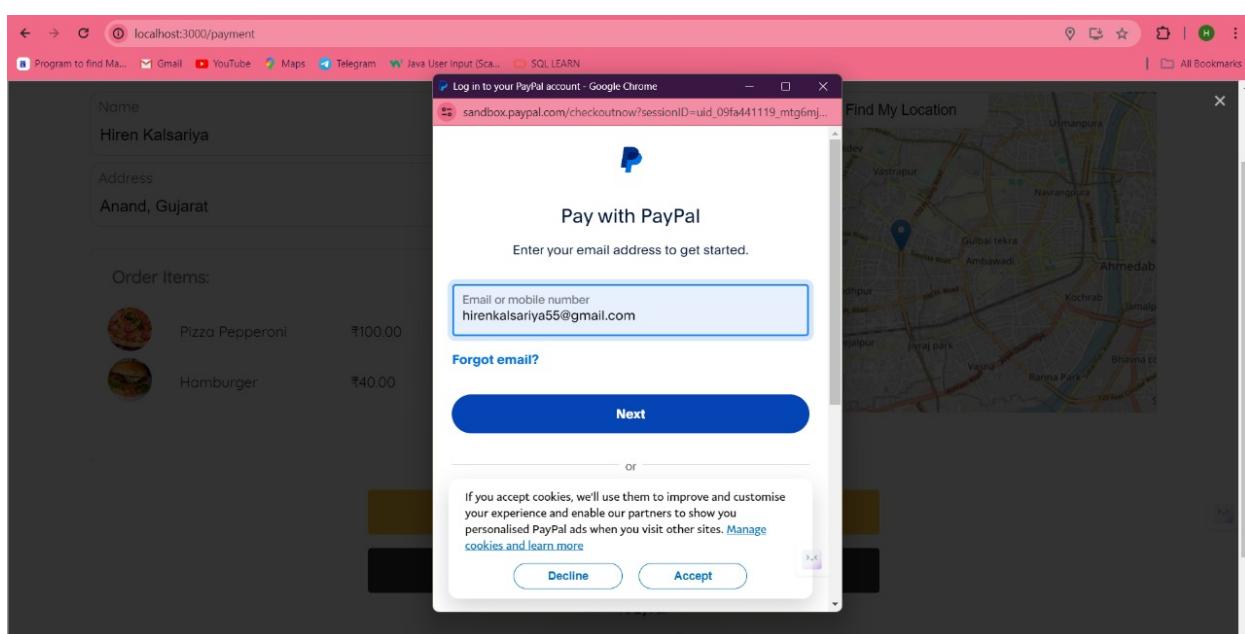
4.8 cart page



4.9 order form



The screenshot shows a payment page from a local host application. At the top, there are fields for Name (Hiren Kalsariya) and Address (Anand, Gujarat). Below these, a section titled "Order Items:" lists two items: Pizza Pepperoni (₹100.00) and Hamburger (₹40.00), with a total of ₹440.00. To the right of the form is a map of Ahmedabad with a blue marker indicating the location. Below the map are two payment buttons: a yellow "PayPal" button and a black "Debit or Credit Card" button. A small note below the card button says "Powered by PayPal".



This screenshot shows the same payment page as above, but with a PayPal login overlay. The overlay has a title "Pay with PayPal" and a sub-instruction "Enter your email address to get started." It contains a text input field with the email "hirenkalsariya55@gmail.com". Below the input field are "Forgot email?" and "Next" buttons. At the bottom of the overlay, there is a cookie consent message: "If you accept cookies, we'll use them to improve and customise your experience and enable our partners to show you personalised PayPal ads when you visit other sites. [Manage cookies and learn more](#)". There are "Decline" and "Accept" buttons at the bottom of the message.

4.10 payment page

CHAPTER 5: SUMMARY AND REFERENCES

5.1 SUMMARY

In summary, the QR-based food menu system offers an efficient solution to challenges faced by traditional paper menus. Through easy updates, contactless ordering, and customization options, it enhances user experience. Moving forward, we'll focus on testing and refining the system. Thank you for your attention and participation.

5.2 REFERENCES

- (1) <https://www.w3schools.com/REACT/DEFAULT.ASP>
- (2) <https://www.w3schools.com/js/>
- (3) <https://www.w3schools.com/mongodb/>
- (4) <https://www.geeksforgeeks.org/tailwind-css/>
- (5) <https://tailwindcss.com/>