FOOD ORDERING SYSTEM

JAMESHEPUR WORKER'COLLEGE

Vocational Department

Bachelors of Computer Application (BCA)

Session: 2021-24

Presented By-

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Reg no- ***KU2021033480***

Declaration

I, Ayush Kumar Yadav, a final year student of Bachelor of Computer Applications (BCA) at Jamshedpur Workers' College, hereby declare that the project titled "Food Ordering System" is my original work. This project has been completed under the guidance of Somnath Sir, in partial fulfillment of the requirements for the degree of Bachelor of Computer Applications.

I have undertaken this project with the objective of designing and developing a comprehensive online food ordering system that can cater to the needs of both customers and restaurant owners. This system is intended to streamline the process of ordering food, managing orders, and enhancing the overall efficiency of food delivery services.

Certificate of Approval

This is to certify that the project report entitled “Food Ordering System” submitted by Ayush Kumar Yadav and Jay Singh, final year students of Bachelor of Computer Applications (BCA) at Jamshedpur Workers’ College, has been approved as it fulfills the requirements for the degree of Bachelor of Computer Applications.

The project work has been carried out under the guidance and supervision of Somnath Sir, and it represents an authentic and original effort. The content and results presented in this project report are the product of the candidates' own work and research.

We hereby approve the project report as a significant contribution to the academic requirements for the BCA program.

(Head of department)

Vocational Department

Acknowledgement

I would like to express my sincere gratitude to everyone who has supported and guided me throughout the development of my final year project, “Food Ordering System.” This project would not have been possible without the assistance and encouragement of many individuals, and I am deeply appreciative of their contributions.

First and foremost, I extend my heartfelt thanks to my project supervisor, Somnath Sir, whose expert guidance, constructive feedback, and constant support have been invaluable throughout the project. His knowledge and experience have greatly enriched my understanding and helped me navigate through various challenges.

I am also grateful to the faculty members of the Department of Computer Applications at JWC for their continuous encouragement and for providing a stimulating academic environment. Their teaching has laid a strong foundation for my technical skills and knowledge, which were crucial in the successful completion of this project.

I would like to thank my peers and classmates for their collaboration and insightful discussions, which have been a great source of learning and inspiration. Their support and camaraderie have made this journey enjoyable and fulfilling.

Special thanks to the restaurant owners and customers who participated in the requirement analysis phase, providing valuable insights and feedback that helped shape the project to meet real-world needs.

I also wish to acknowledge my family and friends for their unwavering support and understanding. Their patience and encouragement have been a constant source of motivation for me.

I am deeply grateful to my project partner, Jay Singh, for his collaboration, hard work, and dedication throughout this project. His contributions have been crucial to the successful completion of the Food Ordering System.

Lastly, I would like to thank all the developers and contributors of the open-source technologies and frameworks that I utilized during this project. Their work has been instrumental in the development of the Food Ordering System.

Thank you all for your support, guidance, and encouragement.

Signature	Signature
(Internal Examiner)	(External Examiner)

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Introduction

The advent of the internet and the proliferation of smartphones have irrevocably altered the way we interact with businesses, including the food industry. The traditional model of physically visiting a restaurant to place an order has given way to a more convenient and efficient method: online food ordering. This project aims to develop a robust and user-friendly food ordering system that addresses the growing demand for digital dining experiences.

Problem Statement

Despite the increasing popularity of online food ordering, many existing systems suffer from limitations such as complex user interfaces, limited menu options, and inefficient order management. Additionally, there's a lack of integration with various payment gateways and delivery services, hindering a seamless user experience. This project seeks to rectify these issues by creating a comprehensive food ordering system that prioritizes user satisfaction, restaurant efficiency, and secure transactions.

This project, titled **“*Food Ordering System*,”** aims to develop a comprehensive and user-friendly online platform that facilitates the process of ordering food from restaurants. The system is designed to cater to the needs of both customers and restaurant owners, providing a seamless and efficient solution for managing food orders, payments, and deliveries

Objective

The primary goal of the Food Ordering System project is to design and develop a comprehensive online platform that facilitates the efficient and user-friendly process of ordering food from restaurants. This system aims to meet the needs of both customers and restaurant owners, providing a seamless experience from order placement to delivery.

The specific objectives of the project are as follows:

Enhance Customer Convenience:

- **User-Friendly Interface**: Develop an intuitive and easy-to-navigate interface that allows customers to browse restaurant menus, select items, and place orders with minimal effort.
- **Customizable Orders**: Enable customers to customize their orders according to their preferences, including special instructions for preparation.

Streamline Order Management for Restaurants:

- **Order Management Dashboard**: Develop an administrative dashboard for restaurant owners and staff to manage incoming orders, update menu items, and monitor order statuses.
- **Inventory Management**: Integrate inventory management features to help restaurants keep track of stock levels and reduce wastage.

Secure and Reliable Transactions:

- **User Authentication and Authorization**: Implement secure login mechanisms for both customers and restaurant owners to protect user accounts and data.
- **Secure Payment Gateway**: Integrate reliable and secure payment gateways to facilitate online transactions, ensuring the safety of customers' financial information.
- **Data Encryption**: Utilize encryption techniques to protect sensitive data such as personal information and payment details.

Customer Relationship Management (CRM): Collect and analyze customer data to enhance marketing efforts, personalize recommendations, and improve customer satisfaction.

Feasibility Analysis

1. Technical Feasibility

- **Technology Availability:** The required technologies for developing the system (web development frameworks, databases, payment gateways) are readily available and mature.
- **Team Expertise:** The project requires a team with skills in programming, database management, user interface design, and project management. The availability of such skills within the team or through external resources should be assessed.
- **System Complexity:** While the core functionalities of the system are relatively straightforward, integrating with various types of foods, payment gateways, and delivery services might introduce complexities. However, these challenges can be managed with careful planning and design.

2. Economic Feasibility

- **Development Costs:** The cost of developing the system, including hardware, software, and personnel expenses, needs to be estimated.
- **Revenue Generation:** The potential revenue streams from the system should be analyzed.

3. Operational Feasibility

- **User Acceptance:** The system should be user-friendly for both users. Conducting user testing and gathering feedback can help assess user acceptance.
- **System Integration:** The system needs to integrate with payment gateways, and delivery services. The feasibility of these integrations should be evaluated.
- **Support and Maintenance:** Plans for system support and maintenance after launch should be considered.

4. Schedule Feasibility

- **Project Timeline:** A realistic project timeline, including development, testing, and deployment phases, should be created.
- **Resource Allocation:** The availability of human and technical resources for the project should be assessed.
- **Potential Risks:** Potential risks that could impact the project timeline, such as technical challenges or resource constraints, should be identified.

Requirement Specification

1. Functional Requirements

User Registration and Authentication

- **User Registration:** The system should allow new users to register by providing necessary details such as name, email, contact number, and password.
- **User Login:** Registered users should be able to log in using their email and password.

Menu Management

- **Menu Display:** The system should display a list of available foods and their menus to customers.
- **Item Details:** Customers should be able to view detailed information about each menu item, including descriptions, prices, and images..

Order Management

- **Order Placement:** Customers should be able to select items, add them to a shopping cart, and place an order.

Payment Integration

- **Payment Options:** The system should support various payment methods, including credit/debit cards, online banking, and digital wallets.
- **Secure Transactions:** Payment processes should be secure, using encryption protocols to protect user data.

2. Non-Functional Requirements

Performance

- **Scalability:** The system should be scalable to handle a large number of simultaneous users without performance degradation.
- **Response Time:** The system should have a fast response time, with most transactions completing within a few seconds.

Compatibility

- **2.6.1 Browser Compatibility:** The system should be compatible with all major web browsers (Chrome, Firefox, Safari, Edge).
- **2.6.2 Device Compatibility:** The system should be responsive and work seamlessly on various devices, including desktops, tablets, and smartphones.

Design Phase

The design phase of the food ordering system focused on translating the system requirements into a concrete blueprint for implementation. This involved creating a robust architecture that effectively supports the system's functionalities, ensuring scalability, performance, and maintainability.

Key design considerations included:

- **User Interface (UI) and User Experience (UX) design:** Developing intuitive and visually appealing interfaces for both customers and restaurant owners.
- **Database schema design:** Creating an efficient and normalized database structure to store user, restaurant, menu, order, and payment information.
- **System architecture:** Defining the overall structure of the system, including components, modules, and their interactions.
- **Technology stack selection:** Choosing appropriate programming languages, frameworks, and tools for frontend and backend development.
- **Security and privacy considerations:** Implementing robust security measures to protect user data and prevent unauthorized access.
- **Integration with third-party services:** Designing interfaces for seamless integration with payment gateways, mapping APIs, and delivery services.

Through rigorous design and prototyping, the team developed a comprehensive system architecture that aligns with project objectives and user needs. The design phase laid the foundation for successful system implementation and testing.

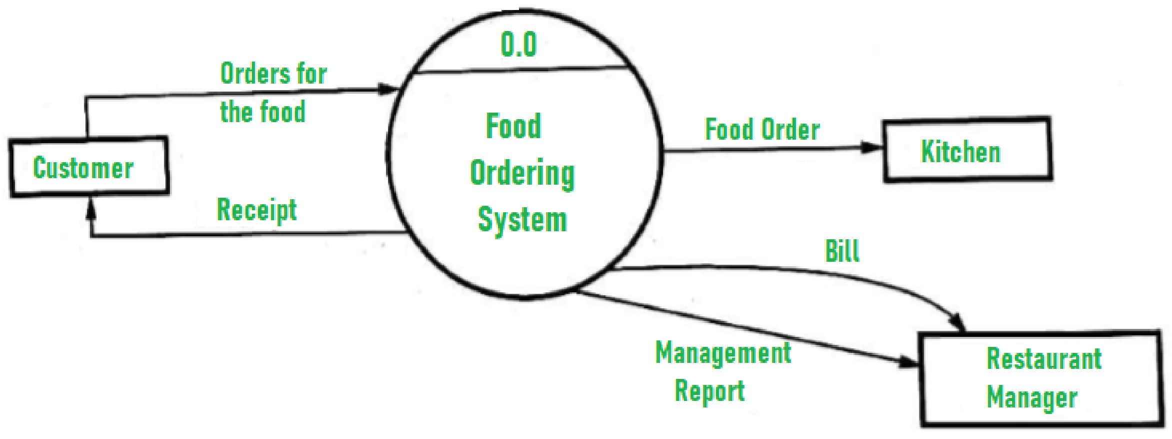
Data Flow Diagram

Let us understand the working of the food ordering system by using DFD (Data Flow Diagram). DFD for Food Ordering System is shown below.

Here, different levels of DFD are shown for Food Ordering System such as Level 0 DFD, Level 1 DFD, Level 2 DFD, and Level 3 DFD.

Level-0 DFD:

At this level, the Input and Output of the system are shown. The system is designed and established across the world with input and output at this level.



Level 0 DFD (Context Level

Food Ordering System has the following input:

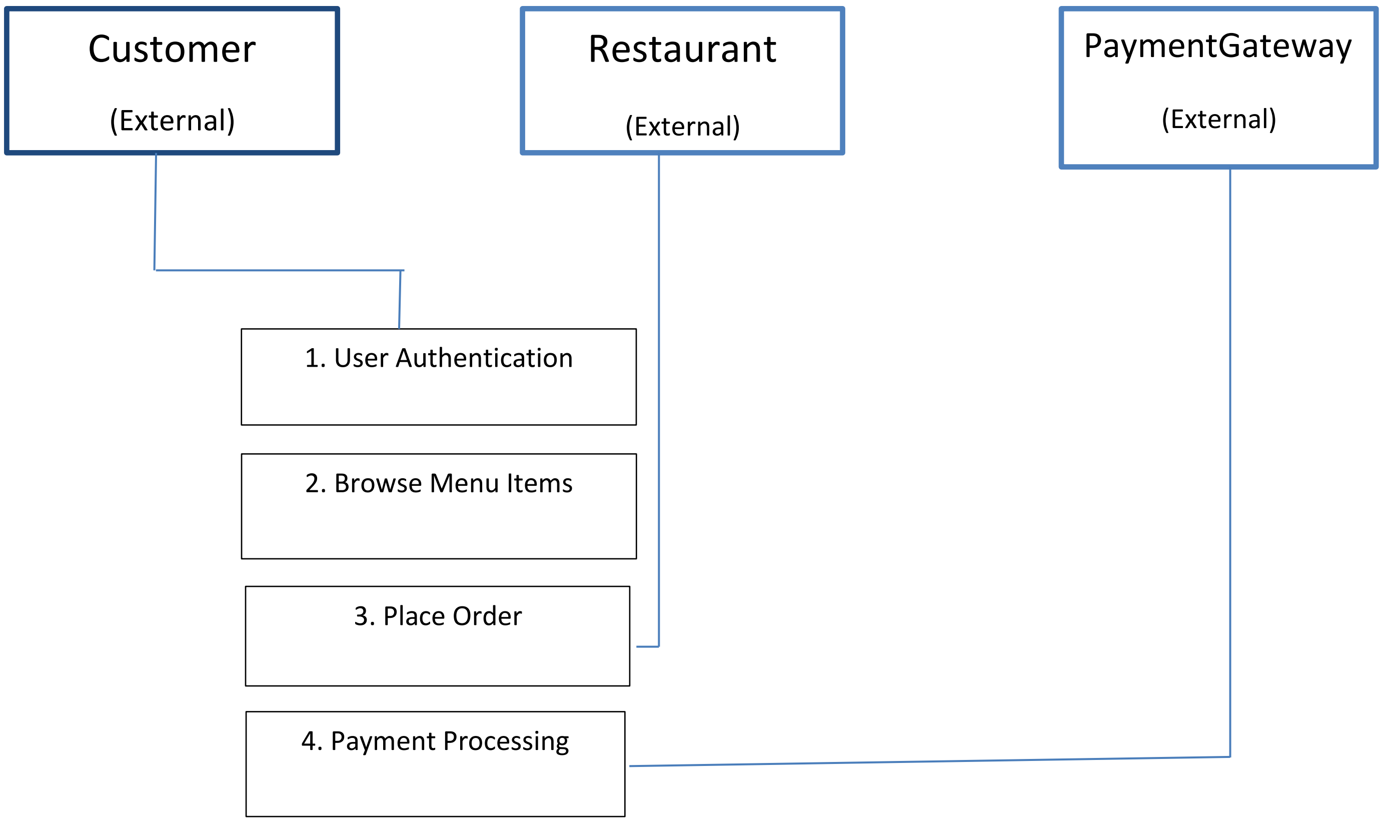
- Food order is input as the customer's order for food.

Food Ordering System has the following output:

- Receipt of the order.
- For further processing the order, the food order is passed to the kitchen.
- The restaurant manager gets the report of Bill and Management.

Level-1 DFD:

The Level 1 DFD provides more detail by breaking down the main process into subprocesses and showing data flows between them.



Data Stores:

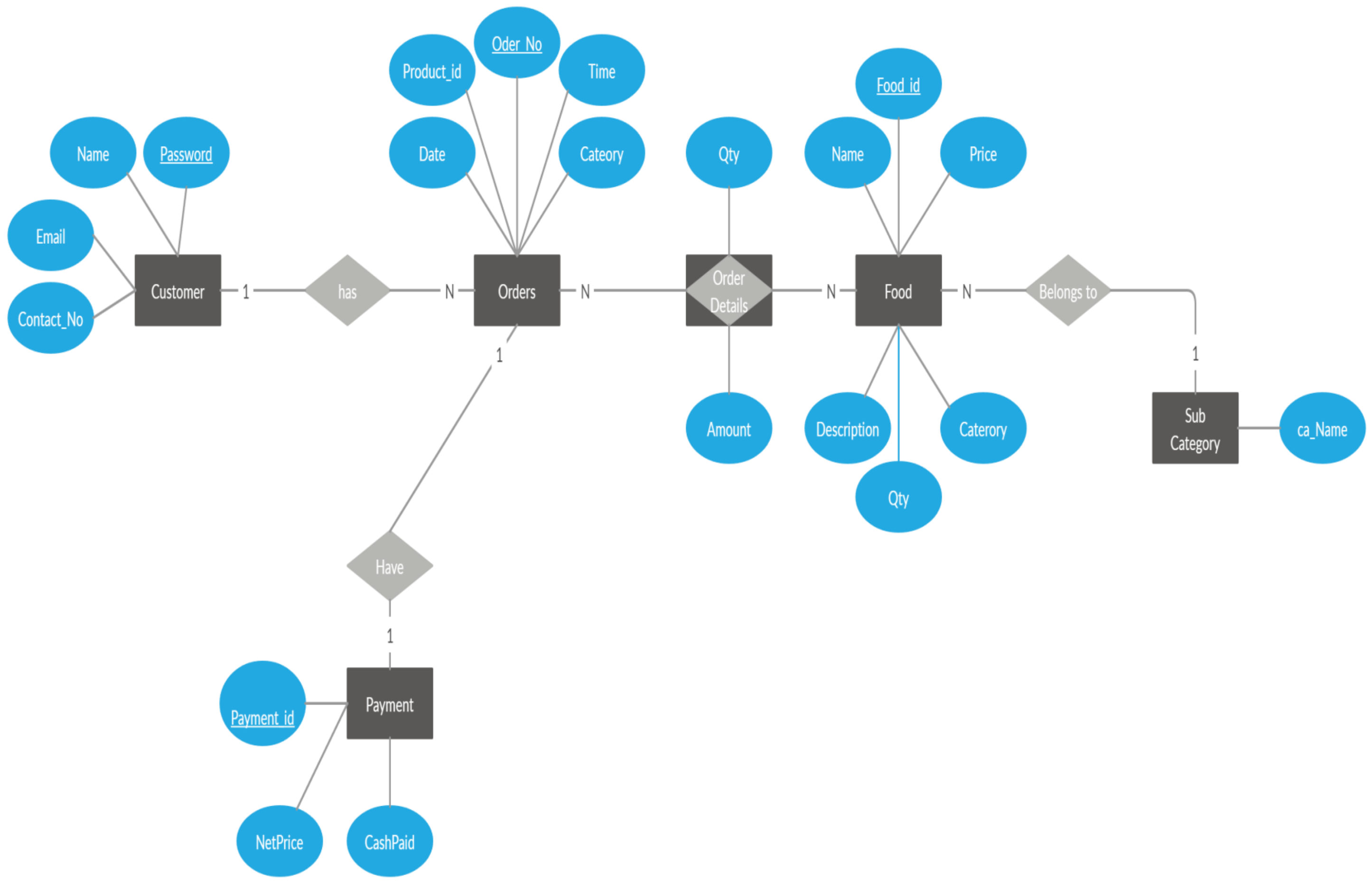
- Customer Information
- Restaurant Information
- Order Details
- Delivery Partner Details
- Payment Information

Level 2 DFD

If necessary, you can create a Level 2 DFD to further decompose the processes from Level 1. For instance, the "Order Management" process can be broken down into:

- Receive Order
- Assign Order
- Update Order Status

ER-Diagram



ER Diagram for Food Ordering System

Explanation of the Diagram

- **Entities:** Represented by rectangles.
- **Attributes:** Represented by ovals within entities.
- **Relationships:** Represented by lines connecting entities.
- **Cardinality:** Indicates the number of instances involved in a relationship (one-to-one, one-to-many, many-to-many).

Data Dictionary

Table- User

Column Name	Data Type	Description	Constraints
CustomerID	INT	Unique identifier for customer	Primary Key, Auto-increment
Name	VARCHAR(50)	Customer's full name	Not Null
Email	VARCHAR(100)	Customer's email address	Unique
PhoneNumber	VARCHAR(20)	Customer's phone number	
Address	VARCHAR(255)	Customer's address	

Table-Menus

Column Name	Data Type	Description	Constraints
MenuItemID	INT	Unique identifier for menu item	Primary Key, Auto-increment
MenuID	INT	Foreign key referencing Menus	
Name	VARCHAR(100)	Name of the menu item	Not Null
Price	DECIMAL(10,2)	Price of the menu item	
Category	VARCHAR(20)	Category of menu	Null Null

Table-Orders

Column Name	Data Type	Description	Constraints
OrderID	INT	Unique identifier for order	Primary Key, Auto-increment
CustomerID	INT	Foreign key referencing Customers	
FoodID	INT	Food Unique ID	Not Null
OrderDate	DATE	Date and Time of the order	Not Null
Quantity	INT	Quantity of Food	Not Null
FoodName	VARCHAR(30)	Name of the Food	Not Null
Category	VARCHAR(30)	Category of the food	Not Null
TotalPrice	INT	Total Price of the Food	Not Null
Payment	BOOLEAN	Payment Details	Not Null

Table-Admin

Column Name	Data Types
Username	**VARCHAR(30)**
Password	**VARCHAR(30)**

Code & UI-Interface

A Food Ordering App

- **UI:** The app has a homepage with featured restaurants, a search bar, and categories. Users can browse menus, add items to a cart, and proceed to checkout.
- **Code:**
    - **Frontend:** Uses React to build the interactive UI components.
    - **Backend:** Uses Node.js and Express to handle user requests, database interactions, and API calls.
    - **Database:** Uses MongoDB to store menu, payment, and order data.

Index.html

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <link rel="icon" type="image/svg+xml" href="/vite.svg" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Admin Panel</title>
  </head>
  <body>
    <div id="root"></div>
    <script type="module" src="/src/main.jsx"></script>
  </body>
</html>
```

This is a basic HTML structure for a web application.

It sets up the foundation for an admin panel. The <head> section defines metadata like character encoding, favicon, viewport for responsive design, and page title. The <body> contains a div with the id "root", which is likely where the main application content will be rendered by a JavaScript framework, and a script tag importing the main JavaScript file (src/main.jsx) for the application's logic.

Main.jsx

```
import React from 'react'
import ReactDOM from 'react-dom/client'
import App from './App.jsx'
import './index.css'
import { BrowserRouter } from 'react-router-dom';

ReactDOM.createRoot(document.getElementById('root')).render(
 <BrowserRouter>
    <App />
 </BrowserRouter>,
)
```

This code sets up a React application.

It imports necessary libraries for React, ReactDOM, and routing. The `App` component is imported as the main application component. The code then creates a React root element in the HTML element with the id "root" and renders the `App` component wrapped in a `BrowserRouter` for routing within the application. Essentially, this code initializes the React application and prepares it to be displayed on the webpage.

App.jsx

```
import React from 'react'
import Navbar from './components/Navbar/Navbar';
import Sidebar from './components/Sidebar/sidebar';
import {Routes, Route} from 'react-router-dom';
import List from './Pages/List/List';
import Orders from './Pages/Orders/Orders'
import Add from './Pages/Add/Add'
import { ToastContainer } from 'react-toastify';
import 'react-toastify/dist/ReactToastify.css';

function App() {

  const url="http://localhost:4000";

  return (
    <div>
      <ToastContainer/>
      <Navbar/>
      <hr/>
      <div className="app-content">
        <Sidebar/>
        <Routes>
            <Route path="/add" element={<Add url={url} />}/>
            <Route path="/list" element={<List url={url} />}/>
            <Route path="/orders" element={<Orders url={url} />}/>
        </Routes>
      </div>
    </div>
  )
}
export default App
```

This code defines the main structure of a React application for an admin panel.

It imports necessary components like Navbar, Sidebar, and pages for List, Orders, and Add. It also includes a library for handling notifications (ToastContainer).

The `App` function creates the overall layout:

- Displays a notification area (ToastContainer).
- Shows a Navbar at the top.
- Creates a main content area with a Sidebar on the left and different page content (List, Orders, or Add) based on the URL using Routes.
- Defines a base URL for API calls.

Essentially, this code sets up the basic framework for an admin panel with navigation, content display, and notification handling.

The code behind the "Navbar" button:

Navbar.jsx

```
import React from 'react';
import './Navbar.css';
import {assets} from '../../assets/assets'

function Navbar() {
  return (
    <div className='navbar'>
        <img className='logo' src={assets.logo} alt="" />
        <img className='profile' src={assets.profile_image} alt="" />
    </div>
  )
}

export default Navbar
```

Creates Navbar component with logo and profile images.

Sidebar.jsx

```
import React from 'react';
import './sidebar.css'
import { NavLink } from 'react-router-dom';
import { assets } from '../../assets/assets';

export const sidebar = () => {
  return (
    <div className='sidebar'>
        <div className="sidebar-options">
          <NavLink to='/add'
          className="sidebar-option">
            <img src={assets.add_icon} alt="" />
            <p>Add Items</p>
          </NavLink>
          <NavLink to='/list' className="sidebar-option">
            <img src={assets.order_icon} alt="" />
            <p>List Items</p>
          </NavLink>
          <NavLink to='/orders' className="sidebar-option">
            <img src={assets.order_icon} alt="" />
            <p>Orders</p>
          </NavLink>
        </div>
    </div>
)}
export default sidebar;
```

Side.css

```
.sidebar{
    width: 18%;
    min-height: 100vh;
    border: 1.5px solid #a9a9a9;
    border-top: 0;
    font-size: max(1vw, 10px)}
.sidebar-options{
    padding-top: 50px;
    padding-left: 20%;
    display: flex;
    flex-direction: column;
    gap: 20px}
.sidebar-option{
    display: flex;
    align-items: center;
    gap: 12px;
    border: 1px solid #a9a9a9;
    border-right: 0;
    padding:  8px 10px;
    border-radius: 3px 0px 0px 3px;
    cursor: pointer}
.sidebar-option .active{
    background-color: #fff0ed;
    border-color: tomato}

@media (max-width: 900px){
    .sidebar-option p{display: none}
}
```

Creates a sidebar component with navigation links.

- Imports necessary modules for styling, routing, and image assets.
- Defines a sidebar with multiple navigation links.
- Each link has an icon and text for Add Items, List Items, and Orders.
- Uses `NavLink` for active link styling.
- Exports the sidebar component for use in other parts of the application.

Pages

1.Add.jsx

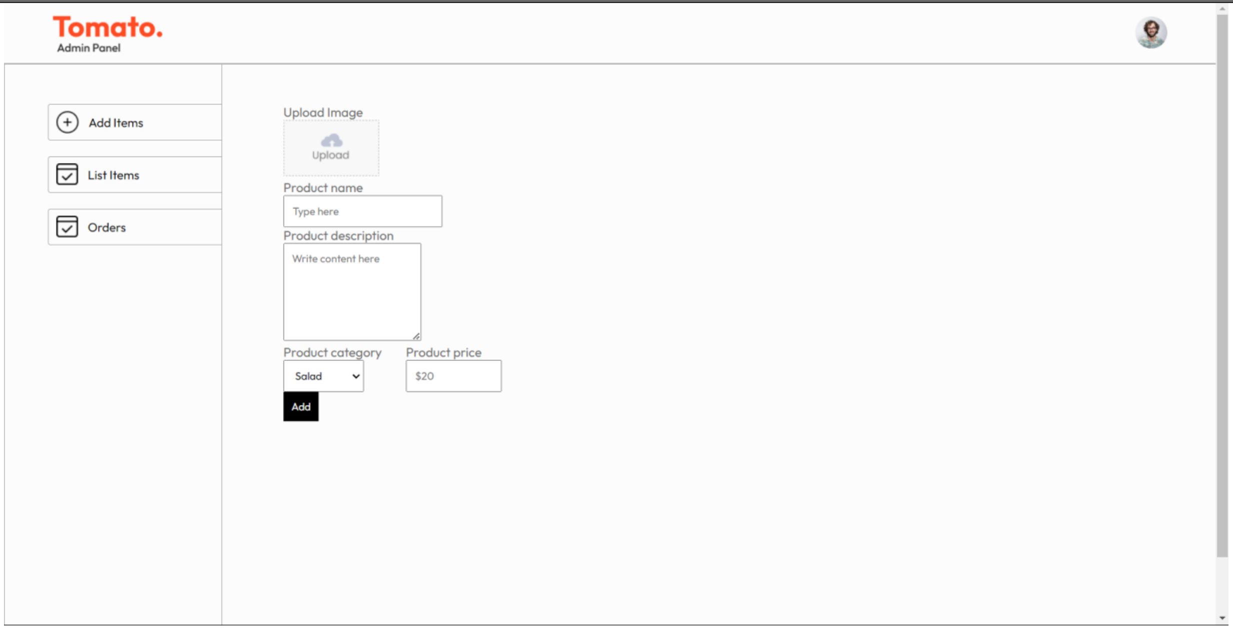
```
import React, { useState } from "react";
import "./Add.css";
import { assets } from "../../assets/assets";
import axios from 'axios';
import { toast } from "react-toastify";

function Add({url}) {
  const [image, setImage] = useState(false);
  const [data, setData] = useState({
    name: "",
    description: "",
    price: "",
    category: "Salad" })
  const onChangeHandler = (event) =>{
    const name=event.target.name;
    const value= event.target.value;
    setData(data=>({...data,[name]:value}));
  }
  const onSubmitHandler = async (event) =>{
        event.preventDefault();
        const formData = new FormData();
        formData.append("name", data.name)
        formData.append("description", data.description)
        formData.append("price", Number(data.price))
        formData.append("category", data.category)
        formData.append("image", image)
        const response = await axios.post(`${url}/api/food/add`, formData);
        if(response.data.success){
            setData({
                name: "",
                description: "",
                price: "",
                category: "Salad"
        })
        setImage(false);
        toast.success(response.data.message);
        }
        else{
            toast.error(response.data.message);
        }
  }
  return (
    <div className="add">
      <form className="flex-col" onSubmit={onSubmitHandler}>
        <div className="add-img-upload">
```

```
           <p>Upload Image</p>
           <label htmlFor="image">
             <img
               src={image ? URL.createObjectURL(image) : assets.upload_area}
               alt=""
             />
           </label>
           <input
             onChange={(e) => setImage(e.target.files[0])} type="file" id="image" hidden
required/> </div>
         <div className="add-product-name flex-col">
           <p>Product name</p>
           <input onChange={onChangeHandler} value={data.name} type="text" name="name"
placeholder="Type here" />
         </div>
         <div className="add-product-description flex-col">
           <p>Product description</p>
           <textarea onChange={onChangeHandler} value={data.description} name="description"
rows="6" placeholder="Write content here" required></textarea>
      <div className="add-category-price">
          <div className="add-category flex-col">
          <p>Product category</p>
          <select name="category" onChange={onChangeHandler}>
            <option value="Salad">Salad</option>
            <option value="Rolls">Rolls</option>
            <option value="Deserts">Deserts</option>
            <option value="Sandwich">Sandwich</option>
            <option value="Cake">Cake</option>
            <option value="Pure Veg">Pure Veg</option>
            <option value="Pasta">Pasta</option>
            <option value="Noodles">Noodles</option></select>
    </div>
             <div className="add-price flex-col">
               <p>Product price</p>
               <input onChange={onChangeHandler} value={data.price} type="Number" name="price"
placeholder="$20"/>
   </div> </div> </div>
         <button type="submit" className="add-btn">Add</button>
 </form> </div>
  );}
export default Add;
```

App.css

```
.add{
    width: 70%;
    margin-left: max(5vw, 25px);
    margin-top: 50px;
    color: #6d6d6d;
    font-size: 16px;}
```

```css
.add form{
    gap: 20px;}
.add-img-upload img{
    width: 120px;}
.add-product-name, .add-product-description{
    width: max(40%, 280px);}
.add-product-name input, .add-product-description textarea{
    padding: 10px;}
.add-category-price{
    display: flex;
    gap: 30px;}
.add-category-price select, .add-category-price input{
    max-width: 120px;
    padding: 10px;}
.add-btn{
    max-width: 120px;
    border: none;
    padding: 10px;
    background-color: black;
    color: white;
    cursor: pointer;}
```



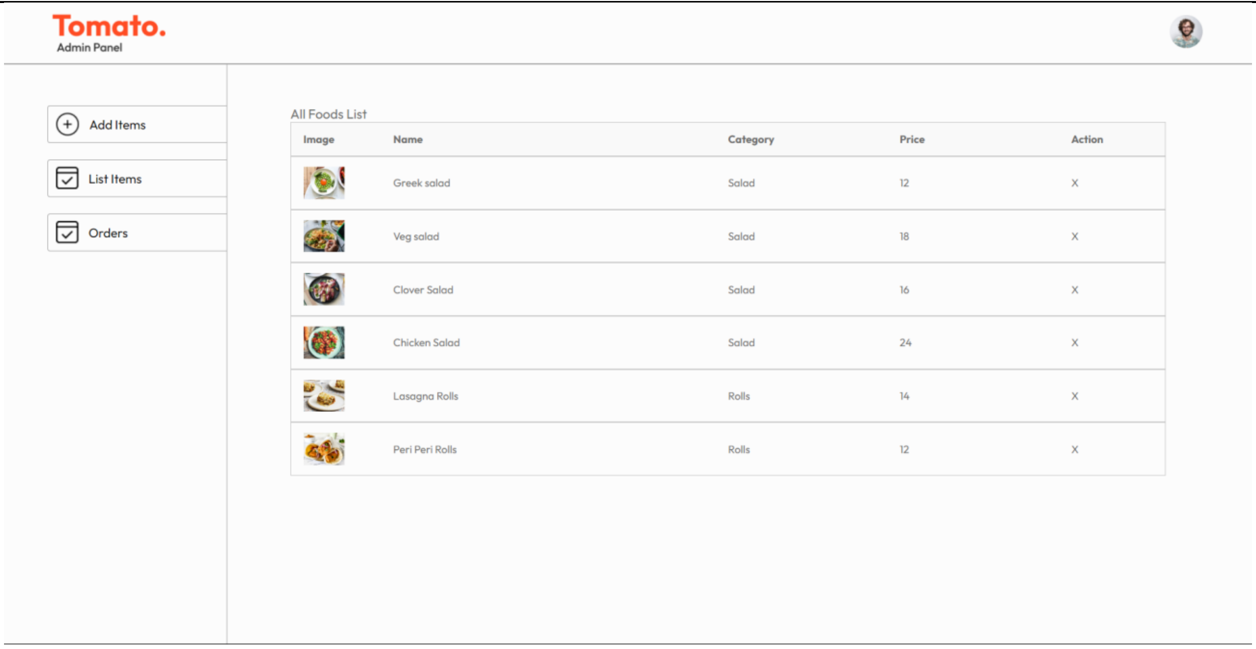
Add Form

2. List.asp

```javascript
import React, { useEffect, useState } from 'react';
import './List.css';
import axios from "axios";
import {toast} from "react-toastify";
function List({url}) {
    const [list, setList] = useState([]);
    const fetchList = async () =>{
        const response = await axios.get(`${url}/api/food/list`);
        console.log(response.data);
        if(response.data.success){
            setList(response.data.data);
        }
        else{
            toast.error("Error");
        }}
    const removeFood = async(foodId) =>{
        const response = await axios.post(`${url}/api/food/remove`, {id:foodId})
        await fetchList();
        if(response.data.success){
            toast.success(response.data.message)}
        else{
            toast.error("Error");}
    }
    useEffect(()=>{
        fetchList();
    },[])
  return (
    <div className='list add flex-col'>
        <p>All Foods List</p>
        <div className="list-table">
            <div className="list-table-format title">
                <b>Image</b>
                <b>Name</b>
                <b>Category</b>
                <b>Price</b>
                <b>Action</b>
            </div>
            {list.map((item, index)=>{
                return (
                    <div key={index} className='list-table-format'>
                        <img src={`${url}/images/`+item.image} alt="" />
                        <p>{item.name}</p>
                        <p>{item.category}</p>
                        <p>{item.price}</p>
                        <p onClick={()=> removeFood(item._id)} className='cursor'>X</p>
                    </div>
                )
            })}
        </div>
    </div>
  )
}
export default List
```

List.css

```css
.list-table-format{
    display: grid;
    grid-template-columns: 0.5fr 2fr 1fr 1fr 0.5fr;
    align-items: center;
    gap: 10px;
    padding: 12px 15px;
    border: 1px solid #cacaca;
    font-size: 13px;
}
.list-table-format.title{
    background-color: #f9f9f9f9;

}
.list-table-format img{
    width: 50px;
}
.cursor{
    cursor: pointer;
}
@media(max-width: 600px){
    .list-table-format{
        grid-template-columns: 1fr 3fr 1fr;
        gap: 15px;
    }
    .list-table-format.title{
        display: none;
    }
}
```



All Foods List

Image	Name	Category	Price	Action
	Greek salad	Salad	12	x
	Veg salad	Salad	18	x
	Clover Salad	Salad	16	x
	Chicken Salad	Salad	24	x
	Lasagna Rolls	Rolls	14	x
	Peri Peri Rolls	Rolls	12	x

List Form

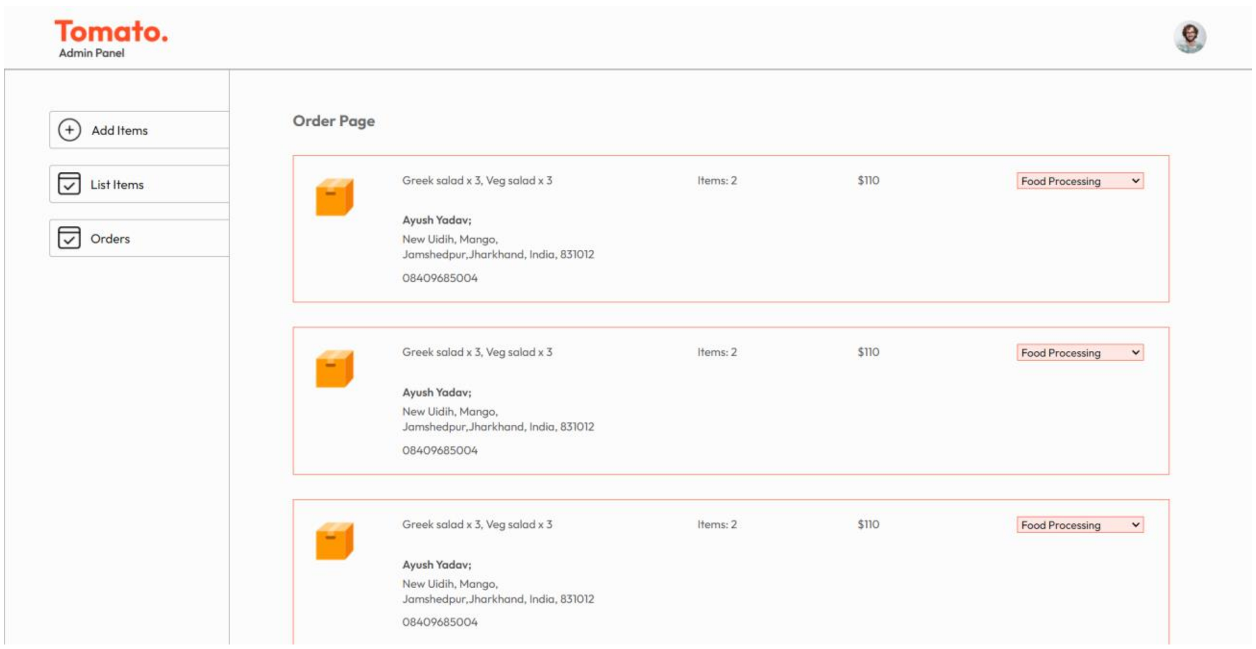
3. Order Form

Order.jsx

```
import React, { useEffect, useState } from 'react';
import './Orders.css';
import axios from 'axios';
import {toast} from "react-toastify";
import { assets } from '../../assets/assets';

function Orders({url}) {
  const [orders, setOrders] = useState([]);
  const fetchAllOrders = async() =>{
    const response = await axios.get(url+"/api/order/list");
    if(response.data.success){
      setOrders(response.data.data);
      console.log(response.data.data);
    }else{
      toast.error("Error");
    }
  }
  useEffect(()=>{
    fetchAllOrders();
  },[])
  return (
    <div className='order add'>
      <h3>Order Page</h3>
      <div className="order-list">
        {orders.map((order, index)=>(
          <div key={index} className="order-item">
            <img src={assets.parcel_icon} alt="" />
            <div className="">
              <p className='order-item-food'>
                {order.items.map((item, index)=>{
                  if (index===order.items.length-1) {
                    return item.name + " x "+item.quantity
                  }
                  else{
                    return item.name +" x " +item.quantity + ", "
                  }
                })}
              </p>
              <p className='order-item-name'>
                {order.address.firstName+ " "+order.address.lastName};
              </p>
                <div className="order-item-address">
                  <p>{order.address.street+","}</p>
                  <p>{order.address.city+","+order.address.state+",
"+order.address.country+", "+order.address.zipcode}</p>
                </div>
                <p className='order-item-phone'>{order.address.phone}</p>

            </div>
            <p>Items: {order.items.length}</p>
            <p>${order.amount}</p>
            <select>
              <option value='Food Processing'>Food Processing</option>
              <option value='Out For Delivery'>Out For Delivery</option>
              <option value='Deliver'>Deliver</option>
            </select>
          </div>
        ))}
      </div>
    </div>
  )
}
export default Orders
```

Order.css

```
.order-item{
    display: grid;
    grid-template-columns: 0.5fr 2fr 1fr 1fr 1fr;
    align-items: start;
    gap: 30px;
    border: 1px solid tomato;
    padding: 20px;
    margin: 30px 0px;
    font-size: 14px;
    color: #505050;
}
.order-item food, .order-item-name{
    font-weight: 600;
}
.order-item-name{
    margin-top: 30px;
    margin-bottom: 5px;
}
.order-item-address{
    margin-bottom: 10px;
}
.order-item select{
    background-color: #ffe8e4;
    border: 1px solid tomato;
    width: max(10vw, 120px);
    outline: none;
}
@media(max-width: 1000px){
    .order-item{
        font-size: 12px;
        grid-template-columns: 0.5fr 2fr 1fr;
        padding: 15px 8px;
    }
    .order-item select{
        padding: 5px;
        font-size: 12px;
    }
    .order-item img{
        width: 40px;}}
```



Greek salad x 3, Veg salad x 3 Items: 2 $110

Ayush Yadav;
New Uidih, Mango,
Jamshedpur,Jharkhand, India, 831012
08409685004

Greek salad x 3, Veg salad x 3 Items: 2 $110

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Jamshedpur,Jharkhand, India, 831012
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Greek salad x 3, Veg salad x 3 Items: 2 $110

Ayush Yadav;
New Uidih, Mango,
Jamshedpur,Jharkhand, India, 831012
08409685004

Order Form

FrontEnd

Index.html

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <link rel="icon" type="image/svg+xml" href="/vite.sv" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Food Ordering System</title>
  </head>
  <body>
    <div id="root"></div>
    <script type="module" src="/src/main.jsx"></script>
  </body>
</html>
```

Explanation:

- Basic HTML structure with head and body sections.
- Title set to "Food Order".
- `div` with id "menu" to display food items.
- `div` with id "order" to display order summary.
- Empty script tag for JavaScript logic.

App.jsx

```
import React, { useState } from 'react';
import Navbar from './components/Navbar/Navbar';
import { Route,Routes } from 'react-router-dom';
import PlaceOrder from './pages/PlaceOrder/PlaceOrder';
import Cart from './pages/Cart/Cart';
import Home from './pages/Home/Home';
import Footer from './Footer/Footer';
import { AppDownload } from './components/AppDownload/AppDownload';
import LoginPopup from './components/LoginPopup/LoginPopup';
import { Verify } from './pages/Verify/Verify';

function App() {

  const [showLogin, setShowLogin ] = useState(false);

  return (
    <>
    {showLogin?<LoginPopup setShowLogin={setShowLogin}/>:<></>}
    <div className='app'>
      <Navbar setShowLogin={setShowLogin}/>
      <Routes>
        <Route path='/' element={<Home/>}/>
        <Route path="/cart" element={<Cart/>}/>
        <Route path="/order" element={<PlaceOrder/>}/>
        <Route path="/verify" element={<Verify/>}/>
      </Routes>
    </div>
    <AppDownload/>
    <Footer/>
    </>
  )
}
export default App;
```

App.css

```css
#root {
  max-width: 1280px;
  margin: 0 auto;
  padding: 2rem;
  text-align: center;
}
.logo {
  height: 6em;
  padding: 1.5em;
  will-change: filter;
  transition: filter 300ms;
}
.logo:hover {
  filter: drop-shadow(0 0 2em #646cffaa);
}
.logo.react:hover {
  filter: drop-shadow(0 0 2em #61dafbaa);
}
@keyframes logo-spin {
  from {
    transform: rotate(0deg);
  }
  to {
    transform: rotate(360deg);
  }
}
@media (prefers-reduced-motion: no-preference) {
  a:nth-of-type(2) .logo {
    animation: logo-spin infinite 20s linear;
  }
}
.card {
  padding: 2em;
}
.read-the-docs {
  color: #888;
}
```

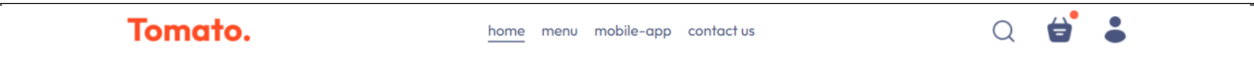
Navbar.jsx

```jsx
import React, { useState, useContext } from 'react'
import './Navbar.css';
import { assets} from '../../assets/assets';
import {Link, useNavigate} from 'react-router-dom';
import { StoreContext } from '../../Context/StoreContext';
function Navbar({setShowLogin}) {
  const [menu, setMenu]= useState("home");
  const {getTotalCartAmount, token, setToken} = useContext(StoreContext);
  const navigate = useNavigate();
  const logout = () =>{
        localStorage.removeItem("token");
        setToken("");
        navigate("/")
  }
  return (
    <div className='navbar'>
      <Link to="/"><img src={assets.logo} alt="" className='logo'/></Link>
      <ul className="navbar-menu">
        <li onClick={()=>setMenu("home")} className={menu==="home"?"active":""}>home</li>
        <li onClick={()=>setMenu("menu")} className={menu==="menu"?"active":""}>menu</li>
        <li onClick={()=>setMenu("mobile-app")} className={menu==="mobile-
app"?"active":""}>mobile-app</li>
        <li onClick={()=>setMenu("contact-us")} className={menu==="contact-
us"?"active":""}>contact us</li>
      </ul>
      <div className="navbar-right">
        <img src={assets.search_icon} alt="" />
        <div className="navbar-search-icon">
         <Link to="./cart"> <img src={assets.basket_icon} alt="" /></Link>
          <div className={getTotalCartAmount===0?"":"dot"}></div>
        </div>
        {!token?<button onClick={()=> setShowLogin(true)}>Sign In</button>
        : <div className='navbar-profile'>
            <img src={assets.profile_icon} alt="" />
            <ul className="nav-profile-dropdown">
              <li><img src={assets.bag_icon} alt="" /><p>Orders</p></li>
              <hr />
              <li onClick={logout}><img src={assets.logout_icon} alt="" /><p>Logout</p></li>
            </ul>
          </div>
          }

      </div>
    </div>
  )
}
export default Navbar
```

Navbar.css

```
.navbar{
    padding: 20px 0px;
    display: flex;
    justify-content: space-between;
    align-items: center;
}
.navbar .logo{
```

```css
    width: 150px;
}
.navbar-menu{
    display: flex;
    list-style: none;
    gap: 20px;
    color: #49557e;
    font-size: 18px;
    cursor: pointer;
}
.navbar-right{
    display: flex;
    align-items: center;
    gap: 40px;
}
.navbar button{
    background: transparent;
    font-size: 16px;
    color: #49557e;
    border: 1px solid tomato;
    padding: 10px 30px;
    cursor: pointer;
    border-radius: 50px;
    transition: 0.3s;
}
.navbar button:hover{
    background-color: #fff4f2;
}
.navbar .active{
    padding-bottom: 2px;
    border-bottom: 2px solid #49557e;
}
.navbar-search-icon{
    position: relative;
}
.navbar-search-icon .dot{
    position: absolute;
    min-width: 10px;
    min-height: 10px;
    background-color: tomato;
    border-radius: 5px;
    top: -8px;
    right: -8px;
}
.navbar-profile{
    position: relative;
}
.nav-profile-dropdown{
    position: absolute;
    display: none;
    right: 0;
    z-index: 1;
}
.navbar-profile:hover .nav-profile-dropdown{
    display: flex;
    flex-direction: column;
    gap: 10px;
    background-color: #fff2ef;
    padding: 12px 25px;
    border-radius: 4px;
    border: 1px solid tomato;
    outline: 2px solid white;
    list-style: none;
}
.nav-profile-dropdown li{
    display: flex;
    align-items: center;
    gap: 10px;
    cursor: pointer;
}
.nav-profile-dropdown img{
    width: 20px;
}
.nav-profile-dropdown li:hover{
    color: tomato;
}
```



Navbar

FoodDisplay.jsx

```
import React, { useContext } from 'react'
import './FoodDisplay.css'
import { StoreContext } from '../Context/StoreContext'
import FoodItem from '../FoodItem/FoodItem'

function FoodDisplay({category}) {
    const {food_list} = useContext(StoreContext)
  return (
    <div className='food-display' id='food-display'>
        <h2>Top Dishes near you</h2>
        <div className="food-display-list">
```

```
            {food_list.map((item, index)=>{
                if(category==="All" || category===item.category){
                    return <FoodItem key={index} id={item._id} name={item.name} 
description={item.description} price={item.price} image={item.image} />
                }
            })}
        </div>
    </div>
  )
}

export default FoodDisplay
```

foodDisplay.css

```
.food-display{
    margin-top: 30px;
}
.food-display h2{
    font-size: max(2vw, 24px);
    font-weight: 600;
}
.food-display-list{
    display: grid;
    grid-template-columns: repeat(auto-fill, minmax(240px, 1fr));
    margin-top: 30px;
    gap: 30px;
    row-gap: 50px;
}
```

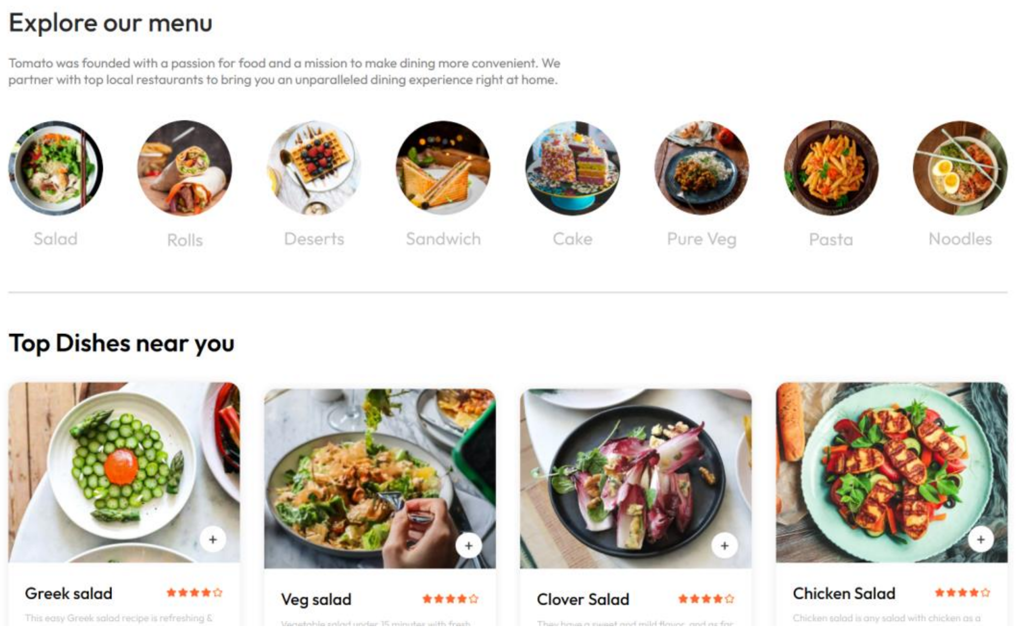
FoodItem.jsx

```
import React, { useContext } from 'react';
import './FoodItem.css';
import { assets } from '../assets/assets';
import { StoreContext } from '../Context/StoreContext';

function FoodItem({id, name, price, description, image}) {
    const {cartItems, addToCart, removeFromCart ,url }= useContext(StoreContext);
    // if (!cartItems) {
    //     return <div>Loading...</div>;
    //   }

    const itemCount = cartItems[id] || 0;

  return (
    <div className='food-item'>
        <div className="food-item-img-container">
            <img className='food-item-image' src={url+"/images/"+image} alt="" />
            {itemCount === 0
                ?<img className='add' onClick={()=> addToCart(id)}
src={assets.add_icon_white}/>
                :<div className='food-item-counter'>
                    <img  onClick={()=> removeFromCart(id)} src={assets.remove_icon_red}
alt="Remove" />
                    <p>{cartItems[id]}</p>
                    <img onClick={()=> addToCart(id)} src={assets.add_icon_green} alt="Add"
/>
                </div>
            }
        </div>
        <div className="food-item-info">
            <div className="food-item-name-rating">
                <p>{name}</p>
                <img src={assets.rating_starts} alt="Rating" />
            </div>
            <p className="food-item-desc">{description}</p>
            <p className="food-item-price">${price}</p>
        </div>
    </div>
  );
}
export default FoodItem
```

FoodItem.css

```
.food-item{
    width: 100%;
    margin: auto;
    border-radius: 15px;
    box-shadow: 0px 0px 10px #00000015;
    transition: 0.3s;
    animation: fadeIn 1s;
}
.food-item-image{
    width: 100%;
    border-radius: 15px 15px 0px 0px;
}
.food-item-info{
    padding: 20px;
}
.food-item-name-rating{
    display: flex;
    justify-content: space-between;
    align-items: center;
    margin-bottom: 10px;
}
```

```
.food-item-name-rating p{
    font-size: 20px;
    font-weight: 500;
}
.food-item-name-rating img{
    width: 70px;
}
.food-item-desc{
    color: #67676767;
    font-size: 12px;
}
.food-item-price{
    color: tomato;
    font-size: 22px;
    font-weight: 500;
    margin: 10px 0px;
}
.food-item-img-container{
    position: relative;
}
.food-item-img-container .add{
    width: 35px;
    position: absolute;
    bottom: 15px;
    right: 15px;
    cursor: pointer;border-radius: 50%;
}
.food-item-counter{
    position: absolute;
    bottom: 15px;
    right: 15px;
    display: flex;
    align-items: center;
    gap: 10px;
    padding: 6px;
    border-radius: 50px;
    background-color: white;
}
.food-item-counter img{
    width: 30px;
}
```


Explore our menu

Tomato was founded with a passion for food and a mission to make dining more convenient. We partner with top local restaurants to bring you an unparalleled dining experience right at home.

Top Dishes near you

Greek salad ★★★★☆
This easy Greek salad recipe is refreshing &

Veg salad ★★★★☆
Vegetable salad under 15 minutes with fresh

Clover Salad ★★★★☆
They have a sweet and mild flavor, and as for

Chicken Salad ★★★★☆
Chicken salad is any salad with chicken as a

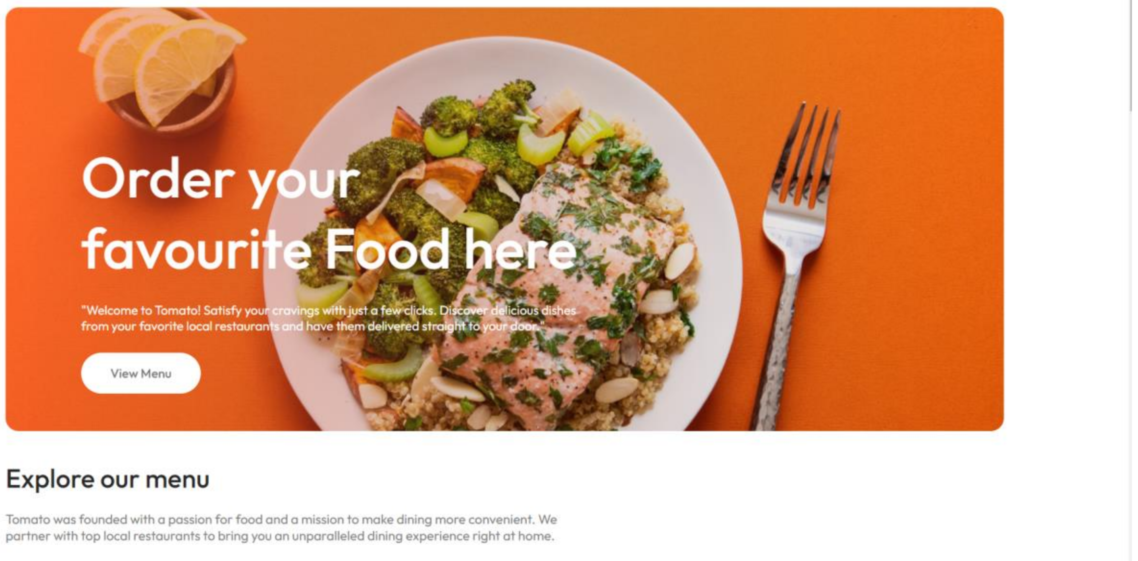
Food Menu and Food Items

Header.jsx

```
import React from 'react';
import './Header.css';

function Header() {
  return (
    <div className='header'>
        <div className="header-contents">
            <h2>Order your favourite Food here</h2>
            <p>"Welcome to Tomato! Satisfy your cravings with just a few clicks. Discover 
delicious dishes from your favorite local restaurants and have them delivered straight to 
your door."</p>
            <button>View Menu</button>
        </div>
    </div>
  )
}
export default Header
```

Header.css

```
.header{
    height: 34vw;
    margin: 30px auto;
    background: url('./header_img.png') no-repeat;
    background-size: contain;
    position: relative;}
.header-contents{
    position: absolute;
    display: flex;
    flex-direction: column;
    align-items: start;
    gap: 1.5vw;
    max-width: 50%;
    bottom: 10%;
    left: 6vw;
    animation: fadeIn 3s;}
.header-contents h2{
    font-weight: 500;
    color: white;
    font-size: max(4.5vw, 22px);}
.header-contents p{
    color: white;
    font-size: 1vw;}
.header-contents button{
    border: none;
    color: #747474;
    font-weight: 500;
    padding: 1vw 2.3vw;
    background-color: white;
    font-size: max(1vw, 13px);
    border-radius: 50px;}
```


Order your favourite Food here

"Welcome to Tomato! Satisfy your cravings with just a few clicks. Discover delicious dishes from your favorite local restaurants and have them delivered straight to your door."

Explore our menu

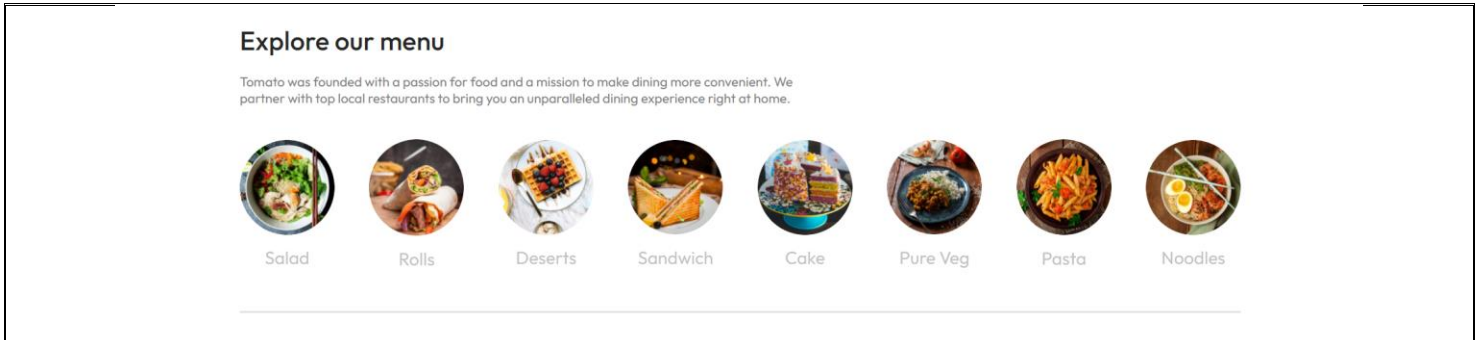
Tomato was founded with a passion for food and a mission to make dining more convenient. We partner with top local restaurants to bring you an unparalleled dining experience right at home.

Header

FoodMenu.jsx

```
import React from 'react'
import './ExploreMenu.css'
import {menu_list} from '../../assets/assets'
```

```
function ExploreMenu({category, setCategory}){
  return (
    <div>
        <div className='explore-menu' id='explore-menu'>
            <h1>Explore our menu</h1>
            <p className='explore-menu-text'>Tomato was founded with a passion for food and a
mission to make dining more convenient. We partner with top local restaurants to bring you an
unparalleled dining experience right at home.</p>
            <div className="explore-menu-list">
                {menu_list.map((item, index)=>{
                    return (
                        <div onClick={()=>
setCategory(prev=>prev===item.menu_name?"All":item.menu_name)} key={index}
className="explore-menu-list-item">
                            <img className={category==item.menu_name?"active":""}
src={item.menu_image} alt="" />
                            <p>{item.menu_name}</p>
                        </div>
                    )
                })}</div><hr /></div></div>)}
export default ExploreMenu
```



Explore our menu

Tomato was founded with a passion for food and a mission to make dining more convenient. We partner with top local restaurants to bring you an unparalleled dining experience right at home.

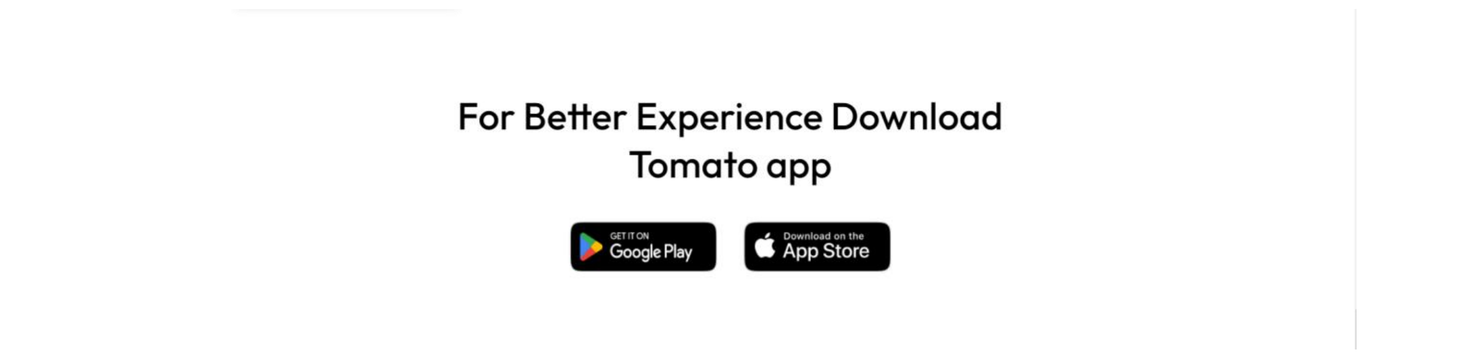
Food Menu

AppDownload.jsx

```
import React from 'react';
import './AppDownload.css'
import { assets } from '../../assets/assets';

export const AppDownload = () => {
  return (
    <div className='AppDownload' id="AppDownload">
            <p>For Better Experience Download <br/>Tomato app</p>
            <div className="app-download-platforms">
                <img src={assets.play_store} alt="" />
                <img src={assets.app_store} alt="" />
            </div>
    </div>)}
```

AppDownload.css

```
.AppDownload{
    margin: auto auto;
    margin-top: 100px;
    font-size: max(3vw, 20px);
    text-align: center;
    font-weight: 500;
}
.app-download-platforms{
    display: flex;
    justify-content: center;
    gap: max(2vw, 10px);
    margin-top: 40px;
}
.app-download-platforms img{
    width: max(30vw, 120px);
    max-width: 180px;
    transition: 0.5s;
    cursor: pointer;
}
.app-download-platforms img:hover{
  transform: scale(1.05);}
```

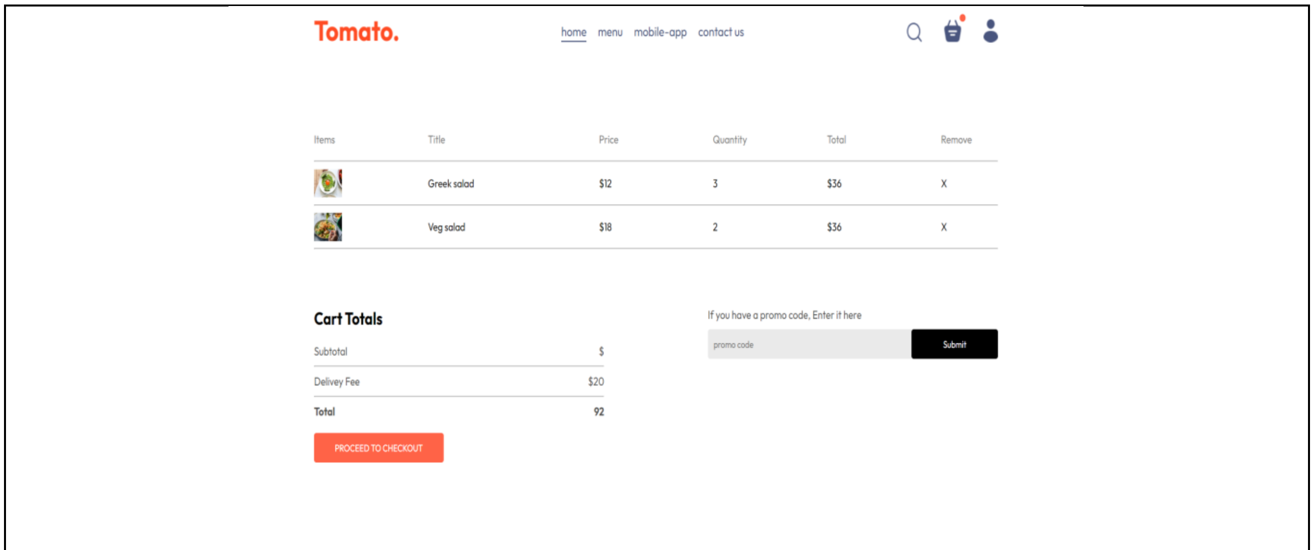

For Better Experience Download
Tomato app

App Download

Cart.jsx

```
import React, { useContext } from 'react'
import './Cart.css';
import {StoreContext} from '../../Context/StoreContext'
import { useNavigate } from 'react-router-dom';
function Cart() {
  const {cartItems, food_list, removeFromCart, getTotalCartAmount, url} =
useContext(StoreContext);
const navigate= useNavigate();
```

```
  return (
    <div className='Cart'>
      <div className="cart-items">
        <div className="cart-items-title">
          <p>Items</p>
          <p>Title</p>
          <p>Price</p>
          <p>Quantity</p>
          <p>Total</p>
          <p>Remove</p>
        </div>
        <br/>
        <hr/>
        {food_list.map((item)=>{
          if(cartItems[item._id]>0){
            return(
              <div  key={item._id}>
              <div className="cart-items-title cart-items-item">
                  <img src={url+"/images/"+item.image} alt="" />
                  <p>{item.name}</p>
                  <p>${item.price}</p>
                  <p>{cartItems[item._id]}</p>
                  <p>${item.price*cartItems[item._id]}</p>
                  <p onClick={()=>removeFromCart(item._id)} className='cross'>X</p>
              </div>
              <hr/>
              </div>
            );
          }
          return null;
        })}
      </div>
      <div className="cart-bottom">
        <div className="cart-total">
          <h2>Cart Totals</h2>
          <div>
            <div className="cart-total-details">
              <p>Subtotal</p>
              <p>${getTotalCartAmount}</p>
            </div>
            <hr/>
          <div className="cart-total-details">
              <p>Delivey Fee</p>
              <p>${getTotalCartAmount()===0?0:20}</p>
            </div>
            <hr/>
            <div className="cart-total-details">
              <b>Total</b>
              <b>{getTotalCartAmount()===0?0:getTotalCartAmount()+20}</b>
            </div>
          </div>
          <button onClick={()=>navigate('/order')} >PROCEED TO CHECKOUT</button>
          </div>
        <div className="cart-promocode">
          <div>
            <p>If you have a promo code, Enter it here</p>
            <div className="cart-promocode-input">
              <input type="text" placeholder='promo code' />
              <button>Submit</button>
            </div>
          </div>
        </div>
        </div>
        </div>
  )
}
export default Cart
```



Items	Title	Price	Quantity	Total	Remove
	Greek salad	$12	3	$36	X
	Veg salad	$18	2	$36	X

Cart Totals

Subtotal	$
Delivey Fee	$20
Total	92

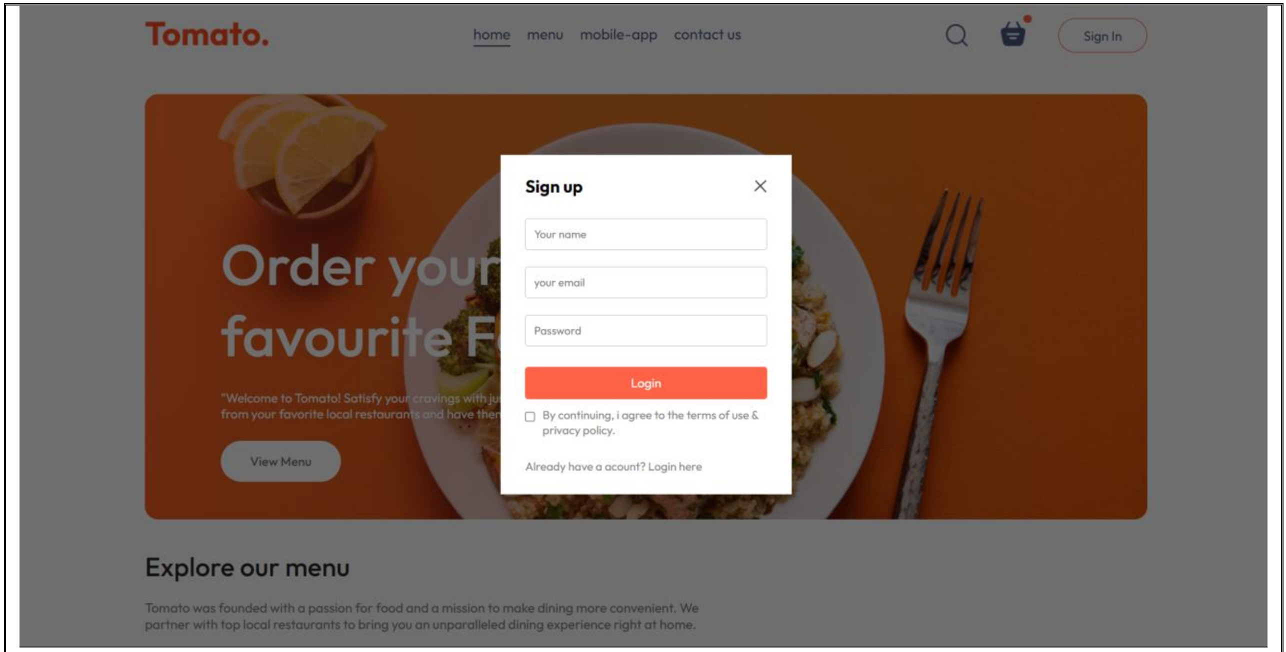
If you have a promo code, Enter it here

Cart Page

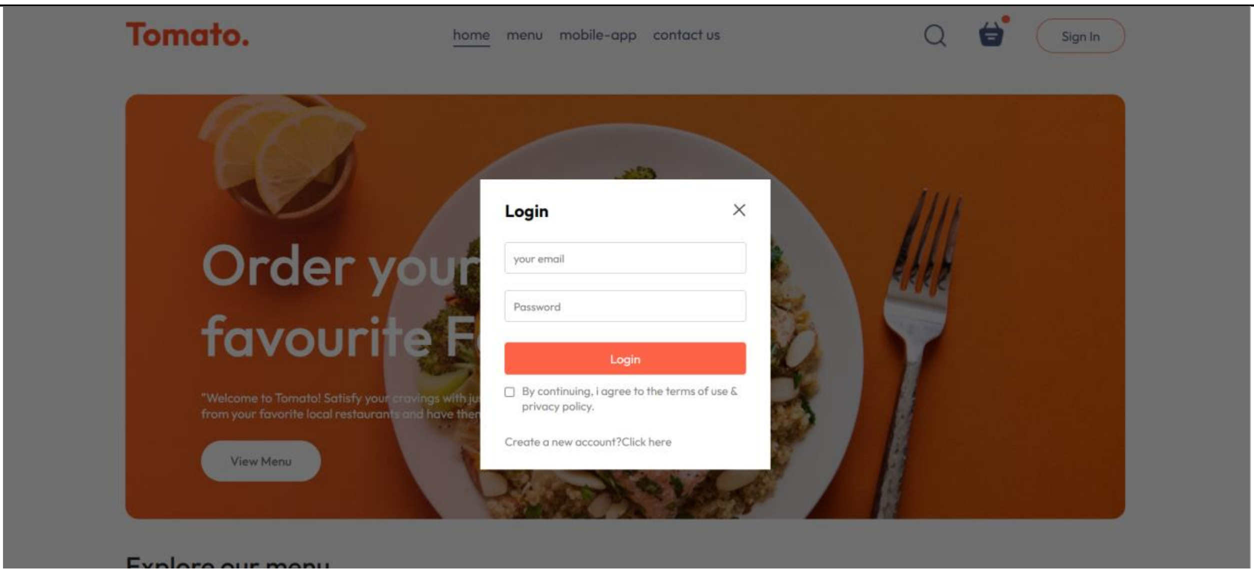
LoginPopup.jsx

```
import React, { useContext, useState } from 'react'
import './LoginPopup.css'
import {assets} from '../../assets/assets';
import { StoreContext } from '../../Context/StoreContext';
import axios from 'axios';

function LoginPopup({setShowLogin}) {

    const {url,setToken} = useContext(StoreContext);
    const [currState, setCurrState ] = useState("Login");
    const [data, setData] = useState({
        name: "",
        email: "",
        password: ""
    })

    const onChangeHandler = (event) =>{
        const name= event.target.name;
        const value= event.target.value;
        setData(data=>({...data,[name]:value}))
    }

    const onLogin = async (event) =>{
        event.preventDefault();
        let newUrl = url;
        if(currState==="Login"){
            newUrl +="/api/user/login";
        }
        else{
            newUrl += "/api/user/register";
        }

        const response = await axios.post(newUrl, data);

        if(response.data.success){
            setToken(response.data.token);
            localStorage.setItem("token", response.data.token);
            setShowLogin(false)
        }else{
            alert(response.data.message);
        }
    }
  return (
    <div className='LoginPopup'>
        <form onSubmit={onLogin} className="login-popup-container">
            <div className="login-popup-title">
                <h2>{currState}</h2>
                <img onClick={()=> setShowLogin(false)} src={assets.cross_icon} alt="" />
            </div>
            <div className='login-popup-inputs'>
                {currState==="Login"?<></>:<input name='name' onChange={onChangeHandler}
value={data.name} type="text" placeholder='Your name' required/>}
                <input name='email' onChange={onChangeHandler} type="email"
value={data.email} placeholder='your email' required />
                <input name='password' onChange={onChangeHandler} value={data.password}
type="password" placeholder='Password' required />
```

```
            </div>
            <button type='submit' >{currState==="Sign Up"?"Create account":"Login"}</button>
            <div className="login-popup-condition">
                <input type="checkbox" required />
                <p>By continuing, i agree to the terms of use & privacy policy.</p>
            </div>
            {currState==="Login"
            ?<p>Create a new account?<span onClick={()=> setCurrState("Sign up")}>Click
here</span></p>
            : <p>Already have a acount? <span onClick={()=> setCurrState("Login")}>Login
here</span></p>
            }
        </form>
    </div>
  )
}
export default LoginPopup
```


Tomato.
home
menu
mobile-app
contact us
Sign In
Order your
favourite F
"Welcome to Tomato! Satisfy your cravings with ju
from your favorite local restaurants and have the
View Menu
Sign up
Your name
your email
Password
Login
By continuing, i agree to the terms of use & privacy policy.
Already have a acount? Login here
Explore our menu
Tomato was founded with a passion for food and a mission to make dining more convenient. We partner with top local restaurants to bring you an unparalleled dining experience right at home.

SignUp


Tomato.
home
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"Welcome to Tomato! Satisfy your cravings with ju
from your favorite local restaurants and have then
View Menu
Login
your email
Password
Login
By continuing, i agree to the terms of use & privacy policy.
Create a new account?Click here
Explore our menu

Log in page

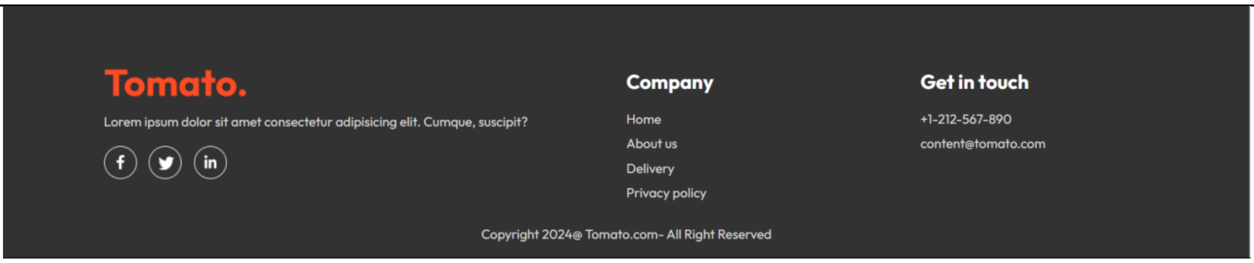
Footer.jsx

```
import React from 'react'
import './Footer.css'
import { assets } from '../assets/assets'

function Footer() {
  return (
    <div className='Footer' id='Footer'>
        <div className="footer-content">
            <div className="footer-content-left">
                <img src={assets.logo} alt="" />
                <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Cumque, 
suscipit?</p>
                <div className="footer-social-icons">
                    <img src={assets.facebook_icon} alt="" />
                    <img src={assets.twitter_icon} alt="" />
                    <img src={assets.linkedin_icon} alt="" />
                </div>
            </div>
            <div className="footer-content-center">
                <h2>Company</h2>
                <ul>
                    <li>Home</li>
                    <li>About us</li>
                    <li>Delivery</li>
                    <li>Privacy policy</li>
                </ul>
            </div>
            <div className="footer-content-right">
                <h2>Get in touch</h2>
                <ul>
                    <li>+1-212-567-890</li>
                    <li>content@tomato.com</li>
                </ul>
            </div>
        </div>
        <p className="footer-copyright">Copyright 2024@ Tomato.com- All Right Reserved</p>
    </div>
  )
}
export default Footer
```

Footer.css

```
import React, { useContext,  useState } from 'react';
```



Lorem ipsum dolor sit amet consectetur adipisicing elit. Cumque, suscipit?

Home
About us
Delivery
Privacy policy

+1-212-567-890
content@tomato.com

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Header

Order place form

PlaceOrder.jsx

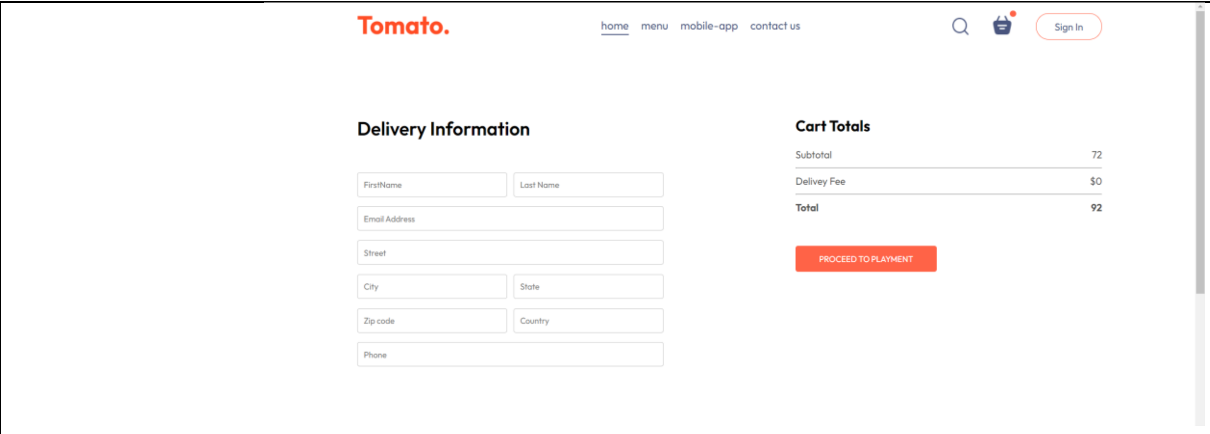
```
import React, { useContext,  useState } from 'react';
import './PlaceOrder.css';
import { StoreContext } from '../../Context/StoreContext';
import axios from 'axios';
function PlaceOrder() {
const {getTotalCartAmount, token, food_list,cartItems, url} = useContext(StoreContext);
const [data, setData] = useState({
  firstName:"",
  lastName:"",
  email:"",
  street:"",
  city:"",
  state:"",
  city:"",
  state:"",
  zipcode:"",
  country:"",
  phone:"",
})
const onChangeHandler = (event) =>{
  const name= event.target.name;
  const value= event.target.value;
  setData(data=>({...data,[name]:value}))
}
const placeOrder = async (event) => {
  event.preventDefault();
  let orderItems = [];
  food_list.map((item)=>{
    if(cartItems[item._id]>0){
      let itemInfo = item;
      itemInfo["quantity"] = cartItems[item._id];
      orderItems.push(itemInfo);
    }
  })
  let orderData ={
    address: data,
    items: orderItems,
    amount: getTotalCartAmount()+20,
  }
  let response= await axios.post(url+"/api/order/place",orderData,{headers:{token}});
  if(response.data.success){
    const {session_url} = response.data;
    window.location.replace(session_url);
  }
else{
  alert("Error");}}
  return (
    <form onSubmit={placeOrder} className='place-order'>
      <div className="place-order-left">
          <p className='title'>Delivery Information</p>
          <div className="multi-fields">
            <input name='firstName' onChange={onChangeHandler} value={data.firstName}
type="text" placeholder='FirstName'/>
            <input name='lastName' onChange={onChangeHandler}
value={data.lastName}  type="text" placeholder='Last Name'/>
          </div>
          <input name='email' onChange={onChangeHandler} value={data.email} type="email"
placeholder='Email Address' />
          <input name='street' onChange={onChangeHandler} value={data.street} type="text"
placeholder='Street'/>
          <div className="multi-fields">
            <input name='city' onChange={onChangeHandler} value={data.city} type="text"
placeholder='City'/>
            <input name="state" onChange={onChangeHandler} value={data.state} type="text"
placeholder='State'/>
```

```
          </div>
          <div className="multi-fields">
            <input name="zipcode" onChange={onChangeHandler} value={data.zipcode} type="text"
placeholder='Zip code'/>
            <input name="country" onChange={onChangeHandler} value={data.country} type="text"
placeholder='Country'/>
          </div>
          <input name="phone" onChange={onChangeHandler} value={data.phone} type="text"
placeholder='Phone' />
      </div>
      <div className="place-order-right">
      <div className="cart-total">
          <h2>Cart Totals</h2>
          <div>
            <div className="cart-total-details">
              <p>Subtotal</p>
              <p>{getTotalCartAmount()}</p>
            </div>
            <hr/>
          <div className="cart-total-details">
              <p>Delivey Fee</p>
              <p>${getTotalCartAmount()===0?"":0}</p>
            </div>
            <hr/>
            <div className="cart-total-details">
              <b>Total</b>
              <b>{getTotalCartAmount()===0?0:getTotalCartAmount()+20}</b>
            </div>
          </div>
          <button type="submit">PROCEED TO PLAYMENT</button>
          </div>

      </div>
    </form>)}
export default PlaceOrder
```

placeOrder.css

```
.place-order{
    display: flex;
    align-items: start;
    justify-content: space-between;
    gap: 50px;
    margin-top: 100px;}
.place-order-left{
    width: 100%;
    max-width: max(30%, 500px);}
.place-order-left .title{
    font-size: 30px;
    font-weight: 600;
    margin-bottom: 50px;}
.place-order-left input{
    margin-bottom: 15px;
    width: 100%;
    padding: 10px;
    border: 1px solid #c5c5c5;
    border-radius: 4px;
    outline-color: tomato;}
.place-order-left .multi-fields{
    display: flex;
    gap: 10px;}
.place-order-right{
    width: 100%;
    max-width: max(40%, 500px);}
.place-order .cart-total button{
    margin-top: 30px;}
```



Place Order page

Backend – food ordering system

- **Express.js**: A Node.js framework for building web applications and APIs. It provides a robust foundation for handling HTTP requests, routing, and middleware.
- **Mongoose**: An Object Data Modeling (ODM) library for MongoDB. It simplifies database interactions by providing a schema-based approach to modeling your data.

Core Components

1. **Server Setup:**
   - Create an Express application instance.

- Configure middleware for parsing request bodies (JSON, URL-encoded data), handling errors, and serving static files.
- Connect to your MongoDB database using Mongoose.

2. **Data Modeling:**
   - Define Mongoose schemas for different data types:
     - User: Stores user information (name, email, address, etc.).
     - Restaurant: Stores restaurant details (name, location, menu, etc.).
     - MenuItem: Stores food items with their details (name, price, description, image, etc.).
     - Order: Stores order information (customer, items, total, status, etc.).
3. **API Endpoints:**
   - Create API endpoints for various functionalities:
     - User registration, login, and authentication.
     - Restaurant management (adding, updating, deleting restaurants).
     - Menu management (adding, updating, deleting menu items).
     - Order creation, viewing, and management.
     - Payment integration (if applicable).
4. **Data Handling:**
   - Implement CRUD (Create, Read, Update, Delete) operations for each data model using Mongoose.
   - Handle data validation and error handling.
   - Optimize database queries for performance.
5. **Error Handling:**
   - Implement proper error handling mechanisms to provide informative error messages to the client.
   - Use try-catch blocks and error middleware.

Code and UI

Server.js

```
import express from "express"
import cors from "cors";
import { connectDB } from "./config/db.js";
import foodRouter from "./routes/FoodRoutes.js";
import userRouter from "./routes/userRouters.js";
import 'dotenv/config';
import cartRouter from "./routes/CardRoutes.js";
import orderRouter from './routes/orderRoutes.js';


// app config
const app= express();
const port = 4000;

// middleware
app.use(express.json())
app.use(cors());
```

```
// db connection
connectDB();

// api endpoints
app.use("/api/food",foodRouter);
app.use("/images",express.static('uploads'))
app.use("/api/user", userRouter);
app.use("/api/cart",cartRouter);
app.use("/api/order",orderRouter);

app.get("/", (req, res)=>{
    res.send("API WORKING")
})

app.listen(port, ()=>{
    console.log(`Server Started on http://localhost:${port}`)
})
```

Imports:

1. **express**: Imports the Express.js framework for building web applications.
2. **cors**: Imports the CORS (Cross-Origin Resource Sharing) middleware for allowing requests from different origins.
3. **connectDB**: Imports a function (likely located in config/db.js) responsible for connecting to the database.
4. **foodRouter, userRouter, cartRouter, orderRouter**: Imports routes responsible for handling specific functionalities (food items, users, carts, orders).
5. **dotenv**: Imports the dotenv package to load environment variables from a .env file (likely containing sensitive information like database credentials).

App Setup:

1. **app**: Creates an Express application instance.
2. **port**: Defines the port on which the server will listen (default is 4000 here).

Middleware:

1. **express.json()**: Parses incoming JSON request bodies for easier data access.
2. **cors()**: Enables CORS for cross-origin requests (important for frontend applications).

Database Connection:

1. **connectDB()**: Calls the imported function to connect to the MongoDB database.

API Endpoints:

1. **app.use("/api/food", foodRouter)**: Registers a route for food-related API requests, delegating handling to the foodRouter.

2. **app.use("/images", express.static('uploads'))** : Serves static files (likely images) from the uploads directory.
3. **app.use("/api/user", userRouter):** Registers a route for user-related API requests, delegating handling to the userRouter.
4. **app.use("/api/cart", cartRouter):** Registers a route for cart-related API requests, delegating handling to the cartRouter.
5. **app.use("/api/order", orderRouter):** Registers a route for order-related API requests, delegating handling to the orderRouter.

Testing Endpoint:

- **app.get("/", (req, res) => {**: Defines a simple endpoint at the root (/) that responds with "API WORKING" for basic testing.

Server Start:

1. **app.listen(port, () => {**: Starts the server on the specified port (4000 in this case) and logs a message to the console.

Note: The provided MongoDB connection string is commented out, likely because it contains sensitive information. You'll need to replace it with your own connection string from your MongoDB database.

Db.js

```
import mongoose from "mongoose";
export const connectDB = async ()=>{
    await
mongoose.connect('mongodb+srv://ayush:2vuRa2WEf8tSOwNy@cluster0.lcsnwkb.mongodb.net/Food-
del').then(()=>console.log("DB connected"));
```

Controlles

1.CartControlles

```
import mongoose from "mongoose";

export const connectDB = async ()=>{
    await
mongoose.connect('mongodb+srv://ayush:2vuRa2WEf8tSOwNy@cluster0.lcsnwkb.mongodb.net/Food-
del').then(()=>console.log("DB connected"));
```

2.FoodControlles

```
import foodModel from "../models/foodModel.js";
import fs from "fs";
// add food item
const addFood = async (req, res)=>{
    let image_filename = `${req.file.filename}`;
    const food = new foodModel({
        name: req.body.name,
        description: req.body.description,
        price: req.body.price,
        category: req.body.category,
        image: image_filename
    })
    try{
        await food.save();
        res.json({success:true, message: "Food Added"})
    }catch(error){
        console.log(error);
        res.json({success:false, message:"Error"})
    }
}
const listFood = async(req, res)=>{
    try{
        const foods= await foodModel.find({});
        res.json({success:true, data:foods});
    }catch(error){
        console.log(error);
        res.json({success:false,message:"Error"})
    }
}
// remove food item
const removeFood = async (req, res) =>{
    try{
        const food= await foodModel.findById(req.body.id);
        console.log(req.body.id);
        fs.unlink(`uploads/${food.image}`,()=>{})

        await foodModel.findByIdAndDelete(req.body.id);
        res.json({success:true, message: "Food Removed"})
    }catch(error){
        console.log(error);
        res.json({success:false, message:"Error"})
    }
}
export {addFood,listFood, removeFood}
```

FoodController.js

```
import orderModel from "../models/orderModel.js";
import userModel from '../models/userModel.js';
import Stripe from 'stripe';
const stripe= new Stripe(process.env.STRIPE_SECRET_KEY);
// placing user order for frontend
const placeOrder = async (req, res) =>{
    const frontend_url = "http://localhost:5173";
    try{
        const newOrder= new orderModel({
            userId:req.body.userId,
            items:req.body.items,
            amount: req.body.amount,
            address: req.body.address
        })
        await newOrder.save();
        await userModel.findByIdAndUpdate(req.body.userId,{cardData:{}});

        const line_items= req.body.items.map((item)=>({
            price_data:{
                currency: "sgd",
                product_data:{
                    name:item.name
                },
                unit_amount:item.price*100*60
            },
        quantity:item.quantity
        })
        )
        line_items.push({
            price_data:{
                currency:"sgd",
                product_data:{
                   name:"Delivery Charges"
                },
                unit_amount:2*100*62
            },
            quantity:1
        })
        const session = await stripe.checkout.sessions.create({
            line_items: line_items,
            mode: 'payment',
            success_url: `${frontend_url}/verify?success=true&orderId=${newOrder._id}`,
            cancel_url: `${frontend_url}/verify?success=false&orderId=${newOrder._id}`
        })
        res.json({success:true, session_url:session.url})
    }catch(error){
        console.error("Error placing order:", error);
        res.status(500).json({ success: false, message: "An error occurred while placing the
order." });
      }
    }
const verifyOrder =async(req, res)=>{
    const {orderId, success}= req.body;
    try{
        if(success=='true'){
            await orderModel.findByIdAndUpdate(orderId, {payment:true});
            res.json({success:true, message:"Paid"})
        }
        else{
            await orderModel.findByIdAndDelete(orderId);
            res.json({success:false, message:"Not Paid"})
        }
    }catch(error){
        console.log(error);
        res.json({success:false, message:"Error"});
    }
}
// order for frontend
const userOrders = async(req, res)=>{
    try{
        const orders = await orderModel.find({userId:req.body.userId});
        req.json({success:true, data:orders})
        }catch(error){
            console.log(error);
            res.json({success:false, message:"Error"});
    }
}
// Listing Order for admin Panel
const listOrders = async (req, res)=>{
    try {
        const orders= await orderModel.find({});
        res.json({success:true, data:orders})
    } catch (error) {
        console.log(error);
        res.json({success:false, message: "Error"});
    }
}
// api for updating order status
const updateStatus = async (req, res)=>{
    try {
       await orderModel.findByIdAndUpdate(req.body.orderId,{status: req.body.status});
       res.json({success: true, message: "Status Updated"});
    } catch (error) {
        console.log(error);
        res.json({success:false, message:"Error"});
    }
}
export {placeOrder,verifyOrder, userOrders, listOrders, updateStatus};
```

AppController.js

```
import userModel from "../models/userModel.js";
import jwt from "jsonwebtoken";
import bcrypt from "bcrypt";
import validator from "validator";
```

```
// login user
const loginUser = async (req, res)=>{
    const {email, password} = req.body;
    try{
        const user = await userModel.findOne({email});

        if(!user){
            return res.json({success:false, message:"User doesn't exist"});
        }
        const isMatch = await bcrypt.compare(password, user.password);

        if(!isMatch){
            return res.json({success:false,message:"Invalid credentials"})
        }

        const token = createToken(user._id);
        res.json({success:true, token})

    }catch(error){
        console.log(error);
        res.json({success: false, message: "Error"});
    }
}

const createToken = (id) =>{
    return jwt.sign({id}, process.env.JWT_SECRET);
}
//register user
const registerUser = async(req, res)=>{
    const {name, password, email}= req.body;
    try{
        // checking user is already exists
        const exists = await userModel.findOne({email});
        if(exists){
            return res.json({success:false, message:"User already exists"})
        }
        // validating email format & strong password
        if(!validator.isEmail(email)){
            return res.json({success: false, message:"Please enter a valid email"})
        }
        if(password.length<8){
            return res.json({success: false,message: "Please enter a strong password"})
        }
        // hashing user password
        const salt = await bcrypt.genSalt(10);
        const hashedPassword = await bcrypt.hash(password, salt);

        const newUser = new userModel({
            name: name,
            email: email,
            password: hashedPassword
        })
        const user = await newUser.save();
        const token = createToken(user._id);
        res.json({success:true, token});
    } catch(error){
        console.log(error);
        res.json({success:false,message:"Error"});
    }
}
export {loginUser, registerUser};
```

Models

Creating Models for database

Table.food

```
import mongoose from "mongoose";
const foodSchema = new mongoose.Schema({
    name: {type:String, required: true},
    description: {type:String, required: true},
    price: {type: Number, required: true},
    image: {type: String, required: true},
    category: {type: String, required: true}
})
const foodModel = mongoose.models.food ||  mongoose.model("food",foodSchema);
export default foodModel;
```

Table.Order

```
import mongoose from 'mongoose';
const orderSchema = new mongoose.Schema({
    userId:{type:String, required:true},
    items:{type: Array, required:true},
    amount:{type: Number, required: true},
    address:{type: Object, required: true},
    status:{type:String, default:"Food Processing"},
    date: {type: Date, default:Date.now()},
    payment:{type:Boolean, default: false}
})

const orderModel = mongoose.models.order || mongoose.model("order", orderSchema)
export default orderModel;
```

Table.user

```
import mongoose from "mongoose"
```

```
const userSchema = new mongoose.Schema({
    name:{type: String, required: true},
    email:{type: String, required: true, unique: true},
    password:{type: String, required: true},
    cartData: {type: Object, default:{}}
},{minimize: false})
const userModel = mongoose.models.user || mongoose.model("user", userSchema);
export default userModel;
```

Routers

CartRoutes.js

```
import express from 'express';
import { addToCart,removeFromCart,getCart } from "../controllers/cartController.js";
import authMiddleware from "../middleware/auth.js"

const cartRouter = express.Router();
cartRouter.post("/add", authMiddleware,addToCart);
cartRouter.post("/remove", authMiddleware,removeFromCart);
cartRouter.post("/get", authMiddleware,getCart);
export default cartRouter;
```

FoodRouter.js

```
import express from 'express';
import { addFood,listFood,removeFood } from "../controllers/foodController.js";
import multer from "multer";
const foodRouter = express.Router();
//Image Storage Engine
const Storage = multer.diskStorage({
    destination: "uploads",
    filename:(req,file, cb)=>{
        console.log("working");
        return cb(null,`${Date.now()}${file.originalname}`)
    }
})
const upload = multer({storage:Storage})
foodRouter.post("/add",upload.single("image"),addFood);
foodRouter.get("/list", listFood);
foodRouter.post("/remove", removeFood);
export default foodRouter;
```

OrderRoutes.js

```
import express from "express";
import authMiddleware from '../middleware/auth.js'
import {placeOrder, verifyOrder, userOrders, listOrders, updateStatus} from
'../controllers/orderController.js';
```

```
const orderRouter = express.Router();
orderRouter.post("/place", authMiddleware, placeOrder);
orderRouter.post("/verify", verifyOrder);
orderRouter.post("/userorders", authMiddleware, userOrders);
orderRouter.get("/list", listOrders);
orderRouter.post("/status", updateStatus);
export default orderRouter;
```

UserRoutes.js

```
import express from "express"
import { loginUser, registerUser } from "../controllers/userController.js";

const userRouter = express.Router()
userRouter.post("/register", registerUser);
userRouter.post("/login", loginUser);
export default userRouter;
```

Testing

Testing Strategy

Types of Testing Performed

- **Functional Testing:** Verifying that the system functions as expected.
- **Usability Testing:** Ensuring the system is user-friendly.
- **Performance Testing:** Assessing the system's performance under various conditions.
- **Security Testing:** Checking for vulnerabilities and ensuring data protection.
- **Integration Testing:** Ensuring different modules work together seamlessly.

Test Environment

- **Hardware:** Details of servers, databases, and other hardware used.
- **Software:** Operating systems, browsers, and other software used.
- **Test Data:** Description of the data used for testing.

Test Cases

Test Case Summary

Test Case ID	Description	Expected Result	Actual Result	Status
TC001	User Login	User should be able to login with valid credentials	Pass	Pass
TC002	User Registration	New user should be able to register	Pass	Pass
TC003	Menu Display	Menu items should be displayed correctly	Pass	Pass
TC004	Add to Cart	Items should be added to the cart	Pass	Pass
TC005	Place Order	Order should be placed successfully	Pass	Pass
TC006	Payment Processing	Payment should be processed correctly	Pass	Pass
TC007	Logout	User should be able to logout	Pass	Pass

Defects

Defect Summary

Defect ID	Description	Severity	Status	Comments
DEF001	Error message not displayed for invalid login	Medium	Fixed	Resolved in build 1.1

Defect ID	Description	Severity	Status	Comments
DEF002	Slow loading of menu page	High	Open	Performance tuning in progress

Defect Analysis

- **Total Defects Found:** 2
- **Defects Fixed:** 1
- **Defects Open:** 1

Test Results

Functional Testing Results

All functional test cases passed successfully, indicating that the core functionalities of the system work as expected.

Performance Testing Results

Performance tests revealed that the menu page loads slower than acceptable limits. This issue is under investigation.

Security Testing Results

No critical vulnerabilities were found during security testing.

Usability Testing Results

Users found the interface intuitive and easy to navigate, with positive feedback on the overall user experience.

Conclusion

The Food Ordering System has been thoroughly tested, and the majority of functionalities are working as expected. One performance issue has been identified and is being addressed. Overall, the system is ready for deployment with minor adjustments needed to optimize performance.

Conclusion

The Food Ordering System project has successfully met its objectives, delivering a robust, user-friendly, and secure platform for online food ordering. The system's successful deployment marks a significant milestone, providing restaurants with an efficient tool to manage orders and customers with a convenient way to order food online. Continuous monitoring and future enhancements will ensure the system remains up-to-date with evolving user needs and technological advancements.

This project has laid a strong foundation for further innovation and improvement in the online food ordering space, positioning the system for long-term success and user satisfaction.

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