

Savitribai Phule Pune University, Pune A PROJECT REPORT ON

"Online Food Ordering System"

Submitted by

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SAHAKAR MAHARSHI BHAUSAHEB SANTUJI THORAT COLLEGE OF ARTS, SCIENCE & COMMERCE SANGAMNER, AHMEDNAGAR – 422605 2023 – 2024





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Department of Computer Science
Project Report
Academic Year
2023 - 2024

CERTIFICATE

This certificate is awarded to Mr. Yash Somanth Gorde, Ms. Gunjal Priya Shivaji in appreciation of his meritorious performance in Project Title on "Online Food Ordering System" as part of practical requirement of Savitribai Phule Pune University during Academic Year 2023-2024.

Mr. Thakare M.V Mr. Thorat D.S

(H.O.D) (Project Guide)

Internal Examiner External Examiner

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1.1 INTRODUCTION

Online food ordering is the process of ordering food from a website. The product can either be food that has been specially prepared for direct consumption (such as vegetables straight from a farm or garden, frozen meats, etc.) or food that has not been (such as direct from a certified home-kitchen, restaurant). The effort to create an online food ordering system aims to replace the manual method of taking orders with a digital one. The ability to rapidly and correctly create order summary reports whenever necessary is a key factor in the development of this project. The potential of an online food ordering system is enormous. Any restaurant or fast food chain can use this PHP project to keep track of customer orders. This project is simple, quick, and precise.

There is less disk space needed. POSTGRESQL is used as the backbone by the online food ordering system, eliminating the risk of data loss and ensuring data security. Customers have the option of either having the food delivered or picked up. A customer starts by selecting the restaurant of their choice, then scans the menu, picks an item, and then decides whether they want it delivered or picked up. Then, when picking up the food, you can pay with cash at the restaurant or with a credit card or debit card using the app or website. The customer is informed by the website and app about the food's quality, how long it takes to prepare, and when it will be ready for pick-up or delivery.

1.2 SCOPE OF THE SYSTEM

Certainly, here's a breakdown of the scope of a typical online food ordering system project by point

User Registration and Authentication:-

Allow users to create accounts and log in securely.

Menu Browsing:-

Provide users with a searchable and filterable menu of available food items from various restaurants.

Order Placement:-

Enable users to add items to their cart, specify quantity, customize orders (e.g., toppings, preferences), and proceed to checkout.

Payment Processing:-

Integrate payment gateways to securely process payments for orders using various methods such as credit/debit cards, digital wallets, or cash on delivery.

Order Tracking:-

Provide real-time updates on the status of orders, including confirmation, preparation, and delivery.

Restaurant Management:-

Allow restaurants to manage their menus, update availability, and view incoming orders.

Admin Dashboard:-

Provide administrators with tools to manage users, restaurants, orders, and resolve disputes if any.

Promotions and Discounts:-

Implement features for offering discounts, promo codes, and special deals to attract customers.

1.3 OBJECTIVE

Developing an objective online food delivery system project involves several key steps:

- 1. Requirement Analysis:- Understand the requirements of the system, including user roles, features, and functionalities.
- 2. system Design:- Design the architecture of the system, including databases, backend, frontend, and APIs.
- 3. Database Design:- Design the database schema to store user data, restaurant details, menu items, orders, and transactions.
- 4. User Authentication: Implement user authentication and authorization mechanisms to ensure secure access to the system.
- 5. Restaurant Management:- Develop features for restaurants to manage their profiles, menus, and orders.
- 6. Order Management:- Implement features for users to browse restaurants, place orders, and track order status.
- 7. Payment Integration: Integrate payment gateways to facilitate secure online payments for orders.
- 8. Delivery Management:- Implement features for delivery personnel to accept and fulfill orders.
- 9. User Interface:- Design and develop intuitive user interfaces for web and mobile platforms.

1.4 FEATURES

Some key features of an online food ordering system project include:

- 1. Order placement and tracking: Let users place orders and track their status in real-time.
- 2. Payment integration: Support various payment methods securely, such as credit/debit cards, mobile wallets, or cash on delivery
- 3. Reviews and ratings: Allow users to rate and review restaurants and dishes to help others make informed decisions.
- 3. Notifications: Send timely notifications to users about order status updates, promotions, or special offers.
- 4. Customer support: Provide assistance through various channels like chat, email, or phone for any issues or inquiries.
- 5. Loyalty programs: Implement loyalty programs or rewards systems to incentivize repeat orders.
- 6. Admin dashboard: Offer an interface for administrators to manage users, restaurants, orders, and other aspects of the system.
- 7. Analytics and reporting: Provide insights into user behavior, sales trends, popular dishes, etc., to help optimize operations and marketing strategies.

2.1 FACT FINDING TECHNIQUE

Preliminary Investigation implies that which methods are applies to make online food ordering system and by which means information is collected regarding product. Generally there are three methods for collecting the information of any instruction.

These are:-

- 1) Interview
- 2) Questionnaires
- 3) Observations

All the methods are equally important. As far as this project is concerned and have to be collected all the information by following methods.

1) Interview:-

Interview is nice method for communicating with people. We can understand view, attributes and members to get information about ordering system and facilities provided to staff and other attendance.

Online food is the one of the most important factor playing master role in the success of any restaurant In manual system it is difficult to find specific customers record in quick time. But by using" ordring system System we will find his or her record 31 immediately. Also find the customer details.

Firstly we visited the "online ordring website" and ask how they maintain the records.

How they order the stock, by identifying customer's requirement and how they maintain the cutumer and restaurant.

The information collected by their website from various categories that are related to system.

2) Questionnaires:-

I have asked following questions:-

What type of problems is occurs in existing system? What type of system is used to collect the data? Is there any facility for maintaining customer and restaurant of the customer?

How to update library status? How to maintain students records? How you maintain privacy?

3) Observations:-

This method is very lengthy. I also observed that there are more chances of mistakes because of manual process. This process is time consuming. In this technique information collected through identifying customer;s requirement. By getting information of latest version in market. We find entity needed for the system and develop the system using this feasibility study and fact finding technique.

2.2 REQUIREMENT ANALYSIS

HARDWARE:

Hardware of Computer means all physical part consist of computer system H/W consist of input devices , CPU & OUTPUT Devices. For This System

| RAM | 4GB or Above |
|-----------|--------------|
| SSD | 256 GB |
| PROCESSOR | Intel I7 |

SOFTWARE:

"Eclipse" provides a graphical environment. We design forms & control that become building block of our website. "Postgresql " provides much facility to store our data safely

| Operating System | Ubuntu 22.04 and Above |
|------------------|------------------------|
| Language | JAVA 17 |
| IDE | Eclipse IDE |
| DataBase | Postgresql 14 |

2.3 LANGUAGE

HTML(Hypertext markup Language) CSS(Cascading Style Sheet) Advance Java





HTML:-

It seems like you're asking about "HTML in details." HTML stands for Hypertext Markup Language, which is the standard markup language for creating web pages and web applications. It defines the structure and layout of a web document by using various tags and attributes to describe the content. If you have a specific question about HTML details or need further clarification, feel free to ask!

CSS(Cascading Style Sheet):-

CSS, or Cascading Style Sheets, is a style sheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML, etc.). CSS describes how elements should be rendered on screen, in print, or in other media.

Here's a breakdown of its key components:

- 1. Selectors: CSS selectors are patterns used to select the elements you want to style. They can target HTML elements, classes, IDs, attributes, or combinations thereof.
- 2. Properties: Properties are the stylistic attributes you apply to selected elements. Examples include color, font-size, width, height, margin, padding, etc.
- 3. Values: Values are assigned to properties and define how those properties should be applied. For example, color: red; sets the text color to red.
- 5.Cascading: CSS follows a cascading mechanism where multiple style sheets can influence the final style of an element. This includes inline styles, external style sheets, and browser default styles. Conflicts are resolved based on specificity and the order of precedence.

Advance Java:-

Advanced Java typically refers to more specialized topics and techniques beyond the basics of Java programming language. JSP (JavaServer Pages) and Servlets are two technologies often categorized under advanced Java.

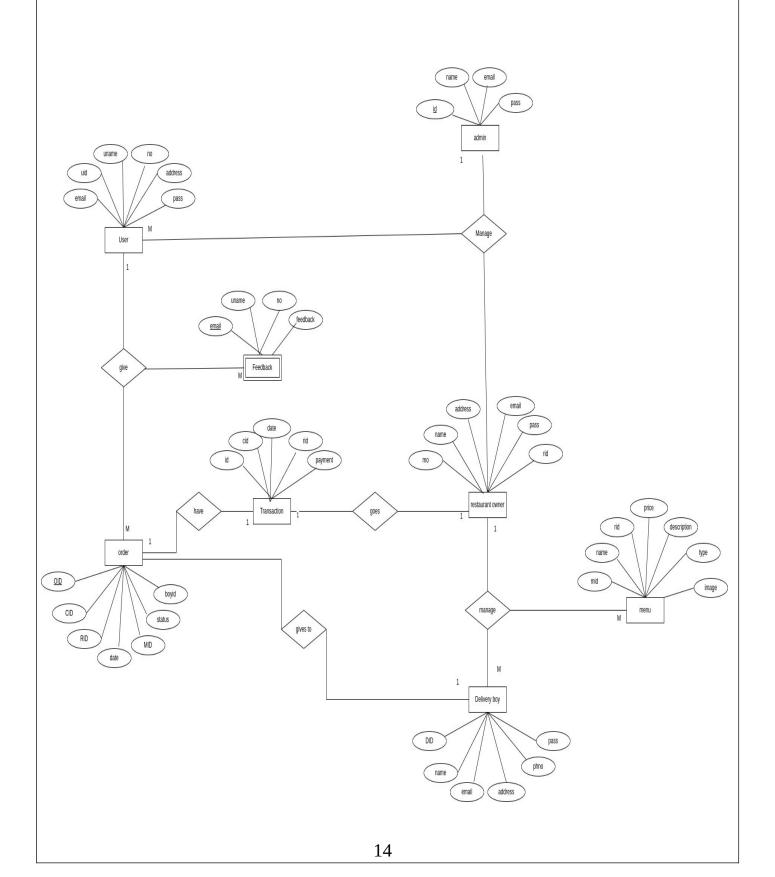
JSP (JavaServer Pages) is a technology that helps developers create dynamically generated web pages based on HTML, XML, or other document types. It allows Java code and certain predefined actions to be embedded into static content.

Servlets are Java programs that run on the server side, handling client requests and generating dynamic responses. They are used to extend the capabilities of web servers and provide a way to generate dynamic content.

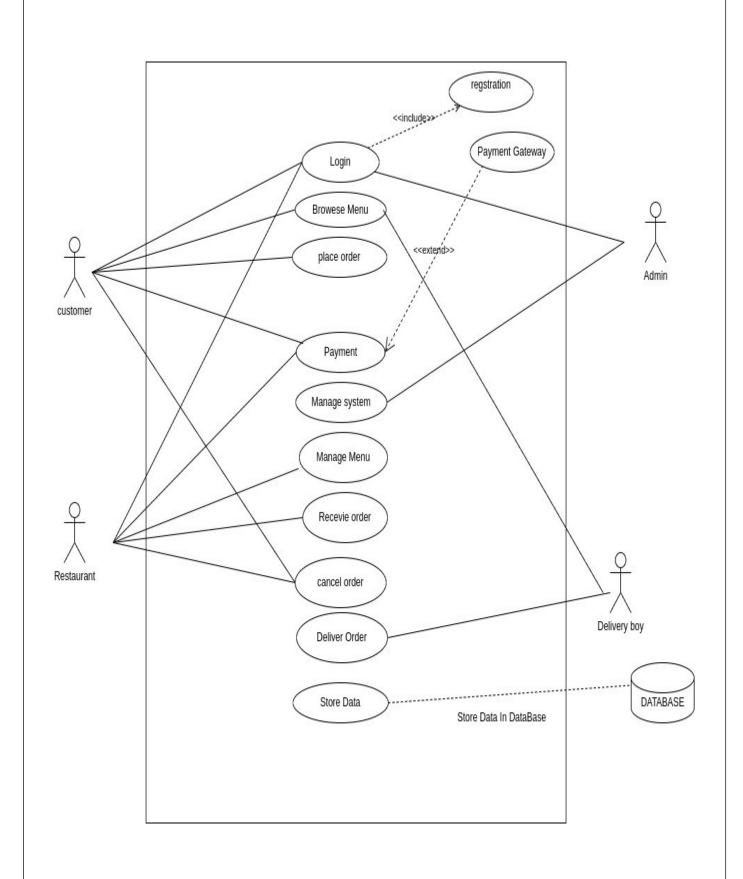
In essence, JSP and Servlets work together to create dynamic web applications. Servlets handle the logic and processing on the server side, while JSP allows for the creation of dynamic content by embedding Java code within HTML pages.

Understanding these technologies in detail involves learning about topics such as servlet lifecycle, request handling, session management, JSP syntax, JSP directives, JSP expressions, JSP scripting elements, and more. These technologies are commonly used in web development using Java.

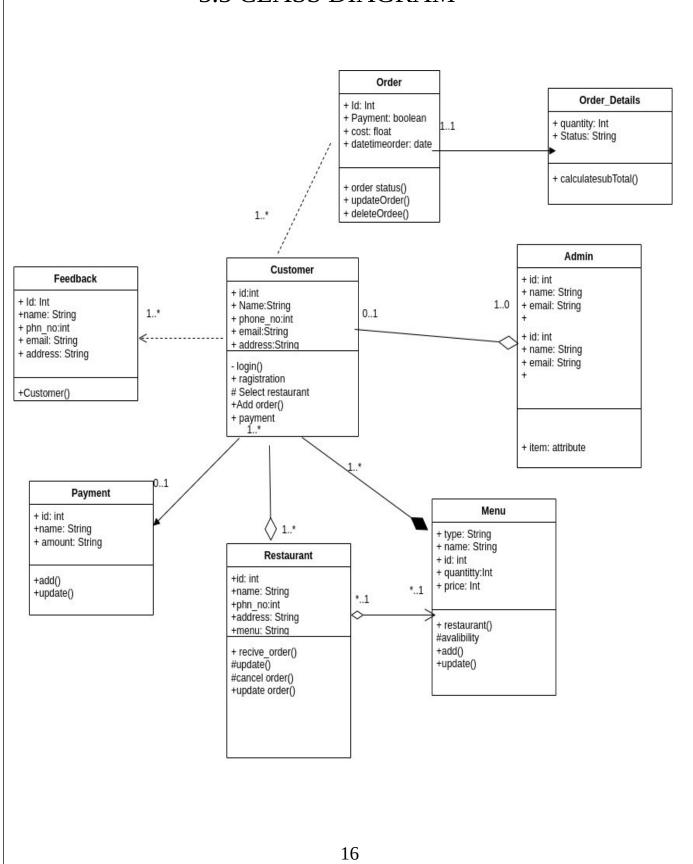
3.1 ENTITY RELATIONSHIP DIAGRAM



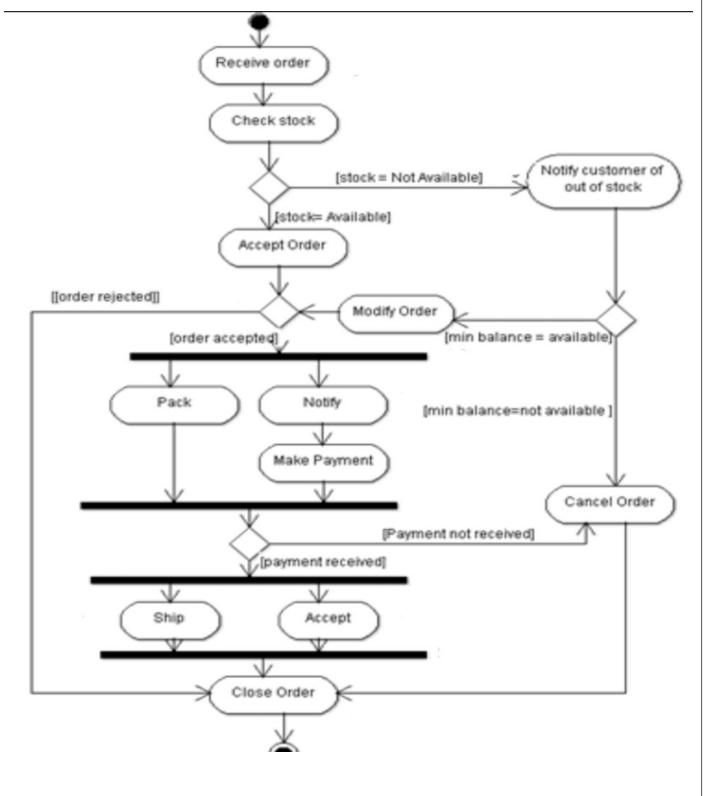
3.2 USE CASE DIAGRAM



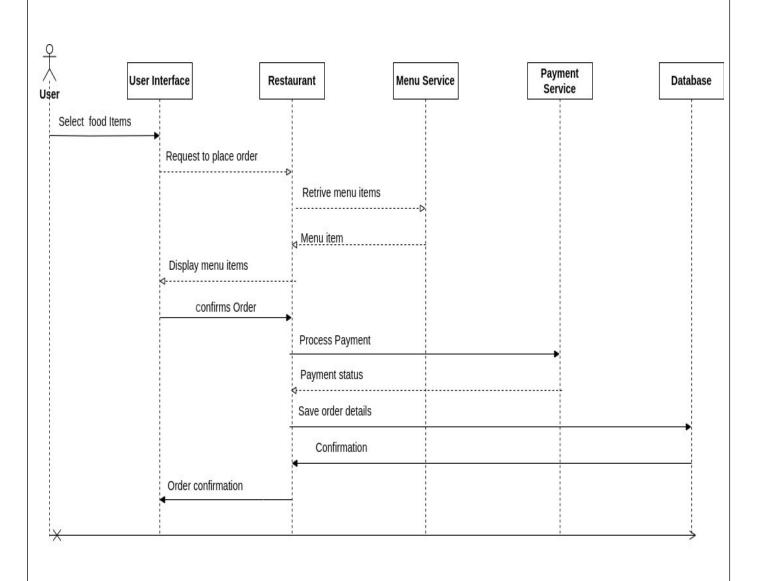
3.3 CLASS DIAGRAM



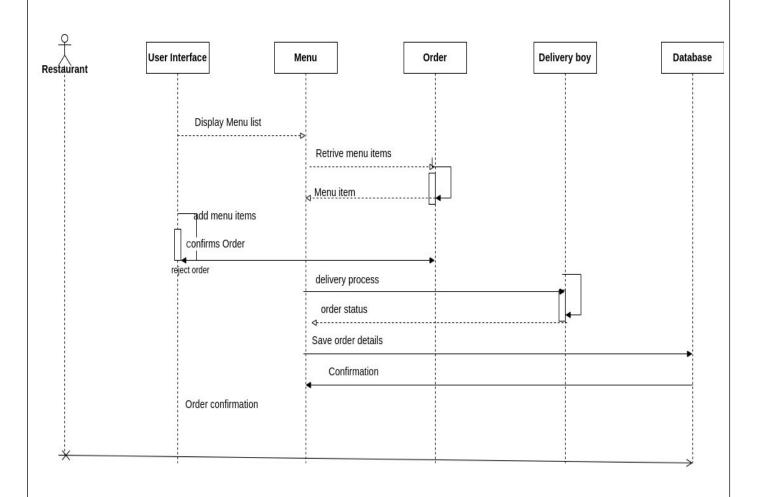
3.4 ACTIVITY DIAGRAM



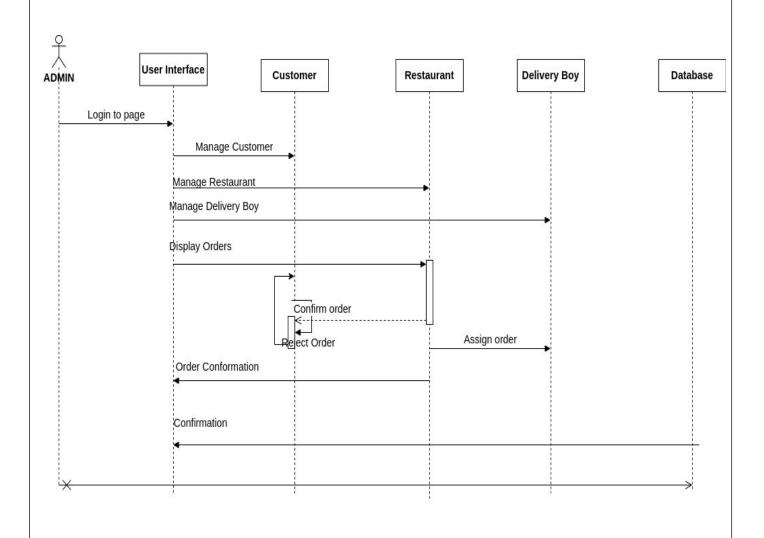
3.5 CUSTOMER SEQUENCE DIAGRAM



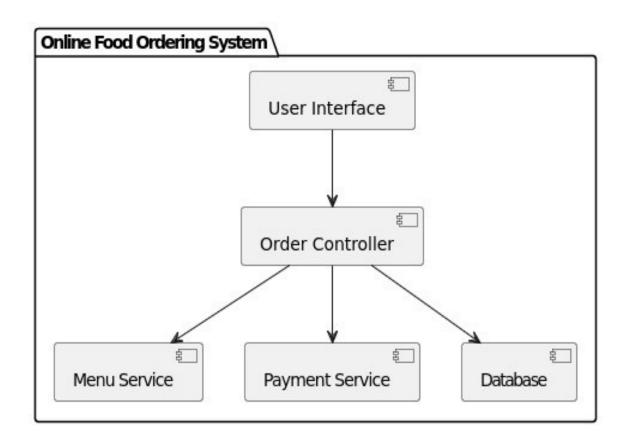
3.6 RESTAURANT SEQUENCE DIAGRAM



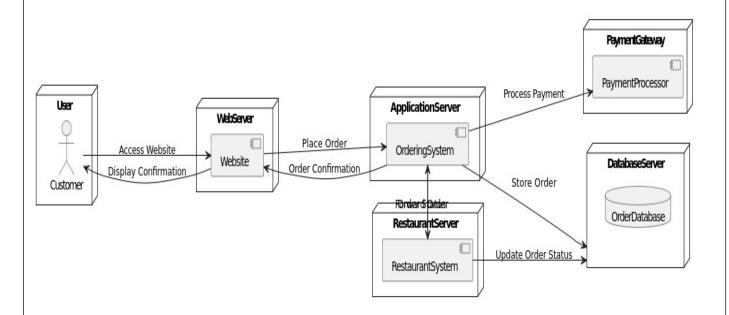
3.7 ADMIN SEQUEANCE DIAGRAM



3.8 COMPENENT DIAGRAM



3.9 DEPLOYEMENT DIAGRAM



4.8 DATA DICTIONARY

admin

| Column | Type | Null | Default | Description |
|--------|--------------|------|---------|-------------|
| aid | bigint | No | _ | Primary key |
| name | varchar(255) | Yes | NULL | Admin Name |
| email | varchar(255) | Yes | NULL | Admin email |
| pass | varchar(255) | Yes | NULL | Admin Pass |

deliveryboy

| Column | Type | Null | Default | Description |
|---------|--------------|------|---------|-----------------------|
| did | bigint | No | - | Primary key |
| name | varchar(255) | Yes | NULL | Delivery Boy name |
| email | varchar(255) | Yes | NULL | Delivery Boy email |
| address | varchar(255) | Yes | NULL | Delivery Boy address |
| phno | varchar(255) | Yes | NULL | Delivery Boy phone no |
| pass | varchar(255) | Yes | NULL | Delivery Boy password |

feedback

| Column | Type | Null | Default | Description |
|----------|--------------|------|---------|---------------|
| name | varchar(255) | Yes | NULL | User Name |
| email | varchar(255) | Yes | NULL | User email |
| phno | varchar(255) | Yes | NULL | User phone no |
| feedback | varchar(255) | Yes | NULL | User Feedback |
| cid | int | Yes | NULL | User Id |

orders

| Column | Type | Null | Default | Description |
|--------|--------------|------|---------|-----------------|
| cid | varchar(255) | Yes | NULL | Foreign key |
| rid | int | Yes | NULL | Foregin key |
| date | date | Yes | NULL | date |
| mid | int | Yes | NULL | Foregion Key |
| oid | bigint | No | - | Primary key |
| status | varchar(255) | Yes | NULL | Order Status |
| boyid | int | Yes | NULL | Delivery Boy Id |

Restorunt_info

| Column | Type | Null | Default | Description |
|---------|--------------|------|---------|--------------------|
| rname | varchar(255) | Yes | NULL | Restorunt Name |
| address | varchar(255) | Yes | NULL | Restorunt Address |
| rno | varchar(255) | Yes | NULL | Restorunt Phone no |
| email | varchar(255) | Yes | NULL | Restorunt Email |
| pass | varchar(255) | Yes | NULL | Restorunt Password |
| rid | bigint | No | - | Primary key |

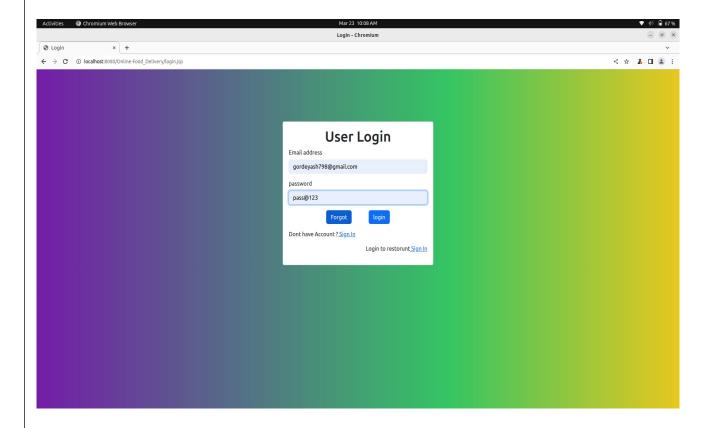
resto_menu

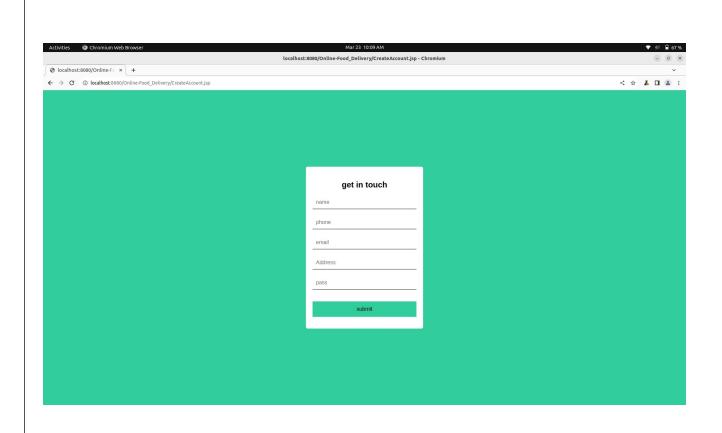
| Column | Type | Null | Default | Description |
|-------------|--------------|------|---------|-----------------------|
| mname | varchar(255) | Yes | NULL | Menu Item Name |
| price | varchar(255) | Yes | NULL | Menu Item Price |
| description | varchar(255) | Yes | NULL | Menu Item Description |
| type | varchar(255) | Yes | NULL | Menu Item Type |
| resto_id | int | Yes | NULL | Foregion Key |
| mid | bigint | No | - | Primary key |
| image | varchar(255) | Yes | NULL | Menu Item Image |
| discount | int | Yes | NULL | Descount On Item |

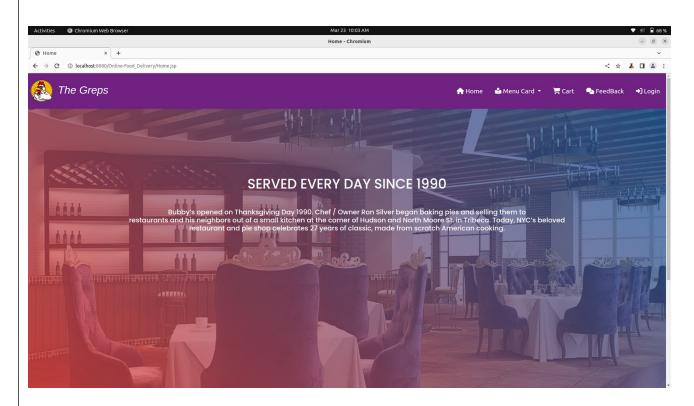
user_info

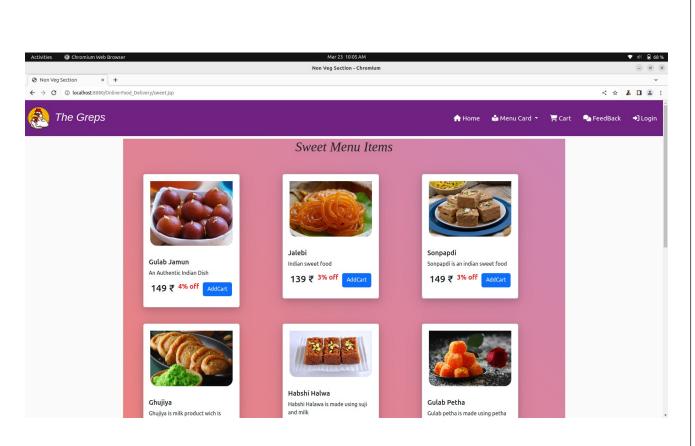
| Column | Type | Null | Default | Description |
|---------|--------------|------|---------|---------------|
| uname | varchar(255) | Yes | NULL | User Name |
| email | varchar(255) | Yes | NULL | User Email |
| no | varchar(255) | Yes | NULL | User Phone no |
| address | varchar(255) | Yes | NULL | User address |
| pass | varchar(255) | Yes | NULL | User password |
| uid | bigint | No | - | Primary Key |

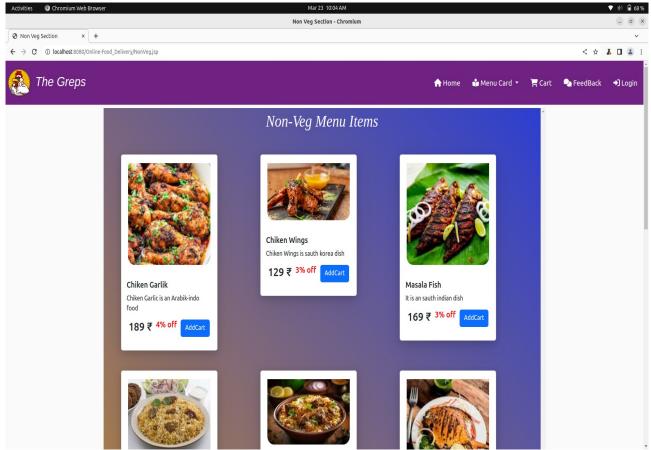
5.1 USER INTERFACE

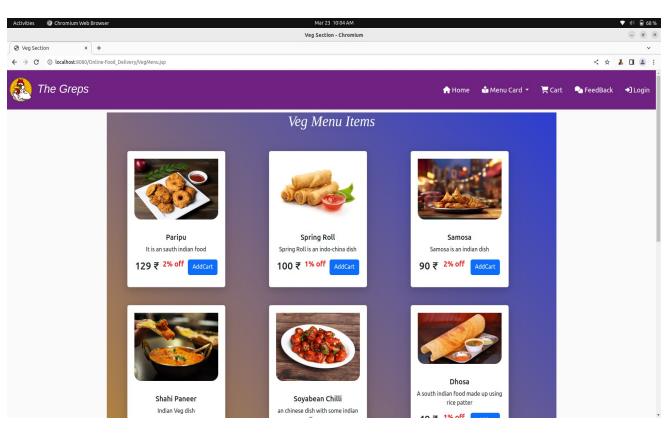


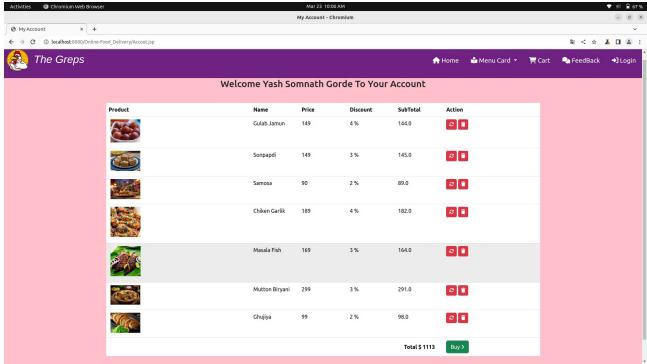






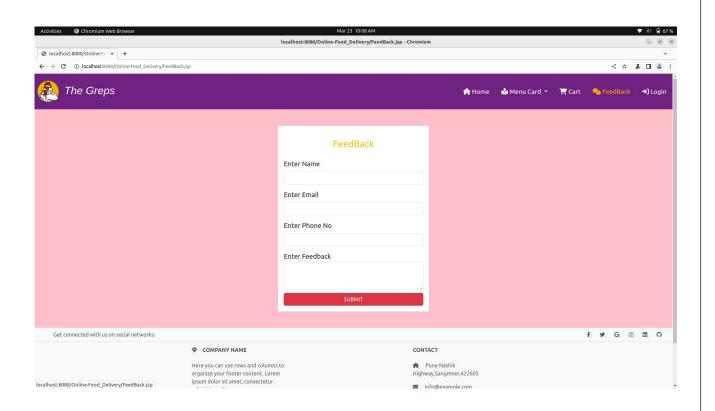


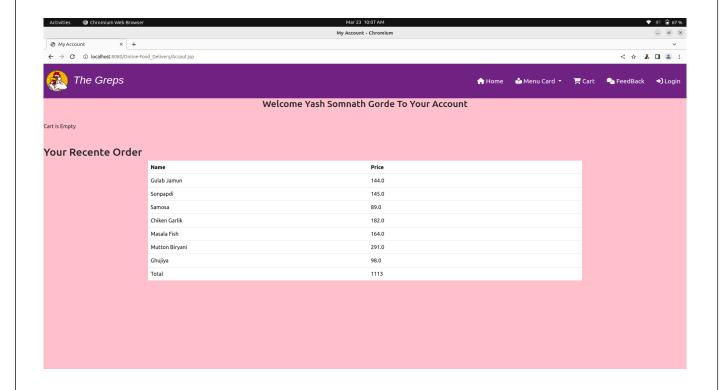




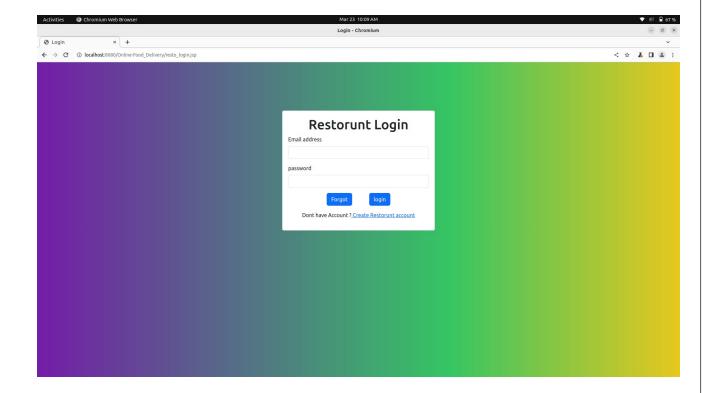


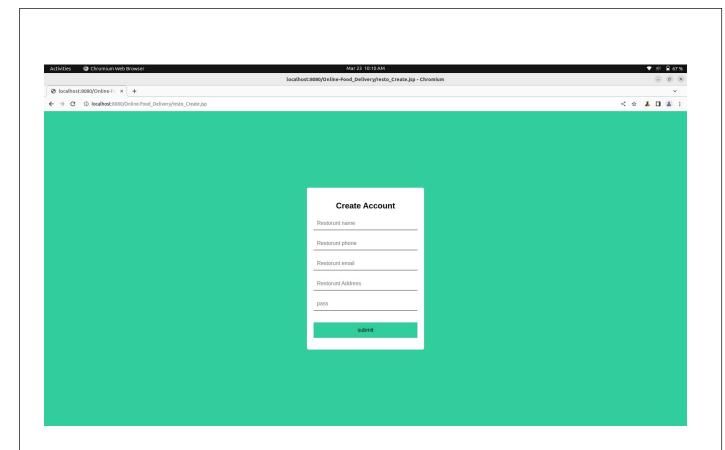


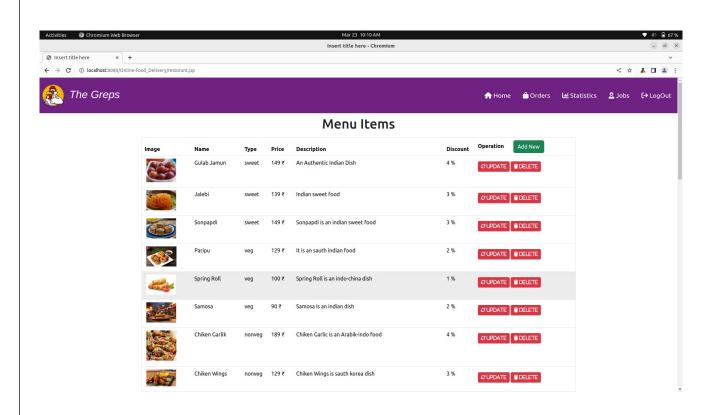


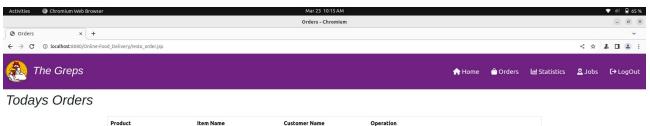


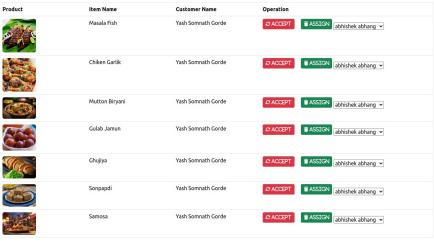
5.2 RESTORUNT USER INTERFACE

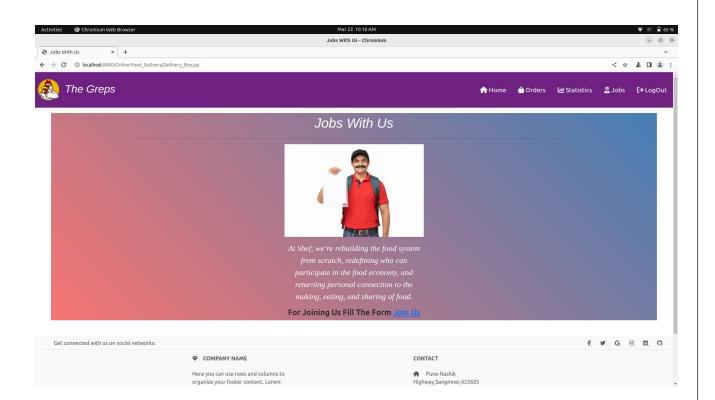




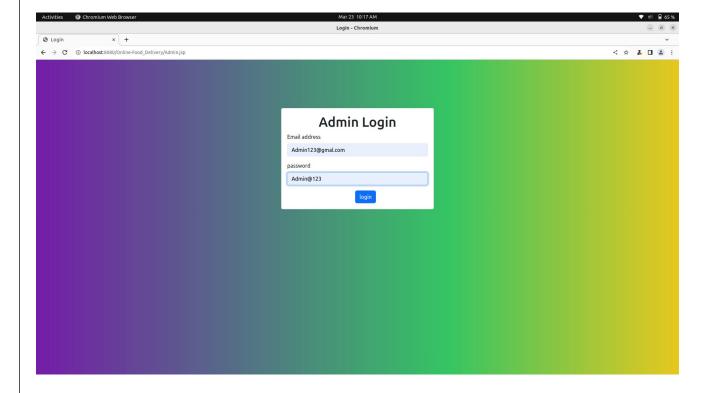


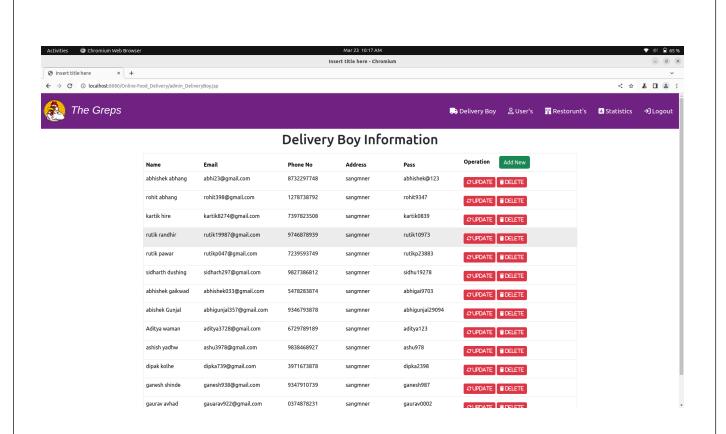


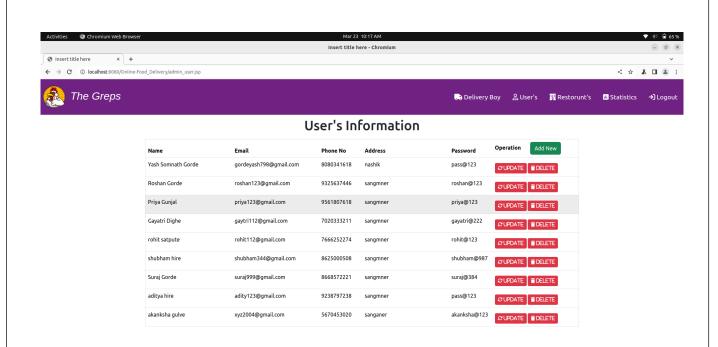




5.3 ADMIN USER INTERFA

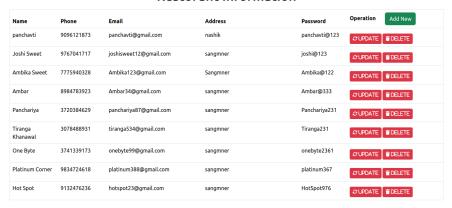


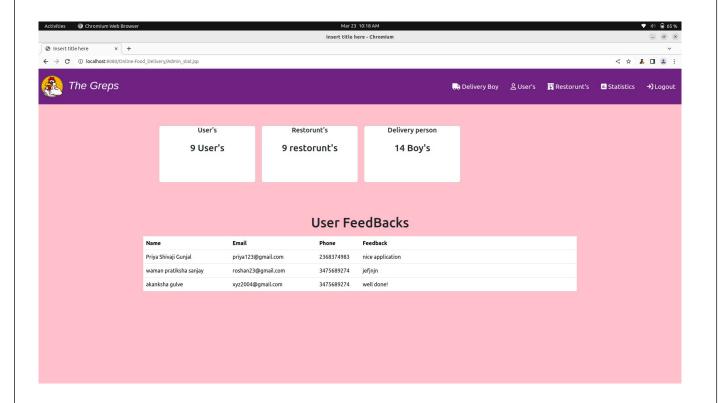






Restorunt Information





6.1 ADVANTAGES

- 1. Convenience: Customers can browse menus and place orders from the comfort of their homes or offices, saving time and effort.
- 2. Wide selection: Online platforms often aggregate menus from multiple restaurants, providing customers with a diverse range of cuisine options to choose from.
- 3. Order customization: Customers can easily customize their orders, specifying preferences, allergies, and dietary restrictions, ensuring their meals meet their needs.
- 4. Time-saving: Online ordering eliminates the need to wait in line or make phone calls, allowing customers to quickly place orders and go about their day.
- 5. Order tracking: Many online food ordering systems offer real-time order tracking, allowing customers to monitor the status of their orders and estimate delivery times.
- 7. Loyalty programs and discounts: Online platforms often offer loyalty programs, discounts, and promotional offers to incentivize repeat orders and attract new customers.

6.2 LIMITATIONS

- 1. Limited Menu Visibility: Customers may not have a complete view of all menu items, leading to potential dissatisfaction if their desired dish is not available for online ordering.
- 2. Accuracy Issues: Incorrect orders due to misunderstandings or errors in the online ordering process can occur, leading to customer dissatisfaction and potential financial losses for the business.
- 3. Technical Glitches: System failures, slow loading times, or website/app crashes can hinder the ordering process, frustrating both customers and restaurant staff.
- 4. Dependency on Internet Connectivity: Customers require a stable internet connection to place orders, which can be a challenge in areas with poor connectivity or during internet outages.
- 5. Delivery Constraints: Limited delivery radius or high delivery fees may discourage potential customers from using the service, especially in suburban or rural areas.
- 6. Food Quality Concerns: Delivery times and transportation can affect the quality of the food, leading to customer complaints and negative reviews.
- 7. Data Security Risks: Storing sensitive customer information online poses risks such as data breaches and identity theft if proper security measures are not implemented.

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- 3. https://www.quora.com
- 4. https://stackoverflow.com

3. YouTube

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- 2. Telusko
- 3. Smart Programing

