CSE370 : Database Systems
Project Report

Project Title : NomNom Express: A user-friendly food delivery service

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Introduction

NomNom Express delivers a streamlined web-based application designed to simplify and enhance the daily operations of food delivery services. It provides a user-friendly and secure platform that enables users to view restaurants and order food and delivery personnel to efficiently manage their tasks, ensuring a smooth workflow and a better delivery experience.

Project Features

- Sign up and Log in:

- A user has options for sign up or log in.

- User Management:

- Supports two separate views of users (Customer and Rider) in the website.
- Each user has a unique user ID, name, email, and password.
- Secure authentication and authorization mechanisms for different user roles.

- Customer Features:

- Customers can view restaurants and menus.
- Customers can add multiple items from a restaurant to his/her Cart.
- Customers can choose their desire payment options to confirm their Order
- Customers can refer other customers to the platform.
- Referral system where customers earn points for each successful referral.

- Rider Features:

- Each Rider can view new orders that haven't been assigned to any rider.
- Riders can accept orders which they are responsible for delivering.
- When a rider completes their delivery, they can mark the order as

delivered. - Riders can view their order history.

- Cart Management:

- Multiple items can be added from a restaurant.
- Customers manage their carts, which are linked to specific restaurants. They can update or delete items, or adjust the quantities in their carts.

- Payment:

- Upon checking out from the cart, it leads to payment.
    - Customers can choose their desired payment method and set their delivery

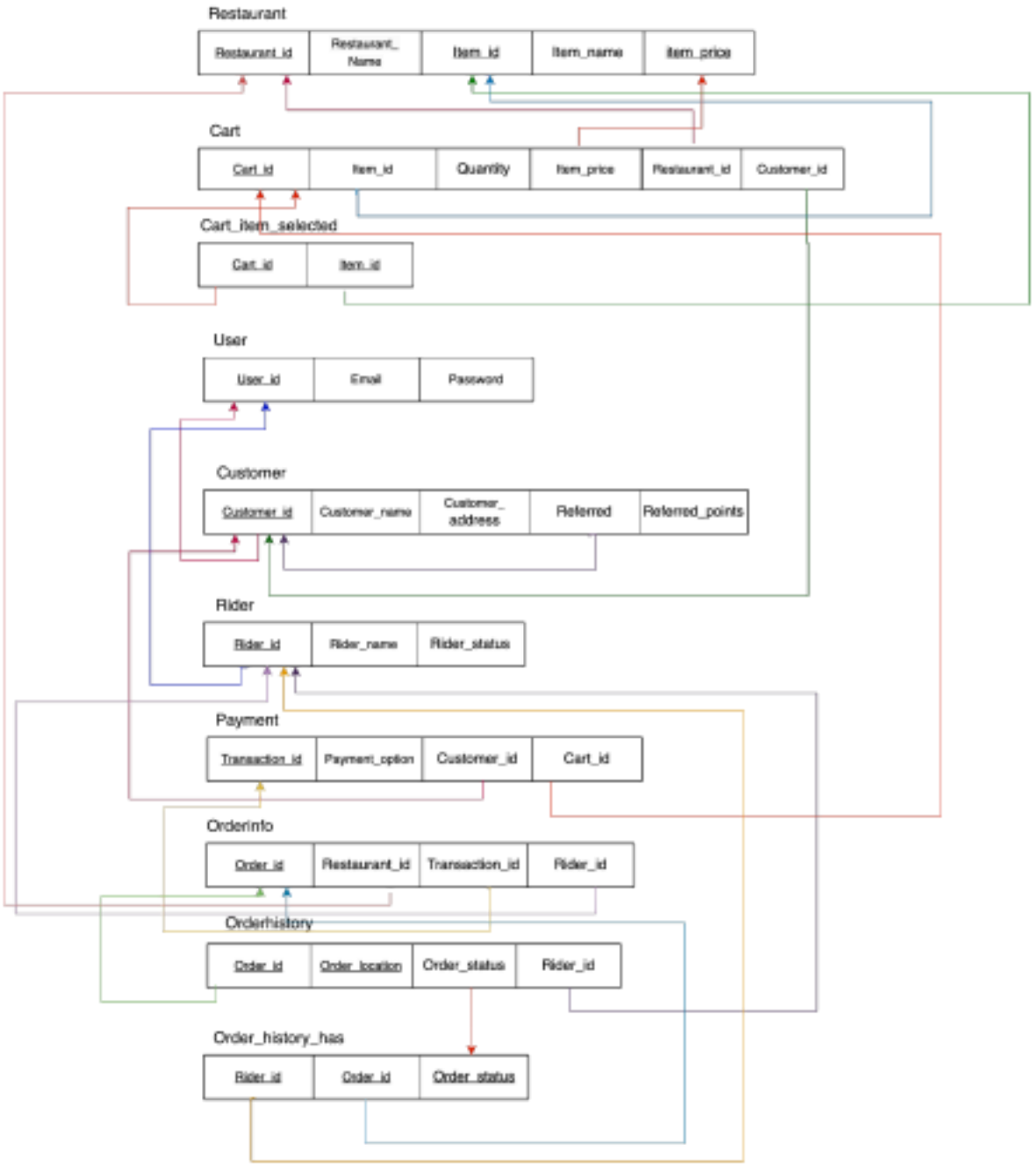
location. 3

- Each payment is linked to a unique transaction ID which confirms an order. Upon confirmation, an unique order ID will be generated which will be visible to the riders for delivery.

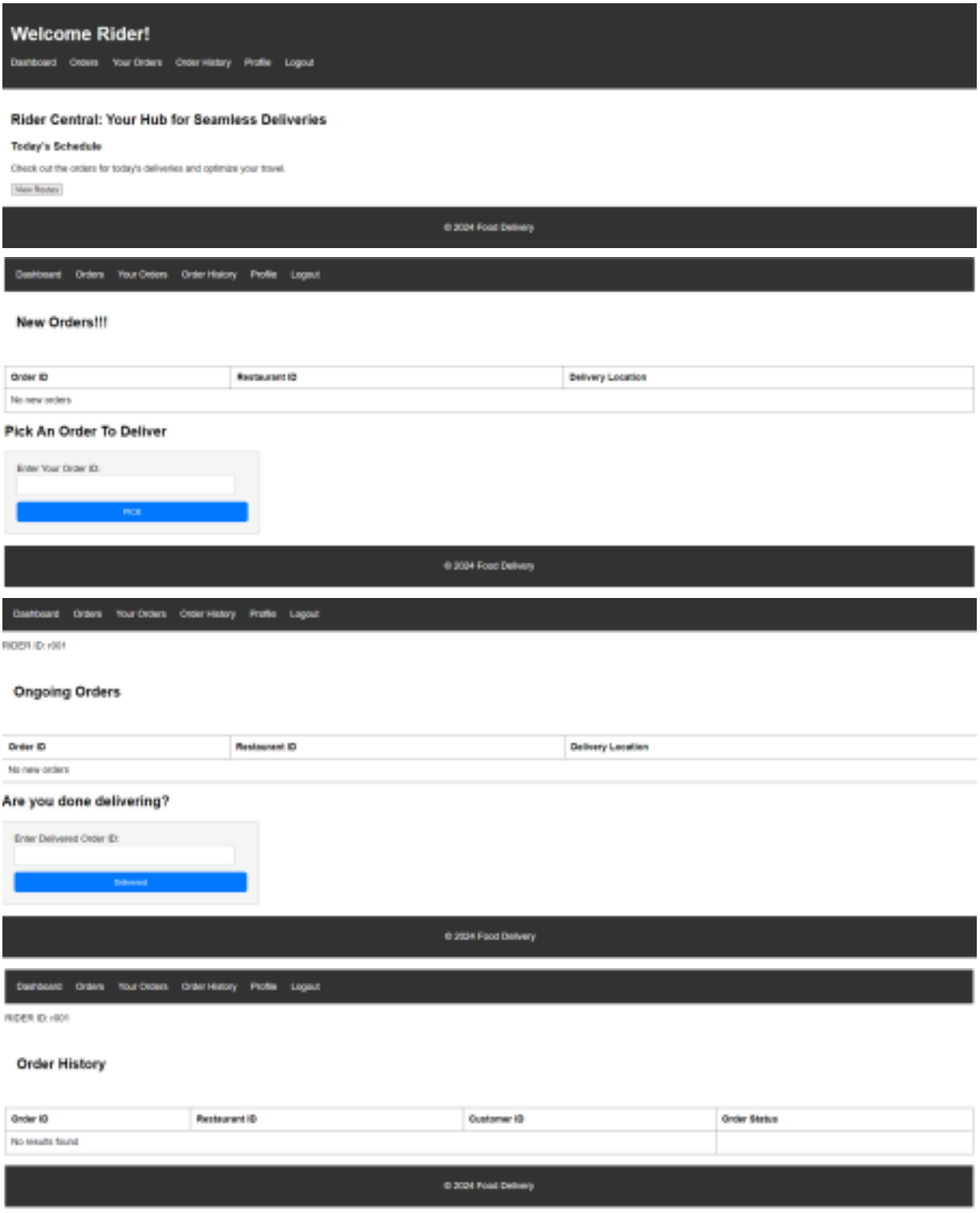
This project structure aims to streamline the operational efficiency of a food delivery service by providing robust, user-specific functionalities for managing orders, customers, riders, and payments within a unified platform.

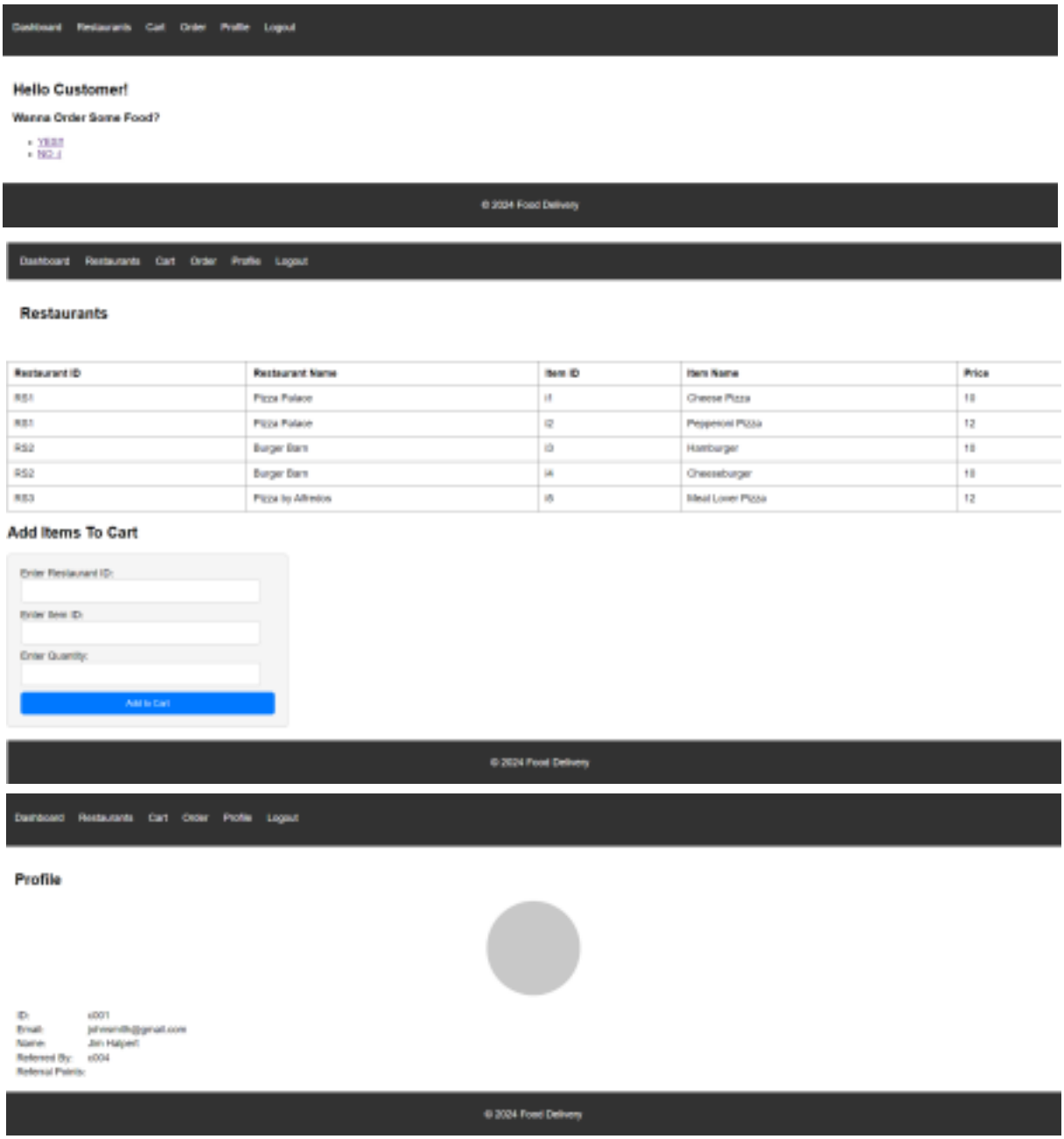
ER/EER Diagram

Schema Diagram

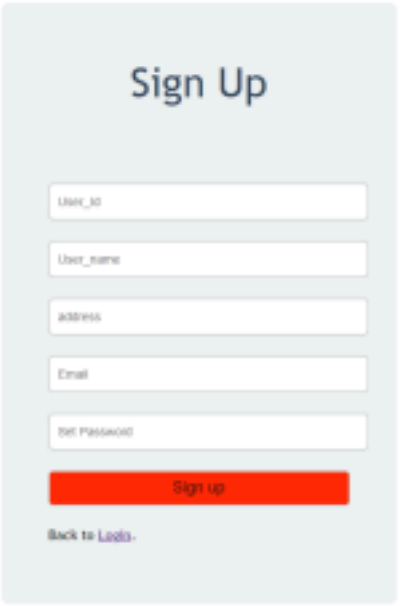


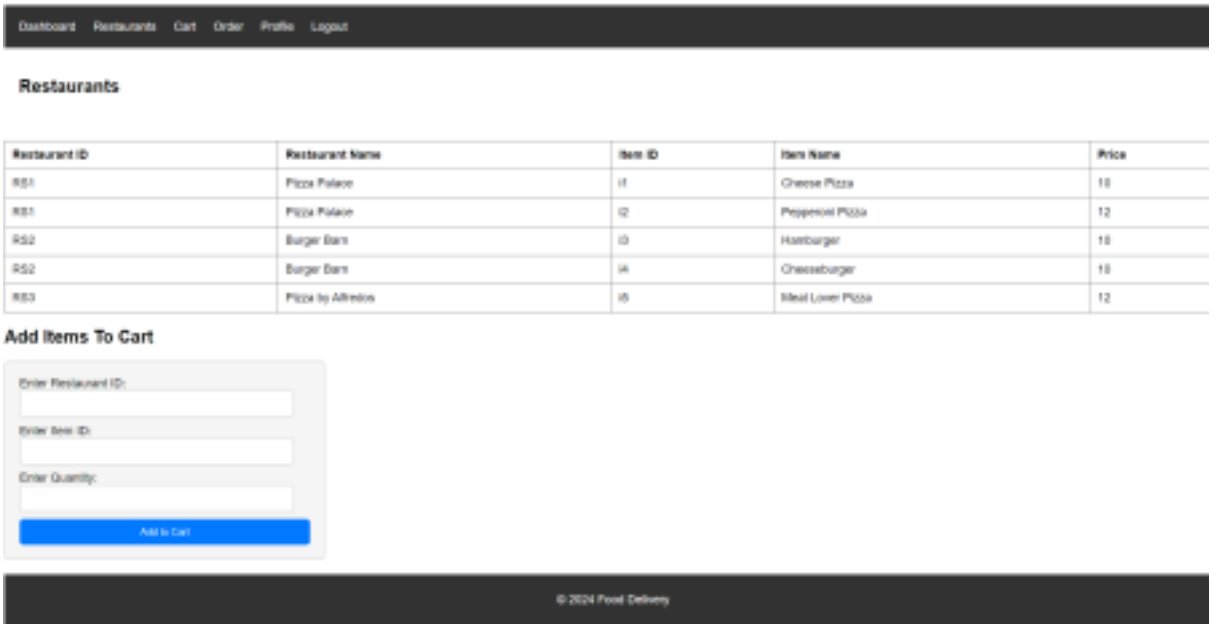
Frontend Development

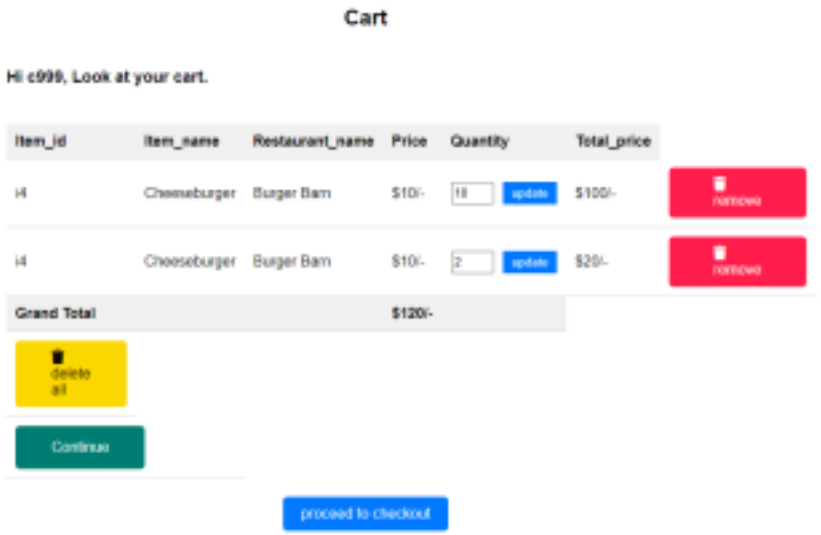

Welcome Rider!
Dashboard Orders Your Orders Order History Profile Logout
Rider Central: Your Hub for Seamless Deliveries
Today's Schedule
Check out the orders for today's deliveries and optimize your travel.
View Routes
© 2024 Food Delivery
Dashboard Orders Your Orders Order History Profile Logout
New Orders!!!
Order ID
Restaurant ID
Delivery Location
No new orders
Pick An Order To Deliver
Enter Your Order ID:
PICK
© 2024 Food Delivery
Dashboard Orders Your Orders Order History Profile Logout
RIDER ID: r001
Ongoing Orders
Order ID
Restaurant ID
Delivery Location
No new orders
Are you done delivering?
Enter Delivered Order ID:
Delivered
© 2024 Food Delivery
Dashboard Orders Your Orders Order History Profile Logout
RIDER ID: r001
Order History
Order ID
Restaurant ID
Customer ID
Order Status
No results found
© 2024 Food Delivery

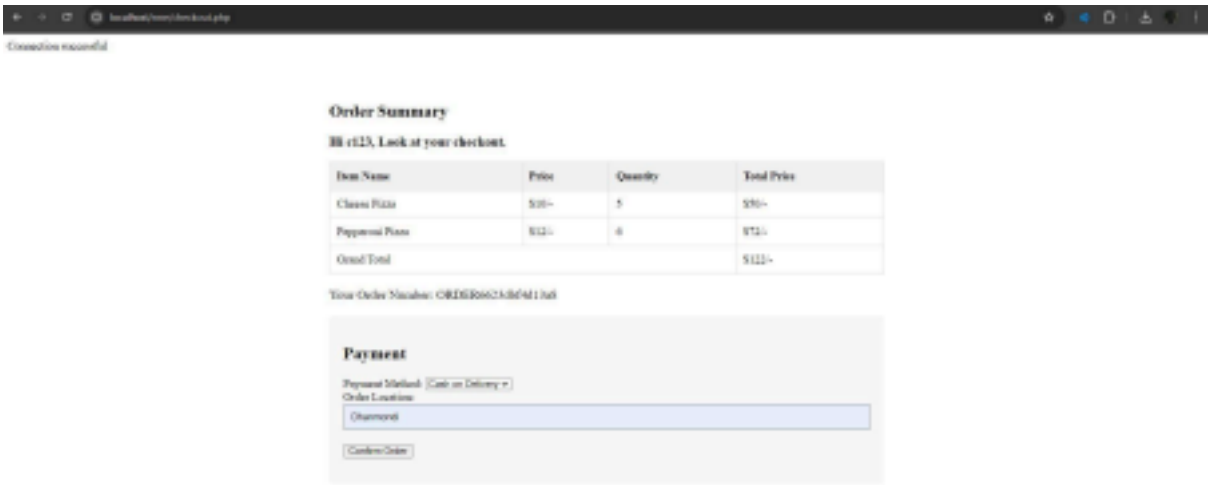

Dashboard Restaurants Cart Order Profile Logout
Hello Customer!
Wanna Order Some Food?
© 2024 Food Delivery
Dashboard Restaurants Cart Order Profile Logout
Restaurants
Restaurant ID
Restaurant Name
Item ID
Item Name
Price
Add Items To Cart
Add to Cart
© 2024 Food Delivery
Dashboard Restaurants Cart Order Profile Logout
Profile
© 2024 Food Delivery

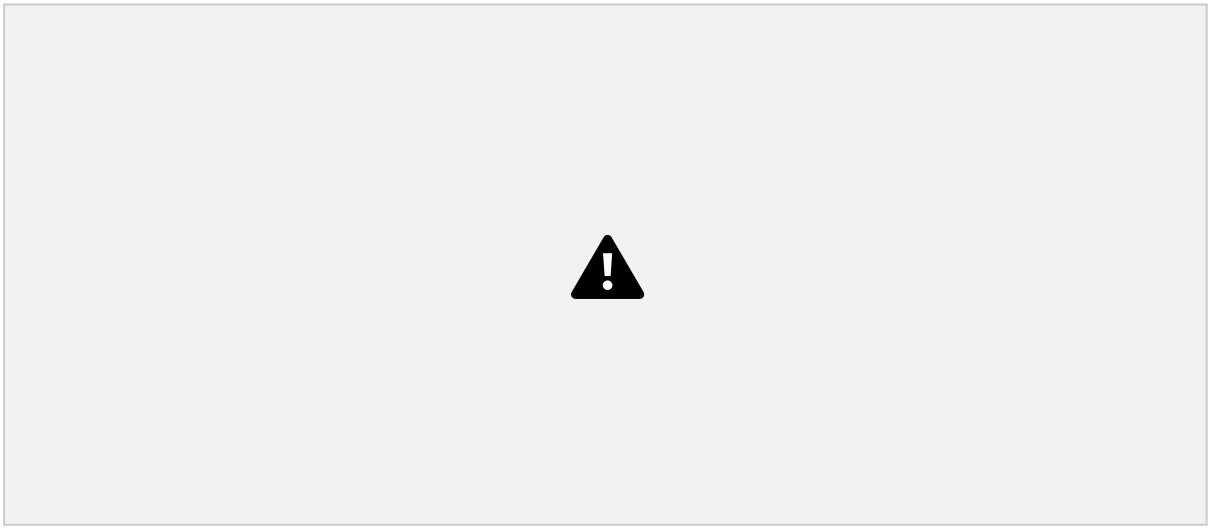
Customer Order View:


Sign Up
User_id
User_name
address
Email
Set Password
Sign up
Back to Login.


Dashboard Restaurants Cart Order Profile Logout
Restaurants
Restaurant ID
Restaurant Name
Item ID
Item Name
Price
RS1
Pizza Palace
I1
Cheese Pizza
10
RS1
Pizza Palace
I2
Pepperoni Pizza
12
RS2
Burger Barn
I3
Hamburger
10
RS2
Burger Barn
I4
Cheeseburger
10
RS3
Pizza by Alfredos
I5
Meat Lover Pizza
12
Add Items To Cart
Enter Restaurant ID:
Enter Item ID:
Enter Quantity:
Add to Cart
© 2024 Food Delivery


Cart
Hi c999, Look at your cart.
Item_id
Item_name
Restaurant_name
Price
Quantity
Total_price
i4
Cheeseburger
Burger Barn
$10/-
10
update
$100/-
remove
i4
Cheeseburger
Burger Barn
$10/-
2
update
$20/-
remove
Grand Total
$120/-
delete all
Continue
proceed to checkout


Connection successful
Order Summary
Item Name
Price
Quantity
Total Price
Payment
Order Location:
Chanmoni



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Backend Development

Navigation Implementation: Developed the HTML structure for a top navigation bar, creating seamless links between the Dashboard, Orders, Your Orders, Order History, and Profile pages, thereby enhancing user navigability and interface efficiency throughout the application.

For the rider view page of the project:

- Dynamic Order Management: Developed functionalities using PHP and SQL to dynamically display available orders to riders, ensuring they only see orders that are unassigned.

- Advanced SQL Integration: Crafted efficient SQL queries to join multiple tables, ensuring accurate and relevant information is displayed across various pages, enhancing data retrieval and presentation within the application.

- Database Updates: Used PHP and SQL queries to handle multiple updates safely, ensuring all data changes are correct and reflecting real-time changes and interactions.

- Order Status Updates: Implemented features that allow riders to view and update the status

of their orders, marking them as delivered directly from their dashboard.

- Secure Access and Session Handling: Set up secure SQL queries to ensure riders can only access their specific orders, preventing any unauthorized access to other riders' information.

- Order History: Enabled riders to view the history of their deliveries, allowing them to track past orders and review their delivery performance.

Files handled in the project: profile.php, profile_rid.php, rid_orders.php, current_order.php, show_orderhist.php, add_order.php, current_order.php, delivered.php

For customer & rider view:

- Profile view for customer and rider, where their information is shown. - Reference form for customer id no reference is shown.
- Developed functionalities using PHP and SQL to dynamically handle reference. - If no reference is given the form will take input and will be updated if valid customer id is provided also 5 refer points will be updated for the reference.

Restaurant:

- Restaurant will display all the restaurant 's items.
- Handle updating item to card with sessions, updates the card of the logged in user

Files handled in the project: profile.php, rid_orders.php, show_restaurants.php, restaurant.css, show_order.php, current_order.php, cus.php

- Session Handling: The PHP script initiates a user session and connects to the database to retrieve order information.
- Dynamic Content: It dynamically generates an HTML table to display Order ID, Transaction ID, Restaurant ID, and Rider ID.
- Security Measures: The use of htmlspecialchars function suggests a focus on

preventing XSS attacks by escaping HTML entities.

- Database Interaction: The backend code interacts with the database using prepared statements, enhancing security against SQL injection.

-Sign Up: It establishes a connection to the database using dbconnect.php. The user details, including User ID, Email, and Password, are inserted into the user table. Depending on the User ID prefix ('c' for customer, 'r' for rider), additional details are inserted into either the customer table or the rider table. If the insertions are successful, a message indicating the successful creation of the user or rider is created. Otherwise, an error message is displayed.

-Cart:

Session Handling: Maintains user login information.

Update Quantity: Handles user quantity updates, updating the database and refreshing the cart.

Remove Item: Deletes selected items from the cart and updates the display accordingly. Delete All Items: Clears the entire cart, removing all items from the database.

Display Cart Contents: Fetches and displays cart items with total prices, calculating the grand total.

Continue Shopping: Provides a link to browse products further.

Checkout Button: Enables checkout only if the grand total exceeds $1.

Files handled in the project: Signup.php, show_cart,php, connection between show_restaurant.php and show_cart.php

1. **Session Handling**: The features of the checkout page works uniquely for every individual user who creates an account and logs in. No data of an individual user

overlaps with another user.

2. **Displaying Order Summary**: The item names that were selected in the cart from the restaurant by the customer , the Price , Quantity and total price along with a uniquely generated Order Number is shown as order summary in a table format.

3. **Payment Option** : The payment method can be selected by the user for their order . It can be selected using the dropdown menu which has two options (Cash On Delivery /Card Payment). This is stored in the payment_option column of the payment table using the appropriate SQL query.

4. **Order Confirmation**: After pressing the " Confirm Order " button, **3 tables** are updated in the database at the same time. The **payment** table , **orderinfo** table and **orderhistory** table are updated with necessary data using the appropriate SQL Query. The user is also redirected to a payment success page where they can see the Transaction ID and Order ID

5. **Emptying The Cart :** The shopping cart is emptied after an order is placed so that a customer can add items newly from their choice of restaurant ! This is done by using a SQL query which works on the cart table to remove the items after an order is placed every time.

6. **Confirmed orders' Visibility to the riders :** It was made sure that after updating the orderinfo and orderhistory table , The riders are able to see which orders are available to be delivered by them after the payment is done.

Files handled in the project:

checkout.php, payment_success.php, checkout.css and payment_success.css. **Made connection between (show_cart.php , checkout.php and rid_orders.php)**

Conclusion

In conclusion, NomNom Express offers a comprehensive solution for food delivery services, facilitating seamless operations for both users and delivery personnel. With its intuitive web-based platform, users can easily browse restaurants and place orders, while delivery personnel can efficiently manage tasks, resulting in an enhanced delivery experience for all parties involved. NomNom Express is poised to revolutionize the food delivery industry by simplifying processes and ensuring a smooth workflow, ultimately setting a new standard for convenience and efficiency.

References

Mr. Web Designer. (2022, February 11). *Advance Shopping Cart with admin panel and checkout system using PHP and MySQL | P4 - Shopping Cart* [Video]. YouTube. https://www.youtube.com/watch?v=Ep7NSDSRouY