

Project Report

On

OM RESTAURANT

(ONLINE FOOD ORDERING SYSTEM)

Created By

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Bscit-5

Under The Guidance of

PROF.NIDHI PARMAR

Submitted To

GEETANAJALI COLLEGE OF COMPUTER SCIENCE & COMMERCE



Affiliated To
Saurashtra University
For Academic Year

2025-26



Geetanjali Charitable Trust Sanchalit

GEETANJALI COLLEGE Of Computer Science & Commerce (B.B.A.)

INDIAN REDCROSS BUILDING, SUCHAK ROAD, OPP. SHASTRI
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Date 06/11/2025

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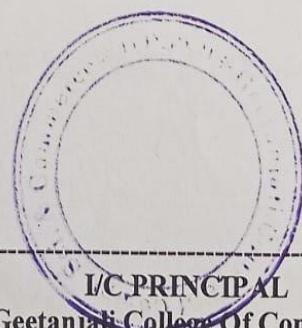
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Certificate

This is to certify that Mr./Miss. Chauhan Ravi K.

student of B.Sc. I.T. SEM-V has carried out this project work as per Saurashtra University curriculum, under our guidance and supervision and it is his/her own contribution.

PROJECT GUIDE
Geetanjali College Of Computer
Science & Commerce (BBA)



I/C PRINCIPAL
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REDMI 9 PRIME
AI QUAD CAMERA

➤ Acknowledgement

➤ The project on OM RESTAURANT(Online Food Ordering System) is developed in PHP Language at GEETANJALI COLLEGE OF COMPUTER SCIENCE & COMMERCE. I would like to acknowledge that my project has been completed and I am ensuring that, in this accomplishment, I would like to express my special gratitude to all my teachers and specially to PROF. NIDHI PARMAR without their guidance and feedback it is not possible to complete this assignment.

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INTRODUCTION

1. OBJECTIVE

- The main objective of this project is to develop an online Restaurant system that simplifies restaurant management tasks.
- The System allows customers to register, Login, browse the menu, place orders and checkout online.
- It allows administrators to manage menu items, manage customer orders, manage users, generate revenue report efficiently.

2. Scope Of the Project

➤ This Project aims to automate and digitalize restaurant operations such as:

- Customer registration and authentication.
- Online food ordering and cart management.
- Administrative control over menu and order management.
- Automated generation of revenue reports.
- Secure login for admin and customers.
- The system improves efficiency, reduce manual errors and enhances customer experience.

PROJECT PROFILE

Project Title : Om Restaurant(Online Food Ordering System)

Development Software : Visual Studio

Front End Tool : PHP

Back End Tool : SQL SERVER

Academic Year : 2025-26

Developed By : Ravi Chauhan

Submitted To : Geetanjali College

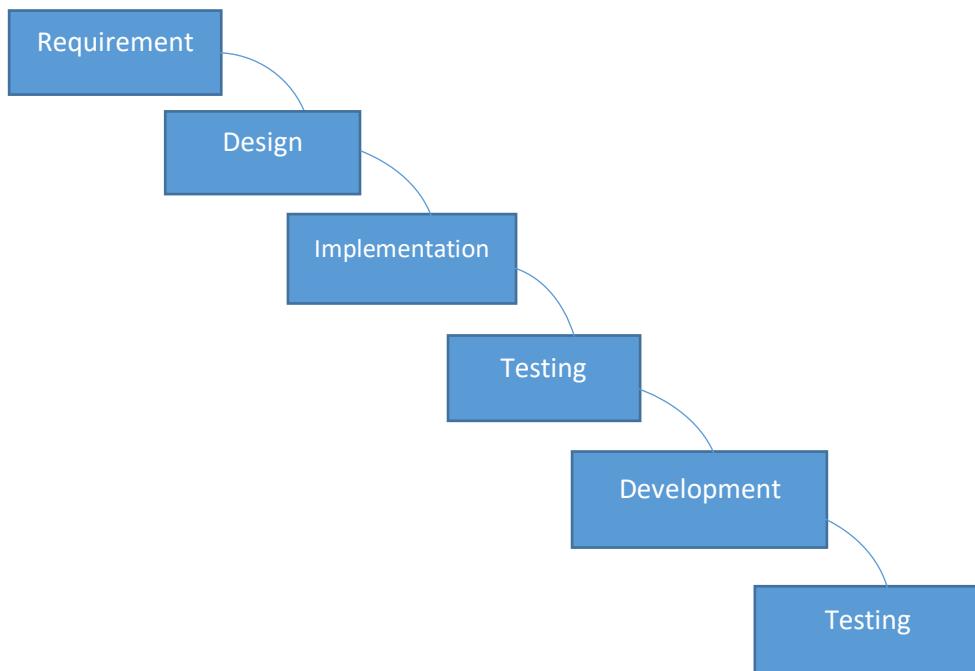
PROCESS MODEL

➤ For The development of the Online Food Ordering System, the Waterfall Model has been used.

➤ The Waterfall Model:

The waterfall model is one of the most widely used Software Development Life Cycle models that follows a sequential design process – where each phase must be completed before moving next.

The waterfall development model originates in the manufacturing and construction industries: highly structured physical environments in which after-the-fact changes are prohibitively costly, if not impossible. Since no formal software development methodologies existed at the time, this hardware-oriented model was simply adapted for software development.



➤ Advantages of Using Waterfall Model

- Easy to Understand and Manage.
- Each phase has clear deliverables and deadlines.
- Works well when requirements are fixed and clearly defined.
- Simple and structured approach.

Software Resources

Frontend Design Tool : Visual Studio Code

Backend Design Tool : Microsoft SQL server

Code-Behind Language : PHP

➤ Customer Module Functionality :

- User Registration
- Login/Logout
- View Menu
- Add to Cart
- Update/ Remove Cart Items
- Checkout
- View Order History

➤ Admin Module Functionality :

- Login/Logout
- Dashboard Overview
- Add Menu Item
- Manage Menu Items(Update / Delete)
- Manage Orders
- Manage User / Customers
- Generate Revenue reports

Data Dictionary

1. User Login Table

Columns	Datatype	Constraints
id	int	PrimeryKey(Ai)
name	Varchar(250)	Not null
phone	Varchar(250)	Not null
email	Varchar(250)	Not null
password	Varchar(255)	Not null
cpassword	Varchar(255)	Not null
address	text	Not null

2. Admin Login Table

Columns	Datatype	Constraints
adm_id	int	PrimeryKey(Ai)
name	Varchar(255)	Not null
email	Varchar(255)	Not null
password	Varchar(255)	Not null
date	Datetime(6)	Not null

3. Menu Table

Columns	Datatype	Constraints
id	int	PrimeryKey(Ai)
item_name	Varchar(50)	Not null
description	Varchar(250)	Not null
img	Varchar(250)	Not null
price	float	Not null
category	Varchar(250)	Not null

4. Contactus Table

Columns	Datatype	Constraints
id	int	PrimeryKey(Ai)
name	Varchar(255)	Not null
number	Varchar(255)	Not null
email	Varchar(255)	Not null
message	text	Not null
date	Datetime(6)	Not null

5. Reservation Table

Columns	Datatype	Constraints
rs_id	int	Primerykey(Ai)
Customer_name	Varchar(255)	Not null
contact	Varchar(11)	Not null
date	date	Not null
time	Time(6)	Not null
Guests	int	Not null

6. Orders

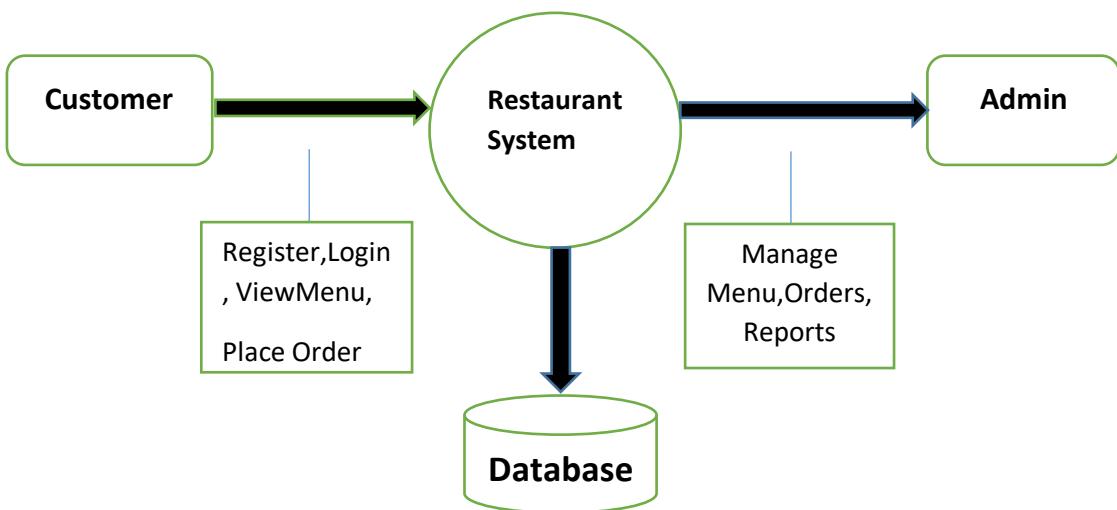
Columns	Datatype	Constraints
Order_id	int	Primerykey(Ai)
Customer_name	Varchar(50)	Not null
phone	Varchar(250)	Not null
address	text	Not null
items	Varchar(255)	Not null
total	float	Not null
status	Varchar(255)	Not null
date	Datetime(6)	Not null
User_id	int	Not null
Payment_method	Varchar(50)	Not null

DFD(Data Flow Diagram)

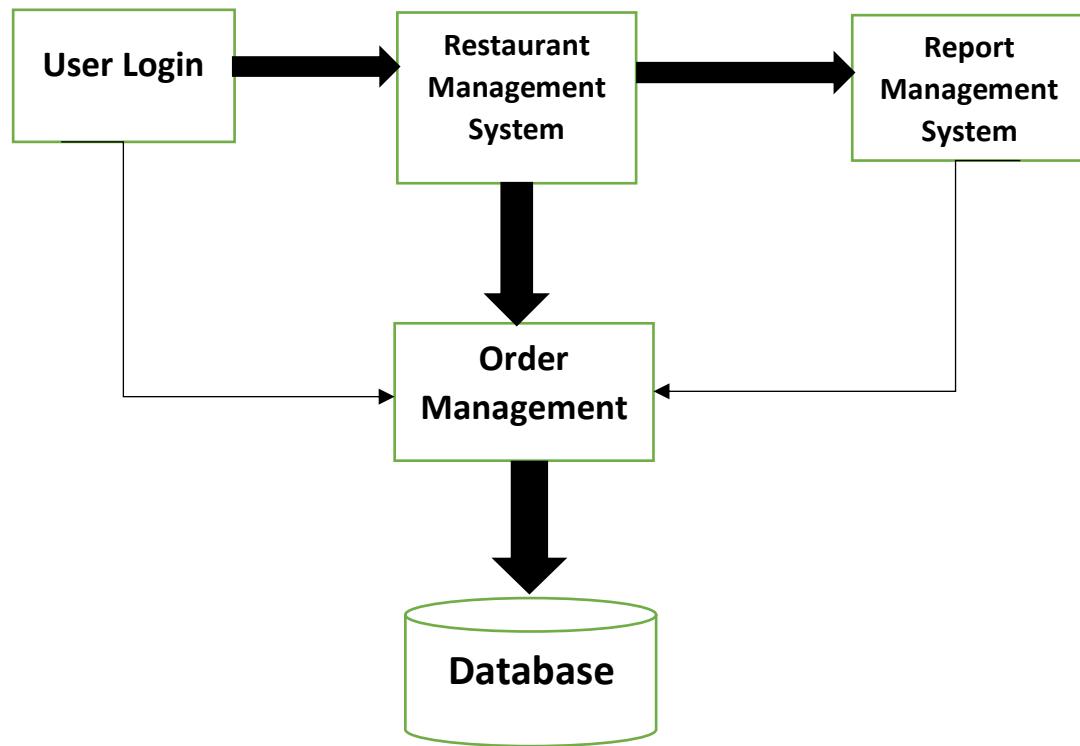
➤ Data Flow Diagram Symbol

Symbol	Description
→	Data Flow : data flow are pipelines through the Packets of information
rectangle	Entity : entity are the object of the system
circle	Process : A process or task performed by the system
cylinder	Data store : A place where data to be stored

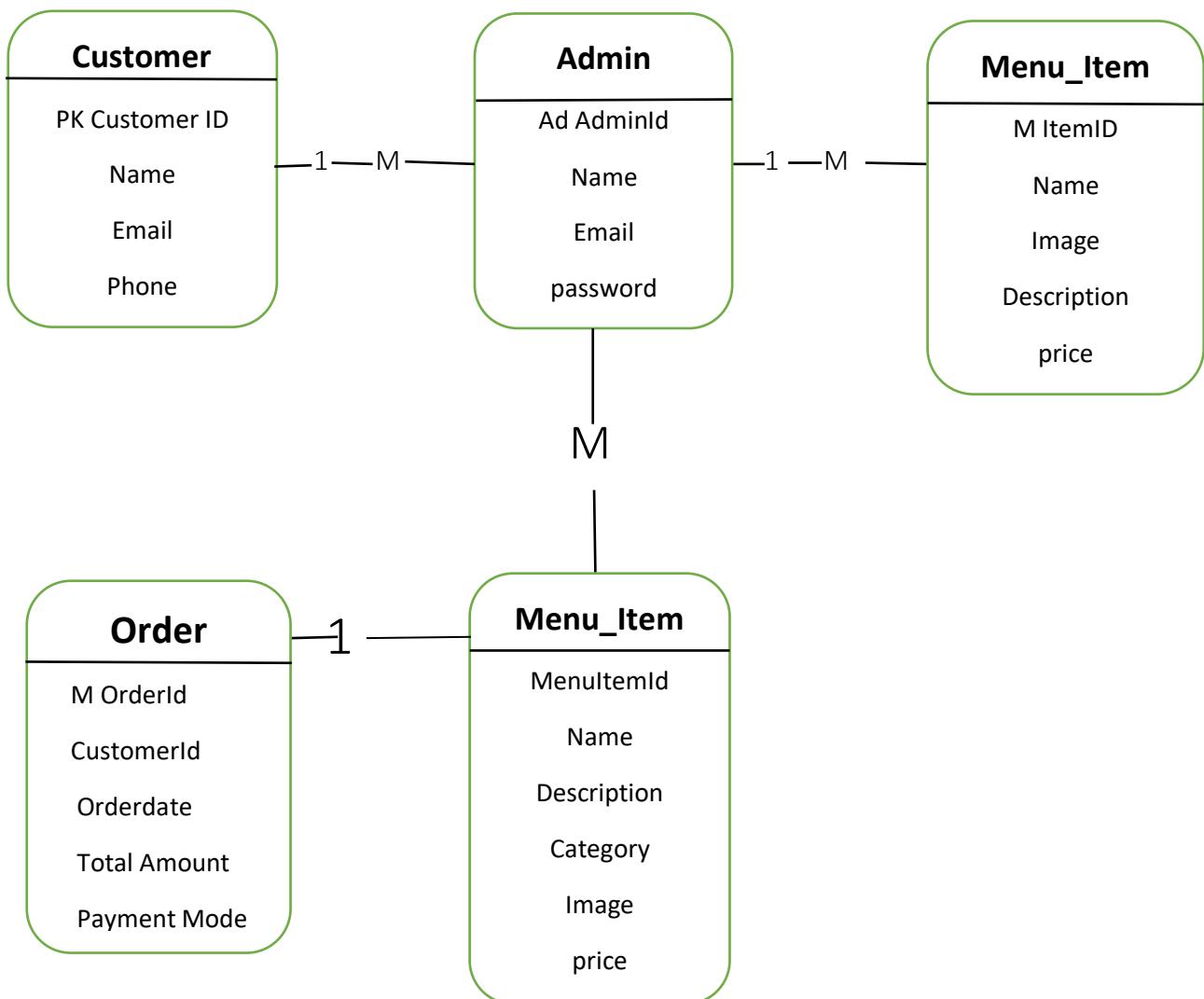
➤ 0 Level DFD



➤ 1 Level DFD



ERD [Entity Relationship Diagram]



Test Cases

User Registration

Serial No.	Test Case	Precondition	Result	Status
1.	Verify a new customer can register successfully	Registration page is accessible	User registered successfully and redirected to login page	Pass/Fail
2	Verify validation for exiting email or phone	Exiting user email or phone	System shows email or phone already exists	Pass/Fail

Login

Serial No.	Condition to be Check	Test Data	Expected Output	Remarks
1.	If Fields are empty	Value of form fields.	Alert the user to enter the fields and then proceed.	Pass/Fail
2	If incorrect username or password	Value of Textbox of Username & password	Alert user that “Invalid Username or password” Please Try Again	Pass/Fail

Cart

Serial No.	Test Case	Precondition	Result	Status
1.	Verify add to cart functionality	Select item to add to cart	Item added to cart successfully	Pass/Fail
2.	Update cart	Verify that user can update item quantity	Cart updated successfully	Pass/Fail
3.	Remove cart Item	Verifying Removing Item from cart	item removed from cart	Pass/Fail

Checkout

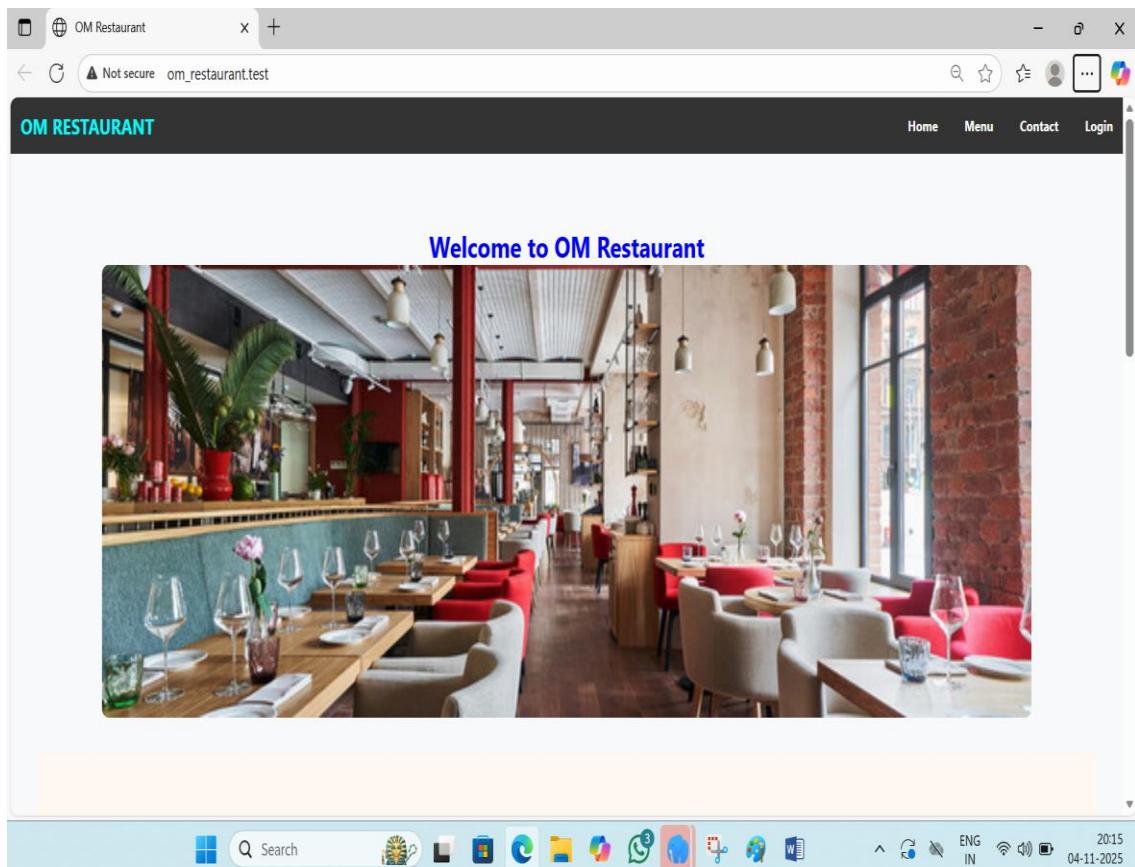
Serial No.	Test Case	Precondition	Result	Status
1.	At Least one item in cart	Add item to cart	Order Placed successfully	Pass/Fail
2	Enter valid mobile number or address	Please enter valid phone or address	Order Placed successfully	Pass/Fail
3.	Select Payment method	Please select valid payment method to checkout cart items	Order Placed successfully	Pass/Fail
4.	Check if user Logged in	User Must be login for checkout	Order Placed successfully	Pass/Fail

Admin

Serial No.	Test Case	Precondition	Result	Status
1.	Add Menu item	1.Admin Logged in. 2.all fields must be filled by admin .	Menu item added successfully	Pass/Fail
2.	Update Menu item	1.Admin Logged in. 2.all fields must be filled by admin . 3. click on Update	Menu item updated successfully	Pass/Fail
3.	Delete Menu item	1.Admin Logged in. 2. click on Delete	Menu item deleted successfully	Pass/Fail
4.	Manage Orders	1.Admin Logged in. 2.click action dropdown 3. change Order status	Delivered/Pending/Cancelled/Delete	Pass/Fail
5.	Revenue Report	1.Admin Logged in. 2.click on time period dropdown 3. click on generate.	Display Revenue Report of selected time Period	Pass/Fail
6	Logout	Admin must beloggedin	Redirected to Login/Home page session destroyed	Pass/Fail

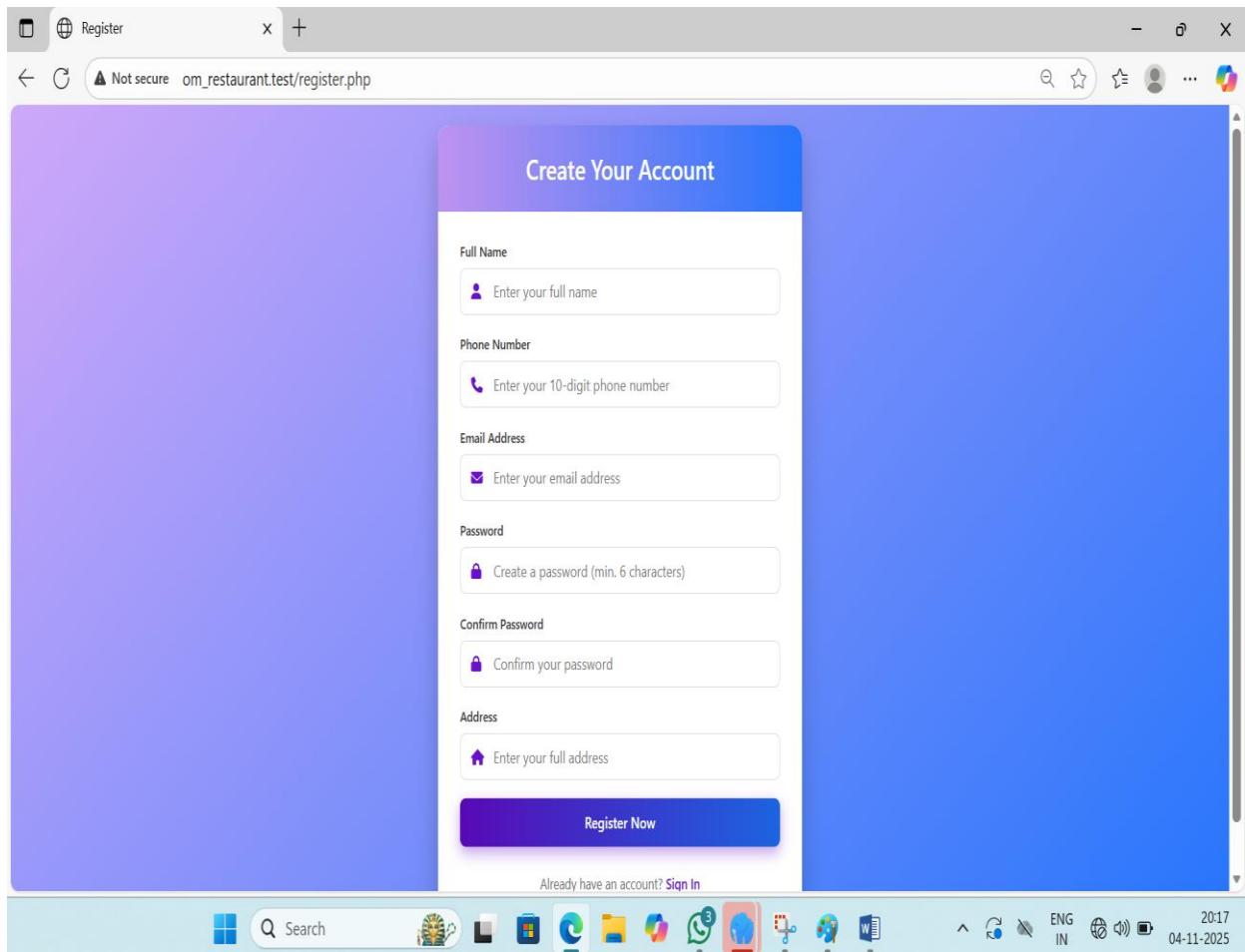
Screenshots

Home Page



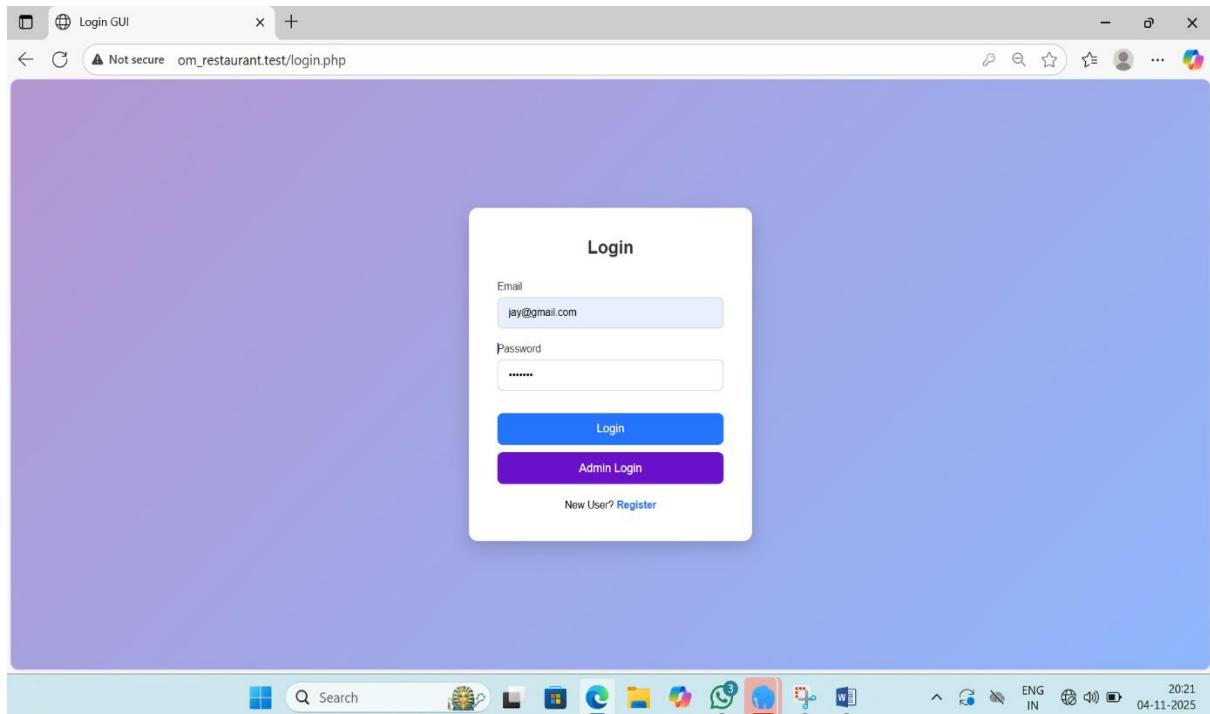
- Display The Restaurant Home Page when You open the site.

Register Page

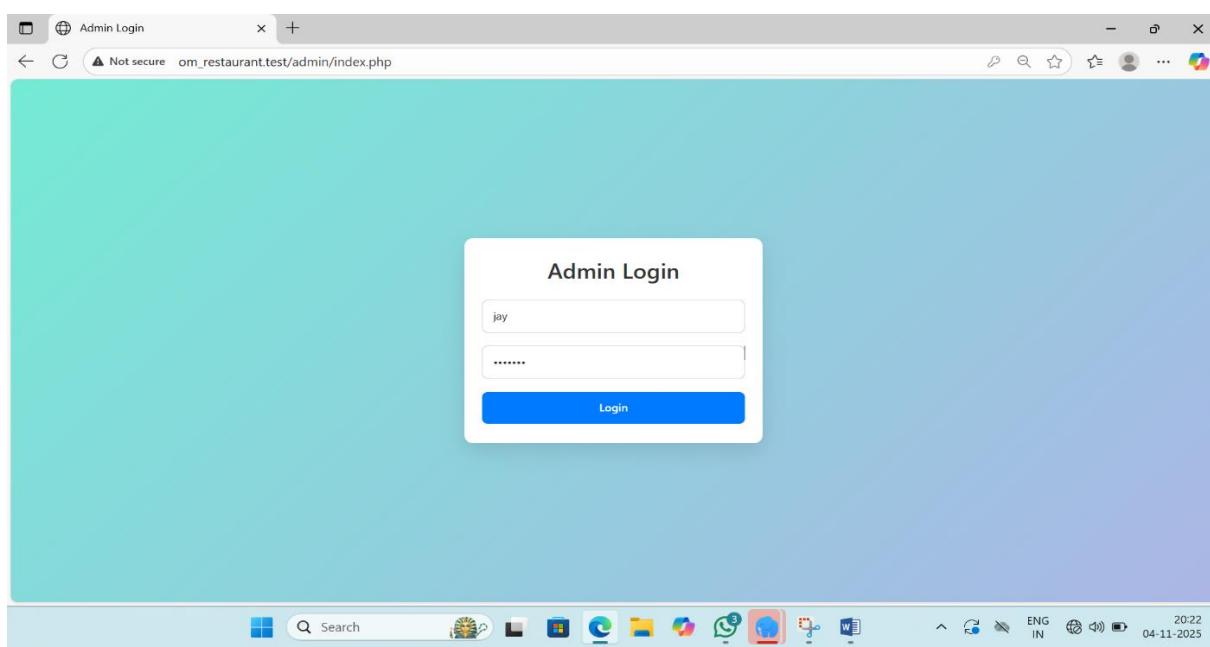


- Enter name, valid email, phone, Password, conform password, address to register.
- Allows user to create account .

Login Page

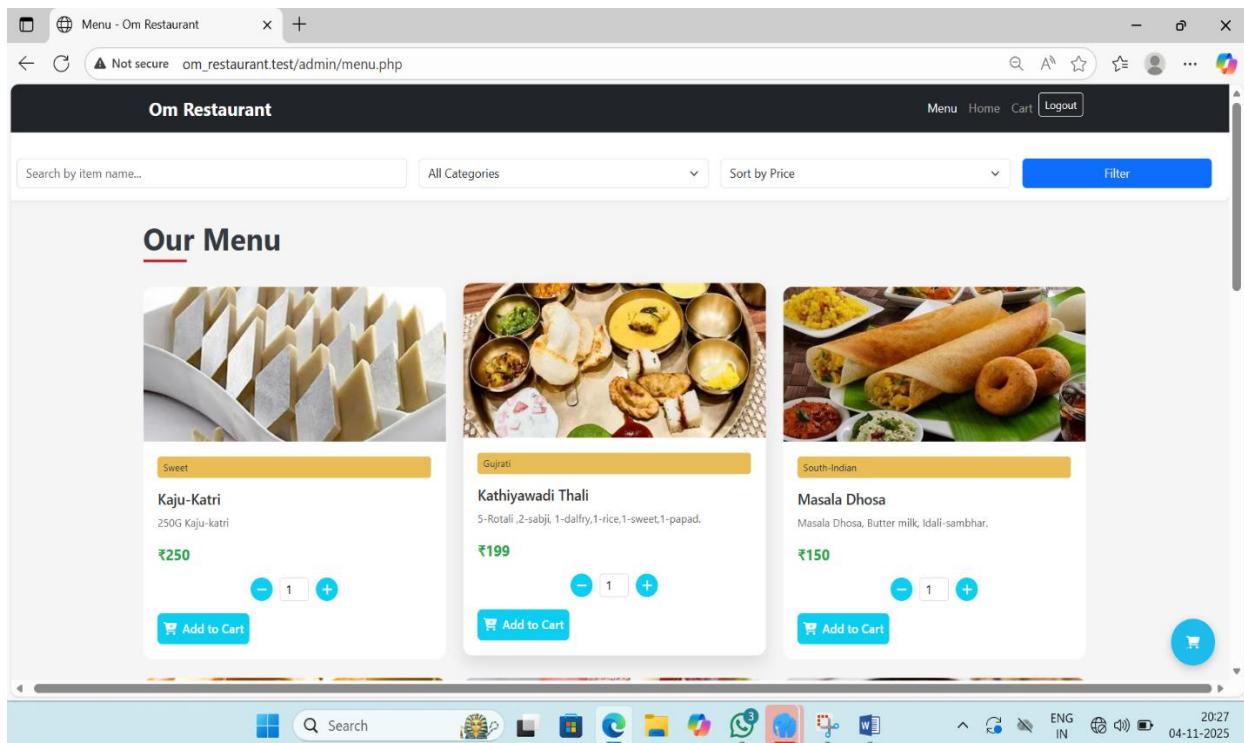


Admin Login



- For User Authentication.
- Login Only Registered Users.
- After Login customer redirect to home page and can give order and Admin can perform administrative tasks.

Menu Page



- Customer can view menu items and add to cart.
- Customer can add min 1 Item and Maximum 6 item to the cart.

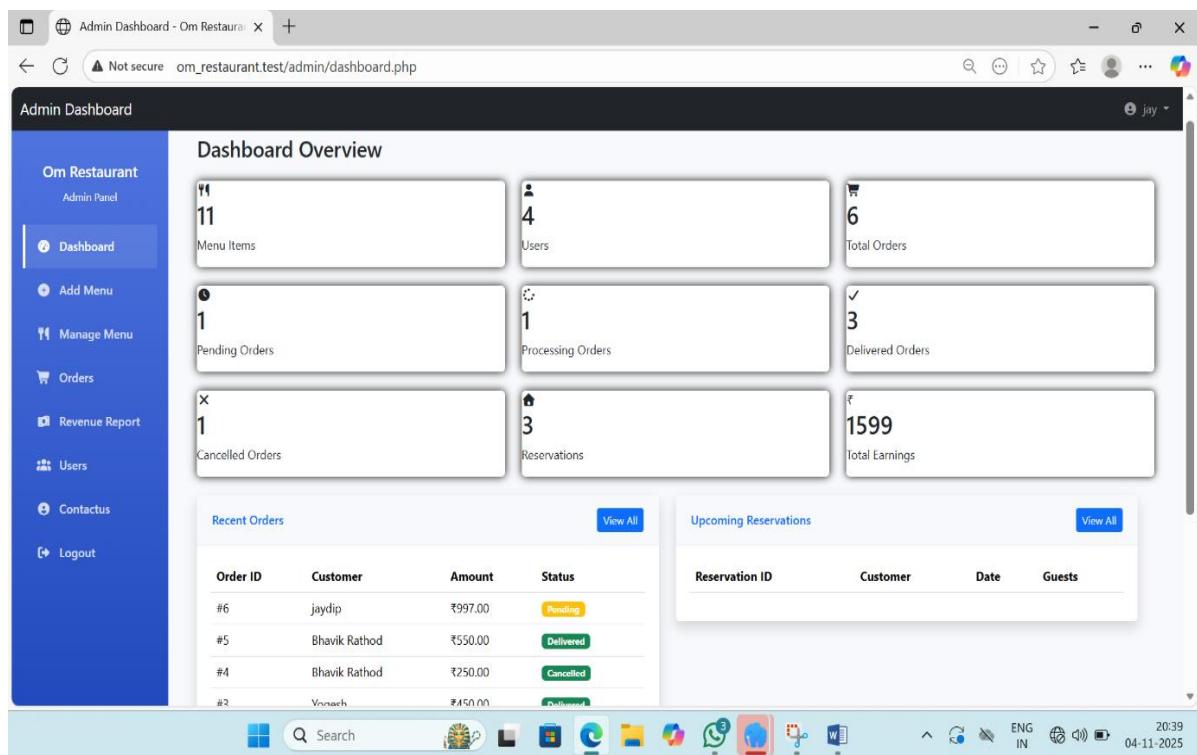
Cart Page

The screenshot shows the 'Cart - Om Restaurant' page. At the top, there's a navigation bar with 'Om Restaurant', 'Menu', 'Cart', 'Orders', and a 'Logout' button. Below it is a section titled 'Your Cart' containing a table with three items: Kaju-Katri, Rajbhog-Shrikhand, and Kathiyawadi Thali. Each item has a quantity selector (minus, plus), a 'Subtotal (₹)' column, and a 'Remove' button. A 'Total' row shows ₹997.00. Below the table are 'Clear Cart' and 'Add More Items' buttons. The next section, 'Checkout', requires customer information: 'Customer Name' (jaydip), 'Phone' (9234567890), and 'Address' (Bapa sitaram chowk, Raiya road, Rajkot). It also includes 'Payment Method' options ('Cash on Delivery' selected, 'Online Payment (Disabled)') and a 'Place Order' button. The status bar at the bottom shows system icons and the date/time: 04-11-2025, 20:33.

The screenshot shows the same 'Cart - Om Restaurant' page after an order has been placed. A green success message at the top states 'Order placed successfully! Your Order ID is ORD20251104150431327'. Below it, a message says 'Your cart is empty.' There's a 'Back to Menu' button. The status bar at the bottom shows system icons and the date/time: 04-11-2025, 20:34.

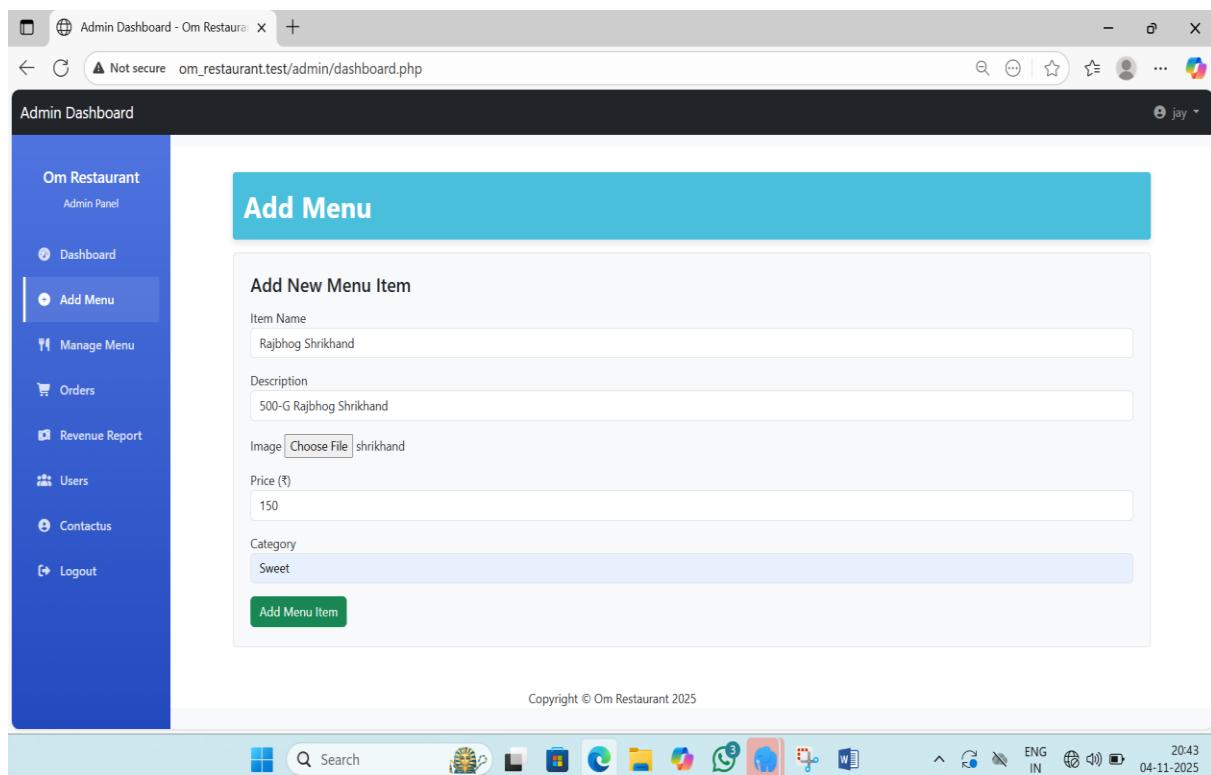
- Customer must be login for checkout cart items.
- Enter all fields for checkout.
- Please select payment method for checkout.

Admin Dashboard



- This admin dashboard saw all administrative activities of the Restaurant System.
- Admin can perform all administrative from this Dashboard.

Add Menu Item



- Admin can add Menu items from this Page.
- All fields must be required for add menu item.
- Choose valid image format of menu item.

Manage Menu

The screenshot shows a web browser window titled "Admin Dashboard - Om Restaura" with the URL "om_restaurant.test/admin/dashboard.php". The dashboard has a dark blue sidebar on the left labeled "Om Restaurant Admin Panel" with options: Dashboard, Add Menu, Manage Menu (which is highlighted), Orders, Revenue Report, Users, Contactus, and Logout. The main content area is titled "Manage Menu" and contains a table titled "Menu Items". The table has columns: ID, Item Name, Description, Image, Price, Category, and Actions (with Update and Delete buttons). There are 7 menu items listed:

ID	Item Name	Description	Image	Price	Category	Actions
1	Kaju-Katri	250G Kaju-katri		₹250.00	Sweet	<button>Update</button> <button>Delete</button>
2	Kathiawadi Thali	5-Rotali ,2-sabji, 1-dalfry,1-rice,1-sweet,1-papad.		₹199.00	Gujrati	<button>Update</button> <button>Delete</button>
3	Masala Dhosa	Masala Dhosa, Butter milk, Idali-sambhar.		₹150.00	South-Indian	<button>Update</button> <button>Delete</button>
4	Pani-puri	8-pani puri		₹25.00	Fast-Food	<button>Update</button> <button>Delete</button>
5	Gulab Jamun	500G Gulab-Jamun		₹150.00	Sweet	<button>Update</button> <button>Delete</button>
6	Kaju Butter Masala	250G-kaju Butter Masala		₹150.00	Punjabi	<button>Update</button> <button>Delete</button>
7	Butter-Nan	3-Butter Nan		₹150.00	Punjabi	<button>Update</button> <button>Delete</button>

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The taskbar at the bottom shows various icons and the date/time: 04-11-2025, 20:45.

- Admin can update and delete menu items from manage menu page.

Orders

Order ID	Customer	Phone	Address	Items	Total	Status	Date	Actions	Bill
6	jaydip	9234567890	Bapa sitaram chowk, Rajya road ,Rajkot.	Kaju-Katri × 1 x ₹250.00 Rajbhog-Shrikhand × 1 x ₹150.00 Kathiawadi Thali × 3 x ₹199.00	₹997.00	Pending	04 Nov 2025	Actions	Generate Bill
5	Bhavik Rathod	9824323564	Bapa sitaram chowk, Rajya road ,Rajkot.	Chapdi-Undhiyu × 2 x ₹150.00 Kaju-Katri × 1 x ₹250.00	₹550.00	Delivered	03 Nov 2025	Actions	Generate Bill
4	Bhavik Rathod	9824323564	Bapa sitaram chowk, Rajya road ,Rajkot.	Punjabi Thali × 1 x ₹250.00	₹250.00	Cancelled	03 Nov 2025	Actions	Generate Bill
3	Yogesh	9824223776	Astron chowk, Rajkot .	Gulab Jamun × 1 x ₹150.00 Butter-Nan × 1 x ₹150.00 Kaju Butter Masala × 1 x ₹150.00	₹450.00	Delivered	03 Nov 2025	Actions	Generate Bill
2	Jaydip	9824323564	Bapa sitaram chowk, Rajya road ,Rajkot.	Masala Dhosha × 1 x ₹150.00	₹150.00	Processing	03 Nov 2025	Actions	Generate Bill

- Admin Can view all orders.
- Admin can update order status from this page.
- Admin can generate order bill.

Revenue Report

The screenshot shows the Admin Dashboard for Om Restaurant. The left sidebar has a dark blue background with white icons and text for Om Restaurant Admin Panel, including Dashboard, Add Menu, Manage Menu, Orders, Revenue Report (which is highlighted in light blue), Users, Contactus, and Logout. The main content area has a white background. At the top, it says "Revenue Report" and "Select Time Period: Current Year". Below that is a blue "Filter" button. Underneath is a heading "Total Revenue: ₹1,599.00". A table follows, showing three orders with their details and totals:

Order ID	Customer	Items	Total (₹)	Date
5	Bhavik Rathod	Chapdi-Undhiyu x ₹150.00 × 2 Kaju-Katri x ₹250.00 × 1	550.00	03 Nov 2025, 11:12 AM
3	Yogesh	Gulab Jamun x ₹150.00 × 1 Butter-Nan x ₹150.00 × 1 Kaju Butter Masala x ₹150.00 × 1	450.00	03 Nov 2025, 11:10 AM
1	Jaydip	Kaju-Katri x ₹250.00 × 1 Rajbhog-Shrikhand x ₹150.00 × 1 Kathiawadi Thali x ₹199.00 × 1	599.00	03 Nov 2025, 11:08 AM

At the bottom of the main content area, it says "Copyright © Om Restaurant 2025". The bottom bar of the browser window shows various system icons and the date/time "04-11-2025 20:47".

- Admin can Generate Revenue report of the selected time period from Revenue Report page.

Users

The screenshot shows a web browser window titled "Admin Dashboard - Om Restaurant". The URL is "om_restaurant.test/admin/dashboard.php". The dashboard has a dark header with the title and a user profile icon. Below the header is a sidebar on the left with the "Om Restaurant" logo and several menu items: Dashboard, Add Menu, Manage Menu, Orders, Revenue Report, Users (which is highlighted), Contactus, and Logout. The main content area is titled "Registered Users" and contains a table with four rows of data. The table columns are ID, Name, Phone, Email, Address, and Actions. The data is as follows:

ID	Name	Phone	Email	Address	Actions
1	jaydip	9786756453	jaydip@gmail.com	Raiya chowkdi, Rajkot	Edit Delete
2	Yogesh	9824223776	yogesh@gmail.com	Hanuman madhi, raiya road, rajkot	Edit Delete
3	bhavik	9876543212	bhavik@gmail.com	Astron chowk,rajkot	Edit Delete
4	sachin	7777884318	sachin@gmail.com	Bapa sitaram chowk,Raiya road,rajkot.	Edit Delete

At the bottom of the page, there is a copyright notice: "Copyright © Om Restaurant 2025". The browser's taskbar at the bottom shows various pinned icons and the date/time: "20:48 ENG IN 04-11-2025".

- Admin can see all the registered users.
- Admin can update and delete users.

Contact us

The screenshot shows a web browser window titled "Admin Dashboard - Om Restaurant". The URL is "om_restaurant.test/admin/dashboard.php". The dashboard has a sidebar on the left with the following menu items:

- Om Restaurant
- Admin Panel
- Dashboard
- Add Menu
- Manage Menu
- Orders
- Revenue Report
- Users
- Contactus (highlighted)
- Logout

The main content area is titled "Contact Us" and displays a table with one row of data:

ID	Name	Number	Email	Message
1	jaydip	9234567890	jaydip@gmail.com	How many items available in your restaurant.

At the bottom of the page, there is a copyright notice: "Copyright © Om Restaurant 2025". The system tray at the bottom right shows various icons and the date/time: "20:49 04-11-2025".

- Admin can view all the messages send by users.
- Admin can replay all the messages send by users.

Limitations

1. Limited Payment Integration:

The system may only support basic or manual payment methods (like cod) and might not include secure online payment gateways.

2. No Real-Time Order Tracking:

Customer cannot track their order status (e.g. "order being prepared", "out for delivery").

3. Single Admin Access:

The system allows only one admin account, which limits scalability and management.

4. No Role-Based Access Control:

There's no separation of roles such as cashier, chef, or manager – all admin users have the same privileges.

5. Lack of Inventory Management:

The system does not track ingredient stock or notify when an item runs out.

6. No AI or Recommendation System:

The system doesn't suggest dishes based on customer preferences or order history.

7. No Multi-Restaurant Support:

Designed for a single restaurant. Cannot handle multiple restaurant branches or locations.

8. Security Constraints:

Basic Login authentication may not include encryption or protection against SQL injection and XSS attacks.

Conclusion

- The OM Restaurant Management System successfully automates the key operations of a restaurant, such as customer registration, login, menu browsing, order placement, and administrative control. It provides a convenient platform for customers to order food online and for administrators to manage menu items, customer details, and orders efficiently.
- By implementing this system, the traditional manual process of taking and managing orders is simplified, reducing errors and saving time. The project also enhances the customer experience through an easy-to-use interface and improves operational efficiency for the restaurant staff.
- Although the current system fulfills the essential requirements of a restaurant's online management, there is still scope for future improvements such as integrating online payment gateways, real-time order tracking, and advanced analytics. Overall, this project demonstrates the effective use of PHP, MySQL, HTML, CSS, and JavaScript to create a reliable and user-friendly restaurant management application.

Feature Enhancement

1. Online Payment Gateway Integration

Integrate secure payment methods like Razorpay, PayPal, or Stripe for online payments using credit/debit cards, UPI, or wallets.

2. Real-Time Order Tracking

Allow customers to track their order status live (e.g., “Order Confirmed”, “Being Prepared”, “Out for Delivery”, “Delivered”).

3. Multi-Admin and Role-Based

Introduce multiple admin roles such as Manager, Chef, Delivery Staff, each with different privileges.

4. Inventory and Stock Management

Track ingredients and menu items to automatically disable out-of-stock dishes and generate restock alerts.

5. Customer Feedback and Rating System

Enable customers to rate dishes and provide feedback to improve service quality.

6. Table Reservation System

Add a feature for customers to book tables online for dine-in service in advance.

7. Discounts and Coupon Management

Include promotional offers, discounts, and coupon code features for loyal or first-time customers.

8. Email & SMS Notifications

Send automatic notifications to customers about order confirmation, delivery updates, or promotional offers.

9. Mobile Application Integration

Develop a mobile-friendly app version for Android/iOS with push notifications and easy ordering.

10. AI-Based Recommendation

System Suggest dishes to customers based on previous orders, preferences, and popular items.

11. Multi-Restaurant Support

Expand the system to manage multiple restaurant branches under one platform.

12. Customer Loyalty Program

Introduce reward points or membership systems for repeat customers.

13. Enhanced Security Features

Use password hashing, CAPTCHA, and secure login mechanisms to protect user data and prevent attacks.

Webliography

- <https://getbootstrap.com/>
- <https://stackoverflow.com/>