A PROJECT ON

Restaurant Management System

SUBMITTED IN

PARTIAL FULFILLMENT OF THE REQUIREMENT

FOR THE COURSE OF DIPLOMA IN ADVANCED COMPUTING FROM CDAC

SUNBEAM INSTITUTE OF INFORMATION TECHNOLOGY

Hinjawadi

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CERTIFICATE

This is to certify that the project work under the title ‘Web Portal for Student and teacher’ is done by Akansha Mishra, Adhishri Shinde, Madhura Mane and Purva Takale in partial fulfillment of the requirement for award of Diploma in Advanced Computing Course.

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Project Guide

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Course Co-Coordinator

Date: 16 August 2024

ACKNOWLEDGEMENT

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We are deeply indebted and grateful to them for their guidance, encouragement and deep concern for our project. Without their critical evaluation and suggestions at every stage of the project, this project could never have reached its present form.

Last but not the least we thank the entire faculty and the staff members of Sunbeam Institute of Information Technology, Pune for their support.

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Introduction:

The Restaurant Management System project aims to streamline the fundamental aspects of restaurant operations. The system allows customers to browse the menu, place orders, and make reservations with ease.

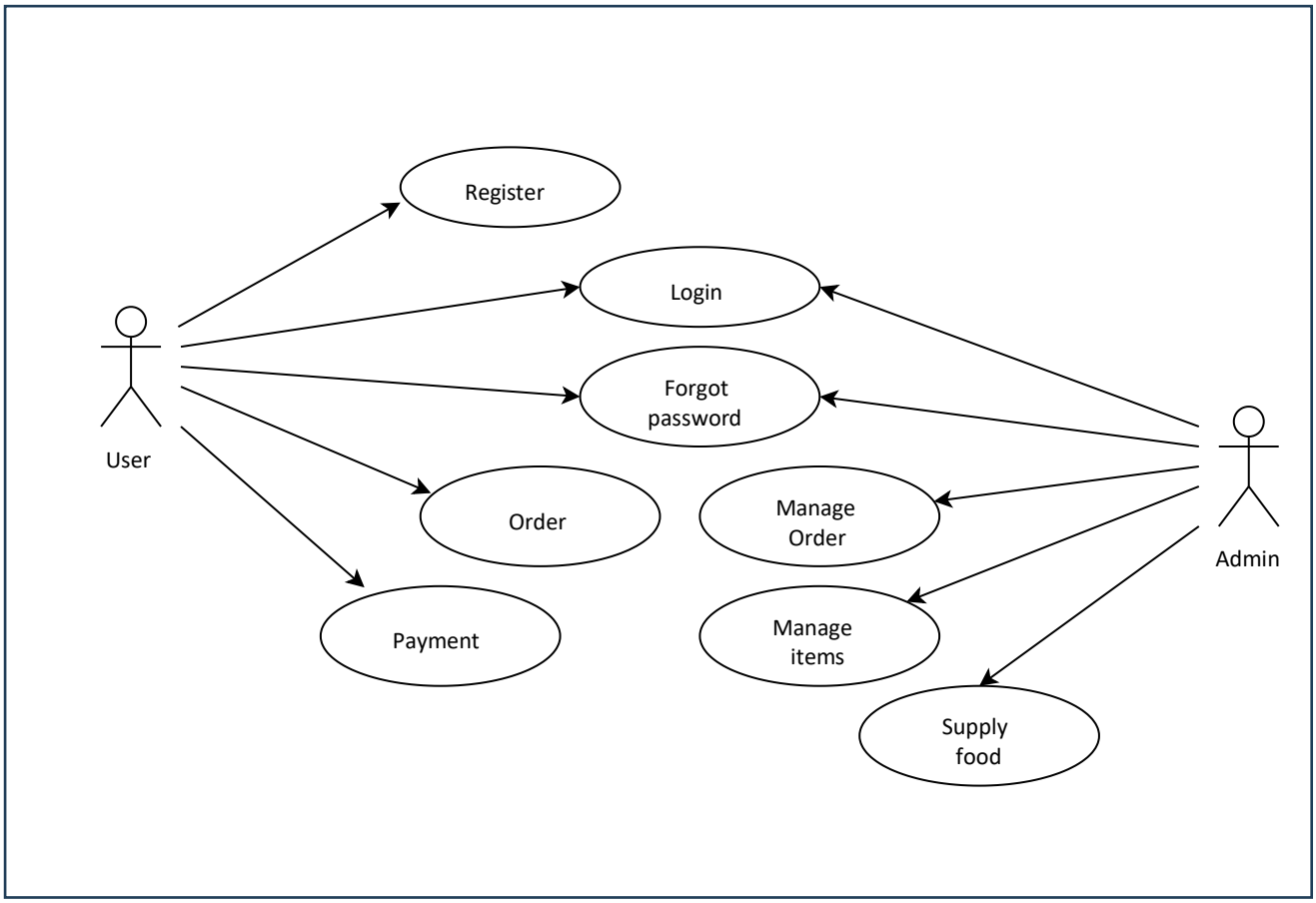
Customers can explore the restaurant's menu, viewing dish details such as name, description, price, and availability. Once they select their desired items, the system checks for item availability. If the selected dishes are available, customers can proceed to place their order. Otherwise, they will be prompted to choose alternative options.

The owner, acting as the admin, has the ability to add, edit, and delete categories and menu items, ensuring that the menu is always up to date.

To complete an order, the system collects customer details such as name, address, contact number, and payment information. It verifies the payment method and processes the order while updating the restaurant's database and user account accordingly.

Requirements:

1. Functional Requirements:



1.1 Admin:

Admin should be able to login, add category information, update and delete category information. Also admin can add items i.e. menus under specific category and delete as well as update item information.

1.2 User:

The customer, henceforth referred to as the ‘user’, will be presented with several options by the restaurant management system as the first step in their interaction. A registered user can view items and place order. The term ‘registered user’ is described below.

A user created an account will have a user ID and password. This personal information will henceforth be referred to as their ‘profile.’ Such a user with a profile in the database will be called a ‘registered user.’ A registered user can log into the system to place orders.

A new user, on the other hand, must either:

a) register with the system by providing personal information, or

b) log into the system

the new user becomes a registered user.

a registered user can view category and items, add item to cart, place order and make payment.

The system will always provide users with the option to exit from the system at any time during the following processes.

1.3 Registration and Creation of User Profile:

The system requires users to register to carry out any transactions, except for browsing the menu. During the registration process, the user will be prompted to provide the following information at a minimum: user ID, password, first name, last name, address, phone number, email address.

1.4 Placing Orders:

Only registered users can proceed to place an order. If the user is not registered, they must create an account and log in to the system before placing an order. Once logged in, the system will ask the user to confirm the selected items and display the total price for the order.

If the user confirms the order, the system will check the availability of the selected items. If all items are available, the system will inform the user that they can add the items to their cart and complete the order.

The system will prompt the user to review their cart and confirm the items they wish to order. The user can modify the cart by adding or removing items at this stage. After finalizing the cart, the system will request the user to enter their payment information, such as debit card or credit card details, to process the order. Once the payment is successfully completed, the system will update the order database

3. DESIGN

3.1 Database Design

Table1: User_Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	user_id	Bigint	4	0
0	created_on	Date	6	1
0	update_on	datetime(6)	255	1
0	address	Varchar(255)	255	1
0	email	Varchar(25)	25	1
0	name	Varchar(25)	25	1
0	password	Varchar(255)	255	1
0	phone_no	Varchar(10)	10	1
0	role	Varchar(255)	255	1

Table2: Category Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	category_id	Bigint	4	0
0	category_name	Varchar(255)	255	1
0	description	Varchar(255)	255	1
0	Image_path	Varchar(255)	255	1

Table3: Item Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	item_id	Bigint	4	0
0	item_desc	Varchar(255)	6	1
0	item_image_path	Varchar(255)	255	1
0	item_name	Varchar(255)	255	1
0	price	Float	4	1
1	cart_id	bigint	4	1
1	category_id	Bigint	4	1
1	order_id	Bigint	4	1

Table4: Cart Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	cart_id	Bigint	4	0
0	item_id	Bigint	4	1
0	user_id	Bigint	4	1

Table5: Orders Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	order_id	bigint	4	0
0	created_on	date	6	1
0	update_on	datetime(6)	6	1
0	user_id	bigint	4	1

Table6: Delivery Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	delivery_id	bigint	4	0
0	del_datetime	date	6	1
0	del_status	Bit(1)	1	1
0	total_amount	Varchar(255)	255	1
1	user_id	bigint	4	1
1	order_id	bigint	4	1

Table7: Payment Info

Key Type/ Constraint	Column Name	Data Type	Length	Allow Null (1=Yes;0=No)
2	payment_id	bigint	4	0
0	payment_status	Bit(1)	6	1
0	payment_type	Varchar(255)	255	1
0	pdatetime	Datetime(6)	6	1
0	Total_amount	float	4	1
1	delivery_id	bigint	4	1
1	user_id	bigint	4	1
1	order_id	bigint	4	1

4. CODING STANDARDS IMPLEMENTED

Naming and Capitalization

Below summarize the naming recommendations for identifiers in Pascal casing is used mainly (i.e. capitalize first letter of each word) with camel casing (capitalize each word except for the first one) being used in certain circumstances.

Identifier	Case	Examples	Additional Notes
Class	Pascal	User, Category, Item	Class names should be based on "objects" or "real things" and should generally be **nouns**. No '_' signs allowed. Do not use type prefixes like 'C' for class.
Method	Camel	getDetails, updateStore	Methods should use **verbs** or verb phrases.
Parameter	Camel	userId, categoryId, itemId	Use descriptive parameter names. Parameter names should be descriptive enough that the name of the parameter and its type can be used to determine its meaning in most scenarios.
Interface	Pascal with "I" prefix	Disposable	Do not use the '_' sign
Exception Class	Pascal with "Exception" suffix	WebException,	

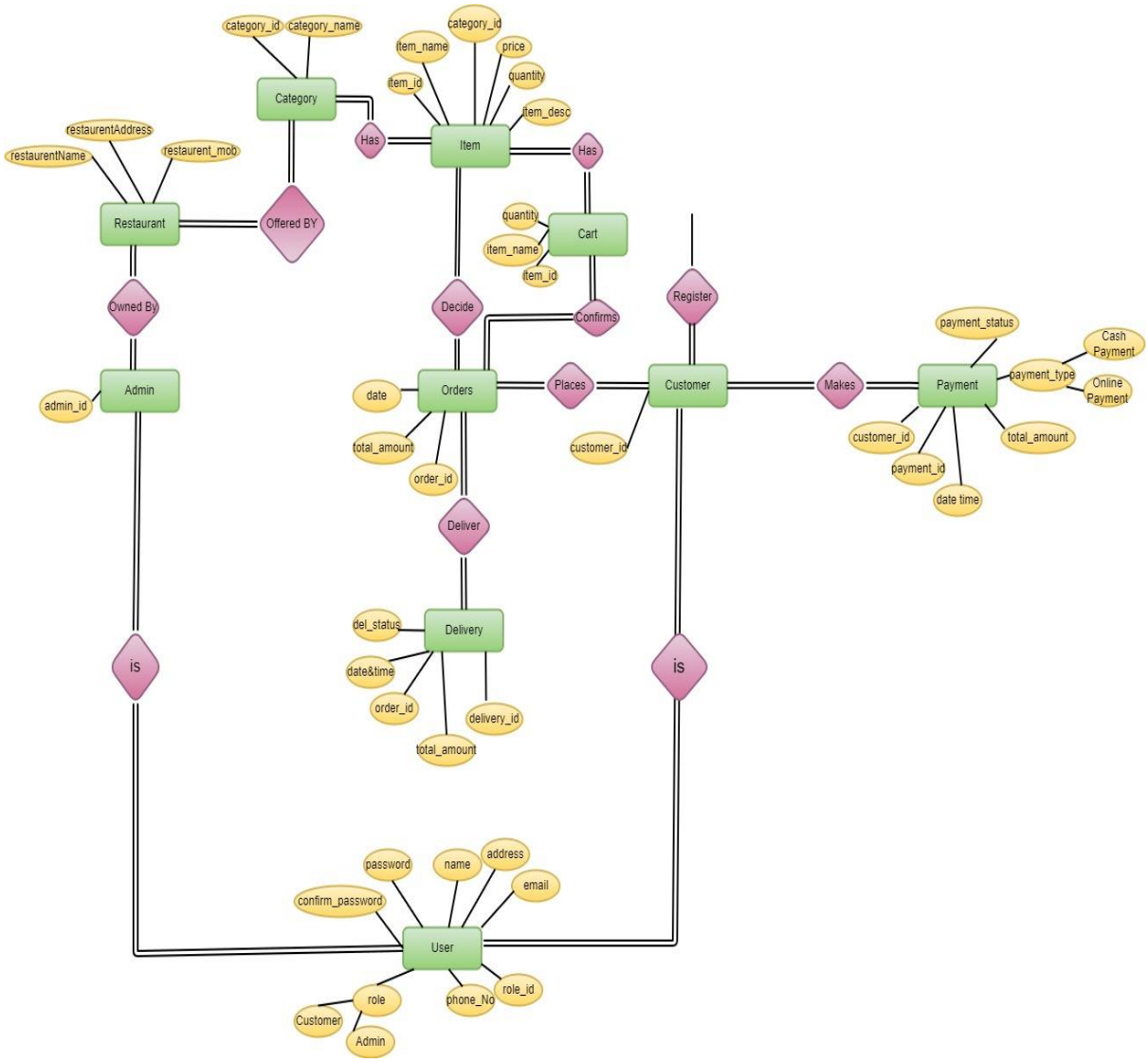
5. TEST REPORT

GENERAL TESTING:

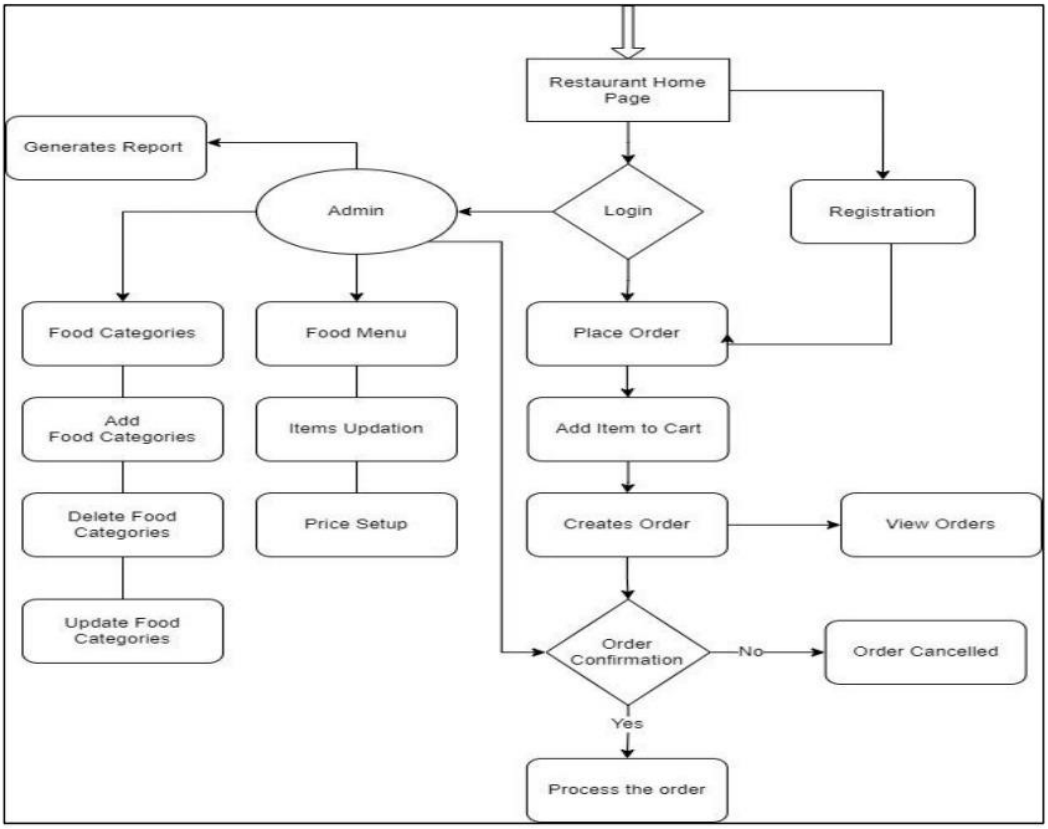
SR-NO	TEST CASE	EXPECTED RESULT	ACTUAL RESULT	ERROR MESSAGE
1	Register Page	Redirected to Next page	OK	Nothing
2	Login Page	Pop-up will come	Ok	Please enter username and password again
3	Booking Ticket	All the fields should be filled for submission	Ok	Nothing
4	Checking login or not	User is logged in or not	Ok	Nothing
5	Add category details	Add informations	Ok	Nothing
6	Add category details	Add informations	Ok	Nothing

Appendix A

Entity Relationship Diagram

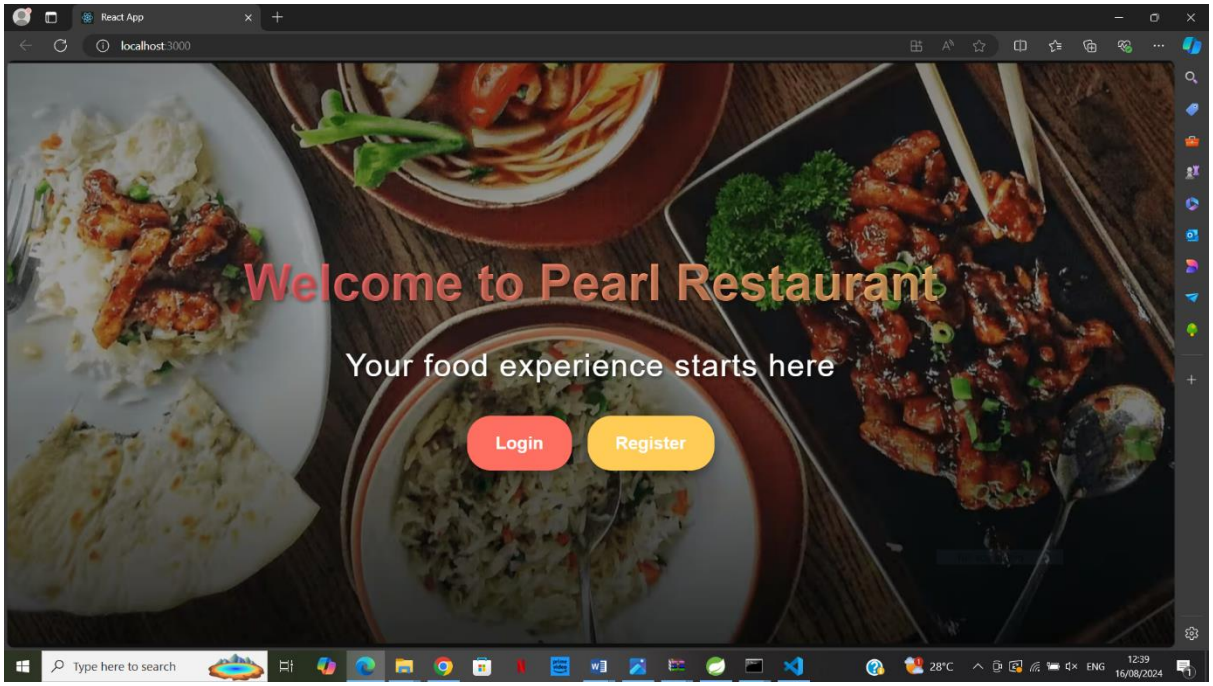


Data Flow Diagram:

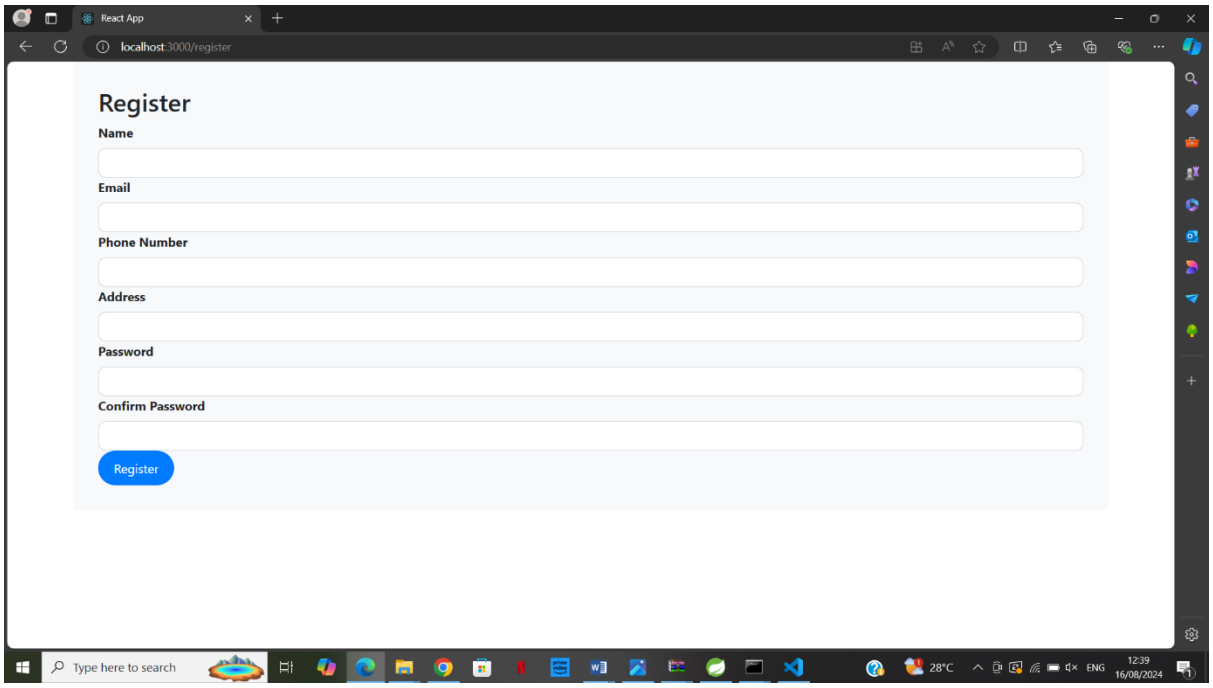


Appendix B

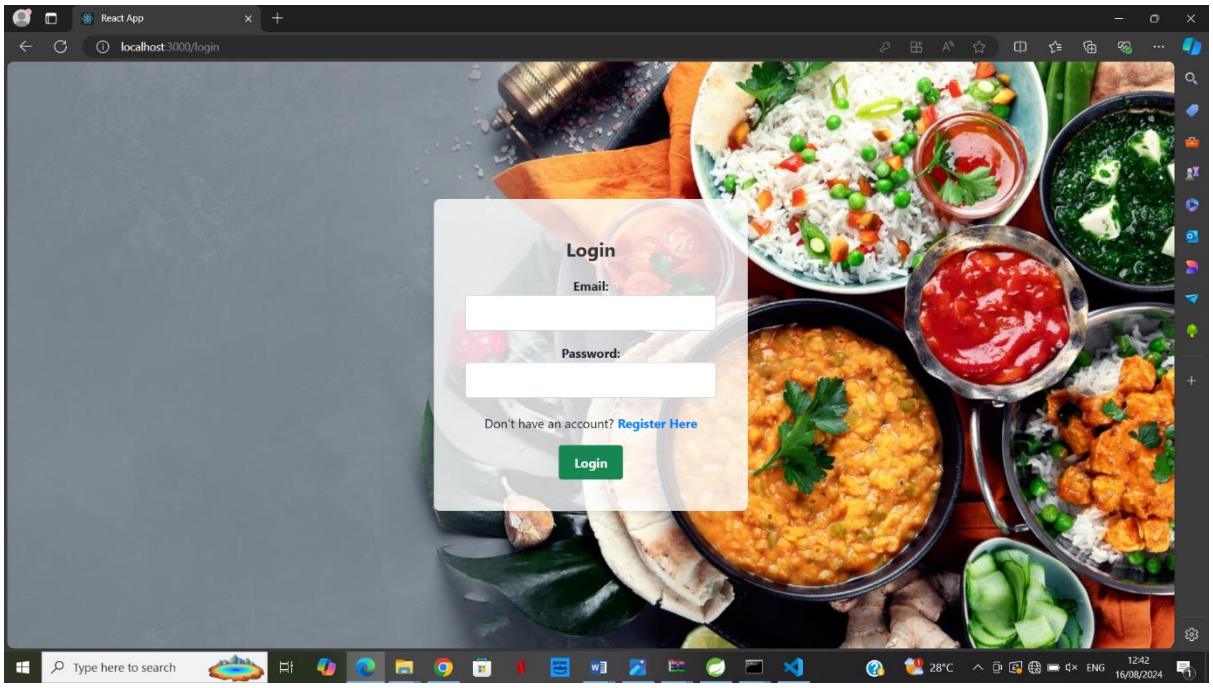
Frontpage:



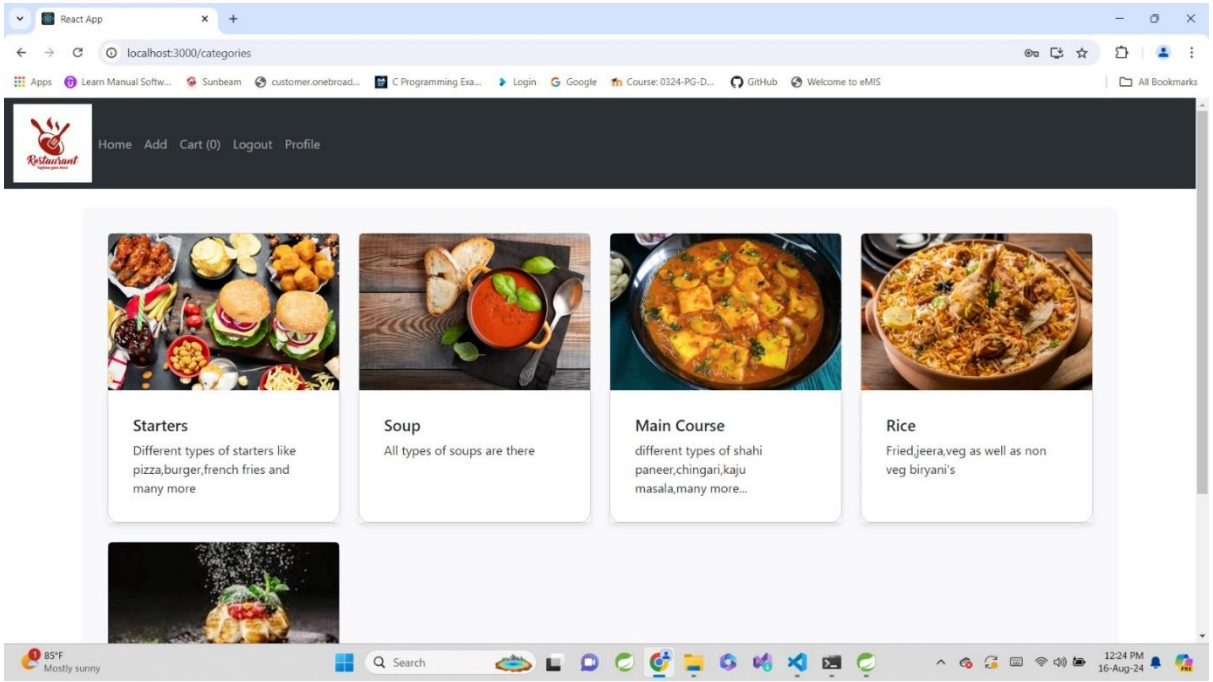
Register



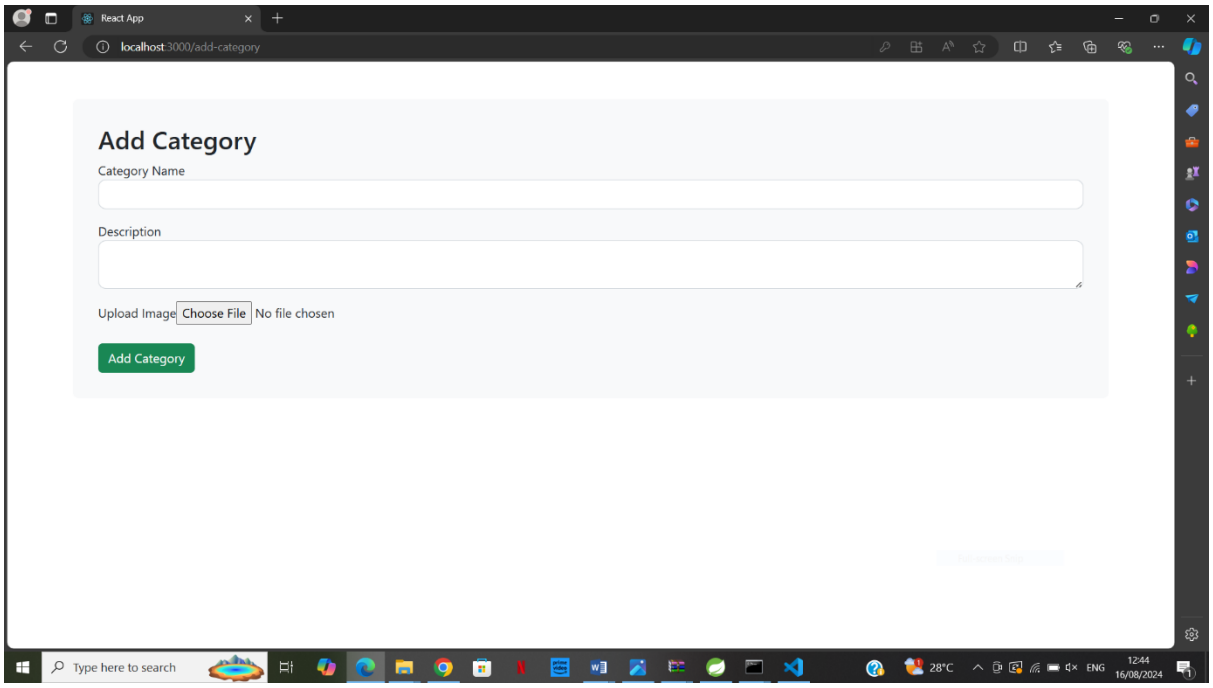
Login



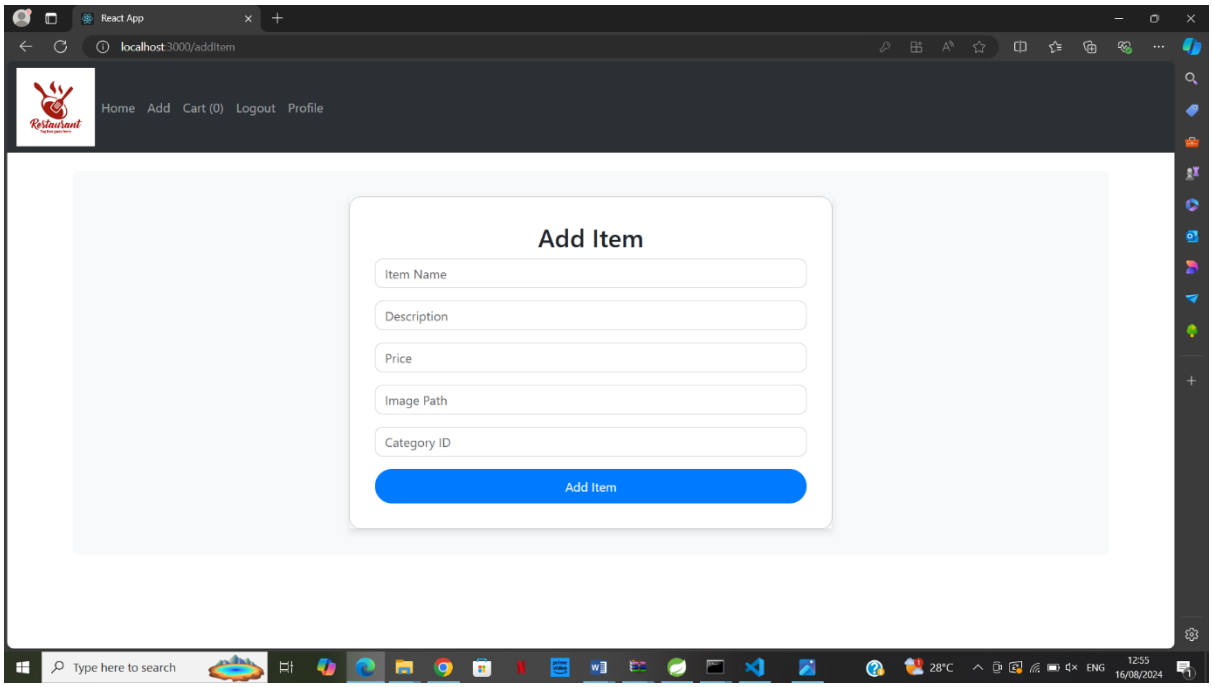
Homepage



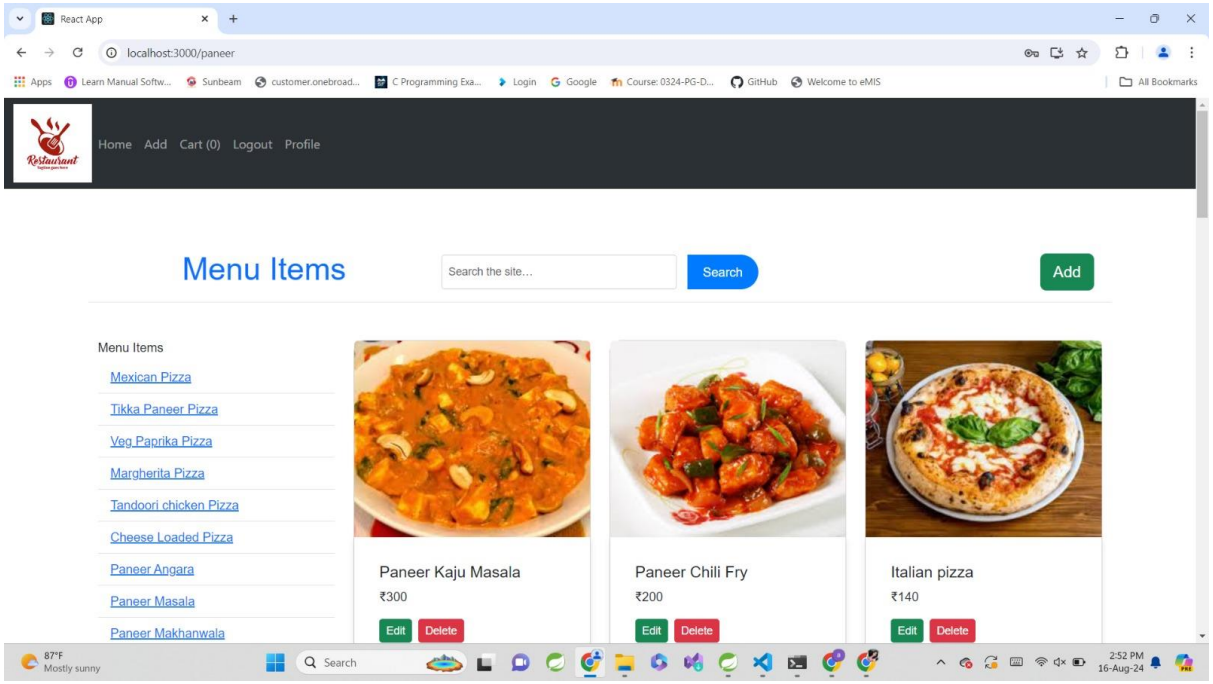
Category Add:

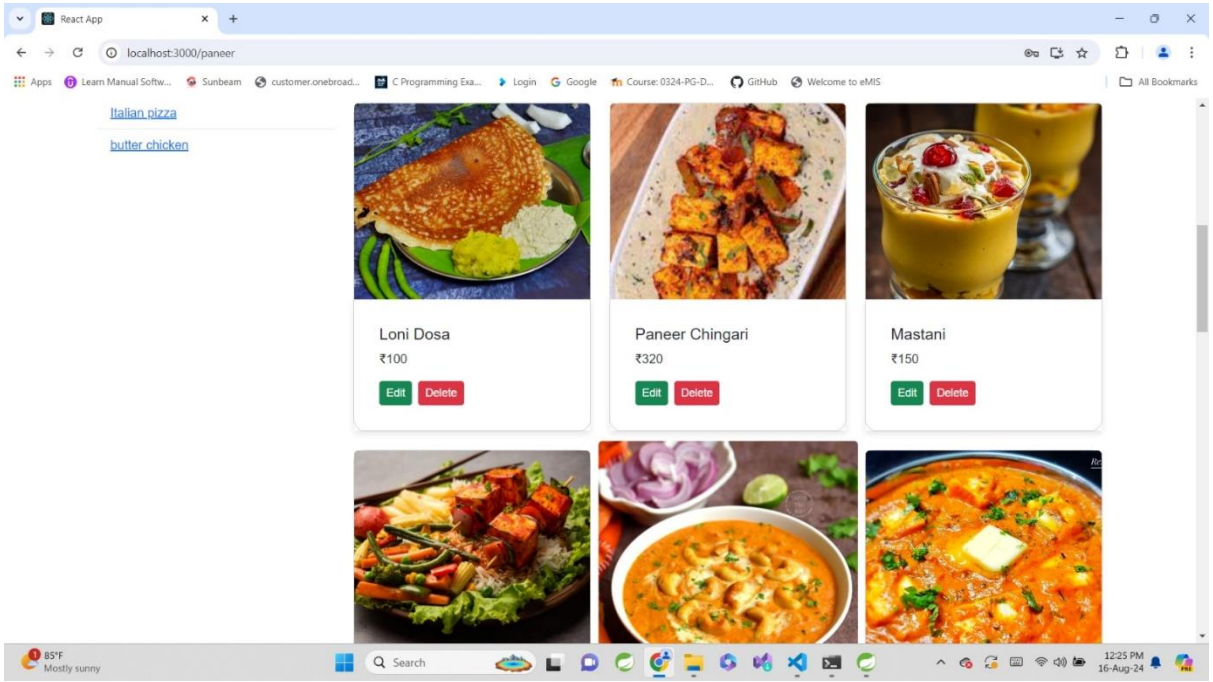


Item Add

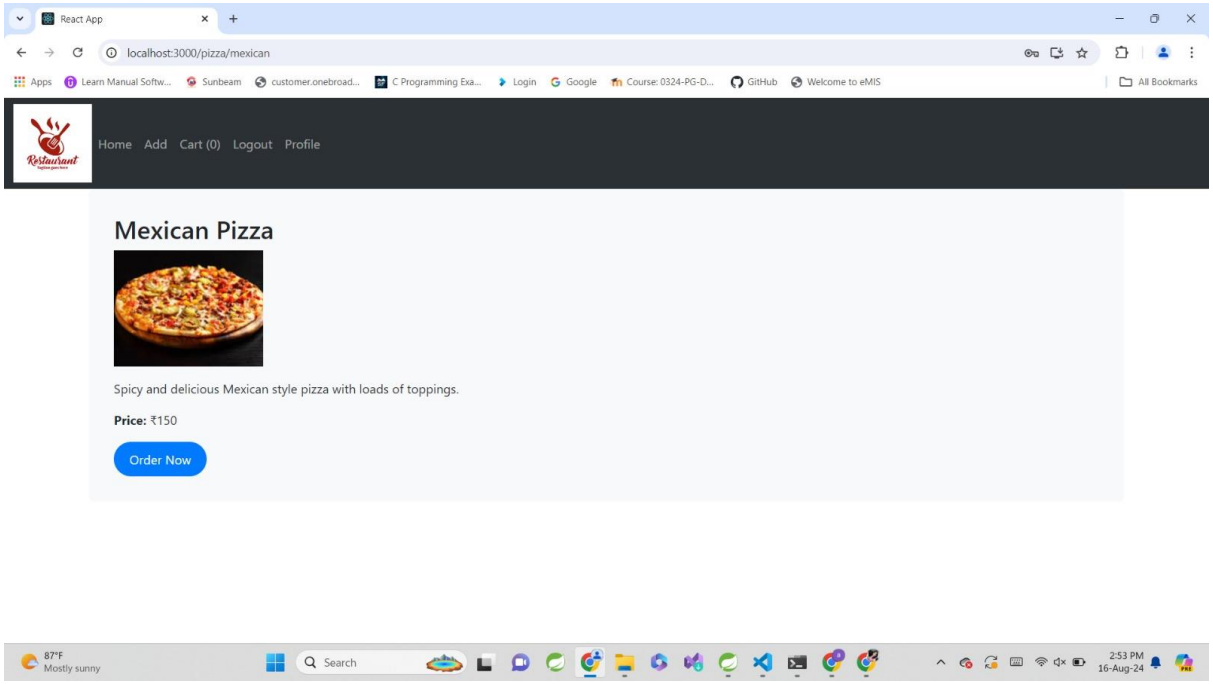


Items

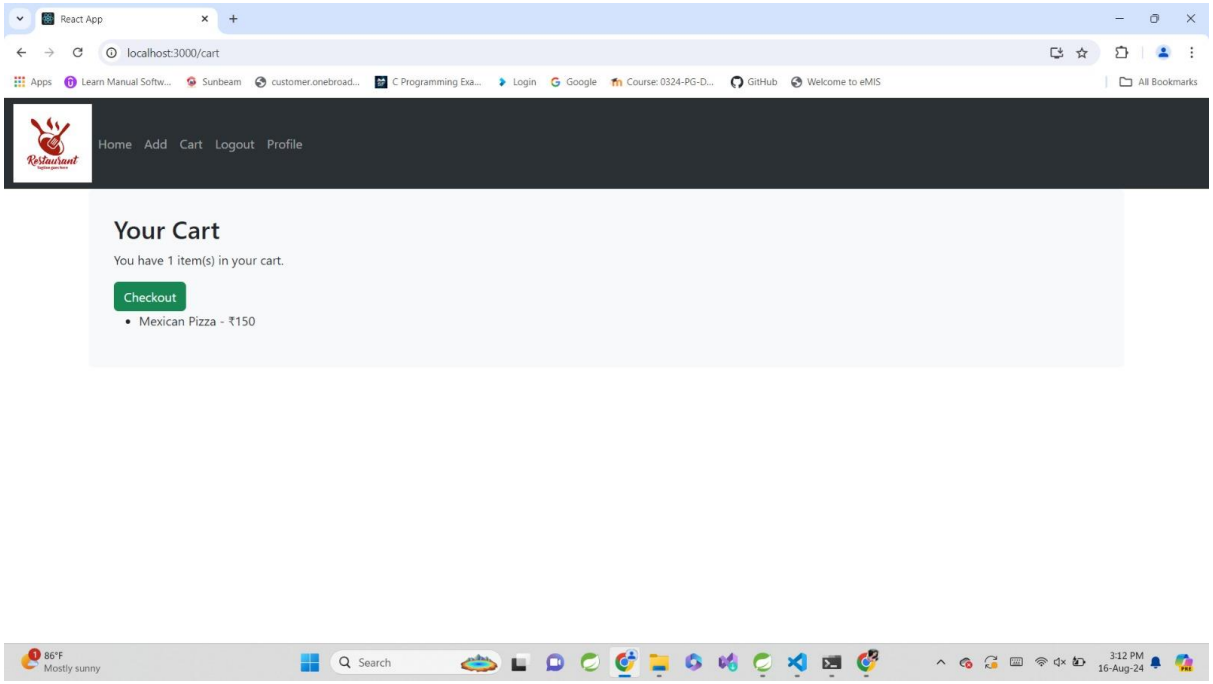

React App
localhost:3000/paneer
Home Add Cart (0) Logout Profile
Menu Items
Search the site...
Search
Add
Menu Items
Mexican Pizza
Tikka Paneer Pizza
Veg Paprika Pizza
Margherita Pizza
Tandoori chicken Pizza
Cheese Loaded Pizza
Paneer Angara
Paneer Masala
Paneer Makhanwala
Paneer Kaju Masala
₹300
Edit
Delete
Paneer Chili Fry
₹200
Edit
Delete
Italian pizza
₹140
Edit
Delete

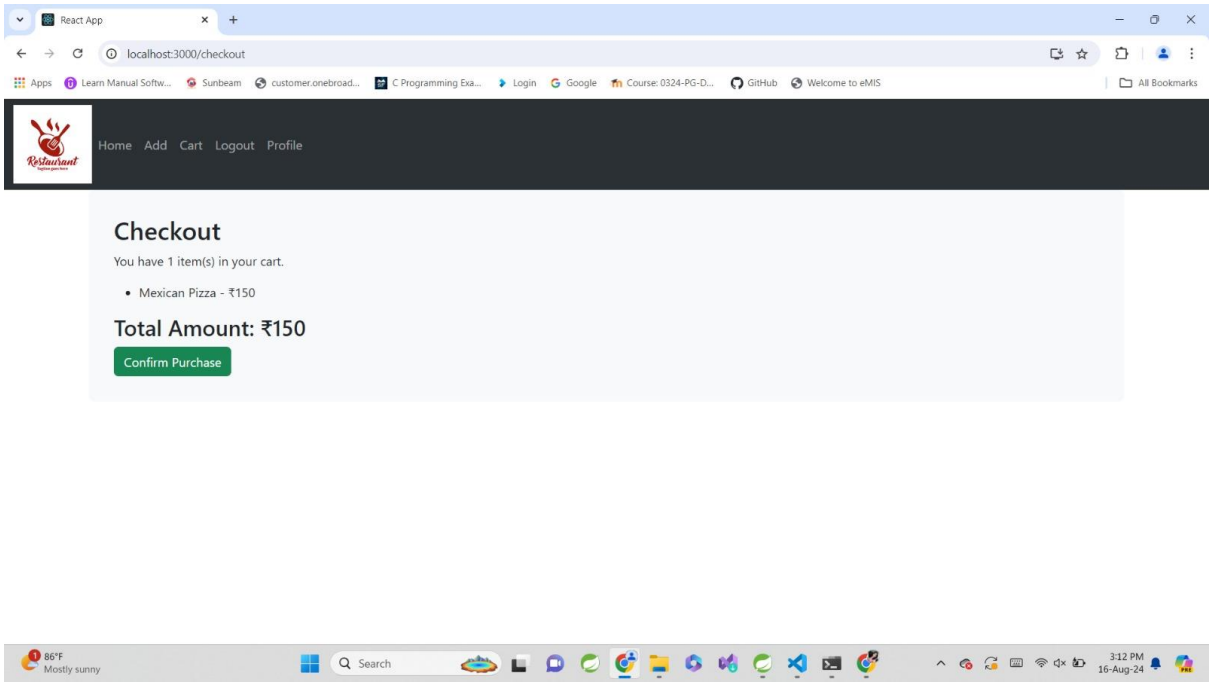

React App
localhost:3000/paneer
Italian pizza
butter chicken
Loni Dosa
₹100
Edit
Delete
Paneer Chingari
₹320
Edit
Delete
Mastani
₹150
Edit
Delete

Cart

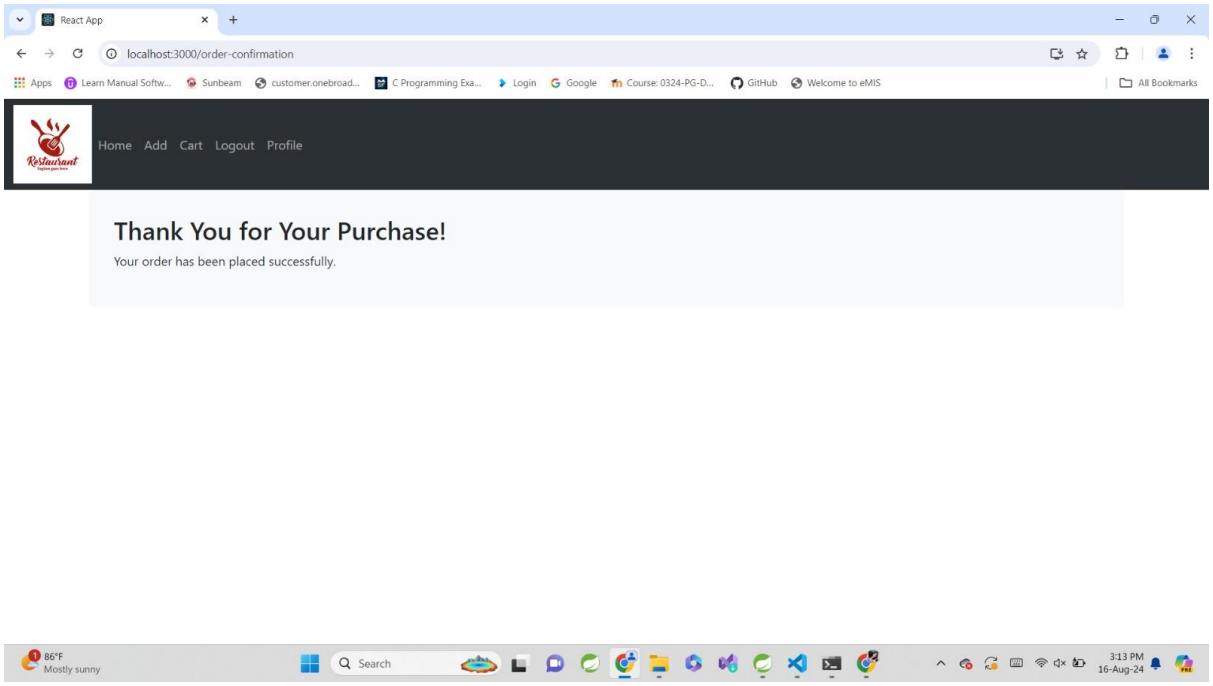

React App
localhost:3000/pizza/mexican
Home Add Cart (0) Logout Profile
Mexican Pizza
Spicy and delicious Mexican style pizza with loads of toppings.
Price: ₹150
Order Now

Order:

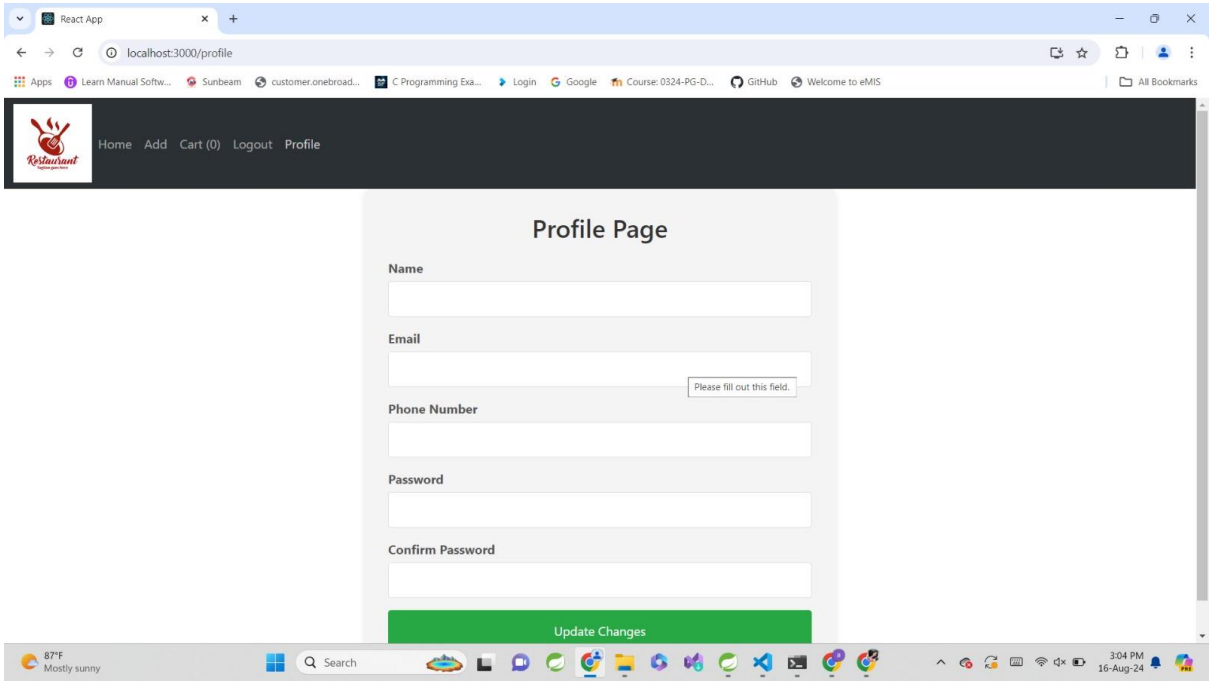

React App
localhost:3000/cart
Home Add Cart Logout Profile
Your Cart
You have 1 item(s) in your cart.
Checkout
Mexican Pizza - ₹150


React App
localhost:3000/checkout
Home Add Cart Logout Profile
Checkout
You have 1 item(s) in your cart.
Mexican Pizza - ₹150
Total Amount: ₹150
Confirm Purchase

Checkout:


React App
localhost:3000/order-confirmation
Home Add Cart Logout Profile
Thank You for Your Purchase!
Your order has been placed successfully.

Profile:


React App
localhost:3000/profile
Home Add Cart (0) Logout Profile
Profile Page
Name
Email
Please fill out this field.
Phone Number
Password
Confirm Password
Update Changes
87°F
Mostly sunny
Search
3:04 PM
16-Aug-24

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