

# Restaurant Reservations and Menu Management

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Restaurants often manage reservations manually or through disconnected systems. This can lead to:

- double bookings
- poor table management
- difficulty tracking peak hours
- limited insight into popular menu items
- Inefficient menu updates

Our project aims to build a web-based Restaurant Reservation & Menu Management System that allows customers to book reservations online and browse menus, while enabling staff and managers to manage reservations and update menu items efficiently.

We chose this idea because:

- realistic real-world business scenario
- demonstrates strong database relationship
- supports multiple user roles
- manageable with our experience

Our system will support three main user groups:

## 1. Customers

- Browse menu items
- Search by category or price
- Make reservations
- View or cancel reservations

## 2. Staff

- View reservation dashboard
- Confirm or cancel reservations
- Assign tables
- Update menu items

## 3. Admin / Manager

- View reservation statistics
- Generate reports (busy hours, peak days)

- Track popular menu items
- Manage staff accounts

This system is designed for a medium-sized restaurant that:

- Accepts reservations online
- Needs organized table management
- Regularly updates its menu
- Wants data insights for better decision-making

Example Use Case Scenario:

A customer wants to reserve a table for Friday at 7 PM:

1. The customer visits the website
2. Checks available time slots
3. Submits a reservation request
4. Staff confirms the reservation
5. The reservation is stored in the database
6. The manager later analyzes reservation trends

The website will provide different functionality depending on the user role.

Rough Draft:

The system will include the following core tables:

## 1. Customers

CustomerID (Primary Key)

Name

Email

Phone

## 2. Tables

TableID (primary Key)

Seats

Location

AvailabilityStatus

### 3. Reservations

ReservationID (primary Key)

CustomerID (Foreign Key)

TableID (foreign Key)

Date

Time

Status

### 4. MenuItems

MenuItemID (primary Key)

Name

Description

Price

Category

AvailabilityStatus

### 5. Staff

StaffID (Primary Key)

Name

Role

LoginCredentials

## UI Layout:

### Customer Page Layout:

Navigation bar

Menu display section (with filters)

Reservation form (date, time, guests)

Confirmation message area

## Staff Dashboard: (from login)

Reservation list (pending/confirmed/canceled)  
Table management view  
Menu editor panel

## Admin Dashboard: (also after login)

Reservation statistics  
Popular dish analytics  
Reporting section