

Restaurant Website Requirements Document

Version: 1.1

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1. Introduction

This document details the functional and non-functional requirements for developing a website for a restaurant. The site will enable customers to place delivery or takeaway orders using "Cash on Delivery" as the sole payment method, and also allow users to reserve tables. The admin dashboard will help in managing orders, reservations, and notifications.

2. Objectives

- **User-Friendly Interface:** The website will provide an intuitive interface for customers to browse the menu, place orders, or reserve a table.
 - **Cash on Delivery:** The website will exclusively support Cash on Delivery for payments.
 - **Admin Dashboard:** Admins will have a dashboard for managing orders, reservations, notifications, and menu updates.
 - **Real-Time Notifications:** The admin will receive real-time alerts for new orders or reservations.
 - **Branch Selection:** Customers can choose from different restaurant branches before placing an order or reserving a table.
 - **Responsive Design:** The site will be optimized for desktops, tablets, and mobiles.
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3. Scope

Inclusions:

- Front-end and back-end design and development.
- Notification systems for customers and admins.
- Hosting setup and deployment.
- Table reservation and branch selection integration.
- Quality assurance and testing.

Exclusions:

- Online payment integration (future enhancement).
- Mobile applications (future enhancement).

4. Functional Requirements

4.1 Customer-Facing Website

- **Home Page:**
 - Display restaurant branding and logo.
 - Highlight promotions and featured dishes.
 - Easy navigation to menu, contact info, table reservations, and order tracking.
- **Branch Selection:**
 - Allow users to select a preferred branch for placing an order or reserving a table.
 - Display branch information including address and contact details.
- **Menu Page:**
 - Menu items categorized (Appetizers, Main Courses, etc.).
 - Each item displays an image, description, price, and customization options (size, add-ons).
- **Order Type Selection:**
 - Users can choose between **Delivery** or **Takeaway**.
 - Depending on the selection, show options for delivery address or pick-up time.
- **Shopping Cart:**
 - Customers can add, remove, or modify items.
 - Display a real-time price update.
 - Itemized list with quantities and prices.
- **Checkout Process:**
 - Collect customer details (name, address, contact number, etc.).
 - Only Cash on Delivery option for payment.
 - Display an order summary before submission.
- **Order Confirmation:**
 - Display a confirmation message with estimated delivery time.
 - Option to send confirmation via email or SMS.
- **Table Reservation:**
 - Customers can reserve a table at a specific branch.
 - Display availability of tables based on real-time data.
 - Collect necessary reservation details (name, contact number, date, time, number of people).
 - Provide a confirmation message for reservation.
- **Order and Reservation Tracking (Optional):**
 - Real-time tracking of order status (Preparing, Out for Delivery).
 - Display reservation details and allow customers to modify or cancel reservations.

4.2 Admin Dashboard

- **User Authentication:**
 - Secure login with password recovery.
- **Order Management:**

- View, update, and filter incoming orders by date, status, branch, or customer name.
 - Display details such as order ID, customer info, items, and timestamp.
- **Reservation Management:**
 - View, update, and manage table reservations.
 - Display reservation details, including customer info, branch, and reservation time.
- **Branch Management:**
 - Manage branch information (e.g., address, contact number, available tables).
 - Assign orders or reservations to the appropriate branch.
- **Menu Management:**
 - Add, edit, delete menu items.
 - Upload and manage images.
 - Update stock availability.
- **Notifications and Alerts:**
 - Receive real-time pop-up and auditory alerts for new orders or reservations.
 - Maintain a log of notifications.
- **Reporting and Analytics (Optional):**
 - Generate sales reports by date range.
 - View insights on popular items, peak ordering times, and reservation patterns.

4.3 Notifications

- **Customer Notifications:**
 - Send order and reservation confirmation via email or SMS.
 - Provide updates on order or reservation status.
 - **Admin Notifications:**
 - Instant notifications for new orders or reservations.
 - Alerts for system errors or issues.
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5. Non-Functional Requirements

- **Performance:**
 - Pages should load within 2 seconds.
 - Support up to 100 concurrent users without performance degradation.
- **Security:**
 - SSL encryption for secure data transmission.
 - Adherence to GDPR regulations.
- **Usability:**
 - Intuitive and accessible design.
 - Compliant with WCAG 2.1 accessibility standards.
- **Reliability:**
 - Guarantee 99.9% uptime.
 - Regular data backups for recovery.
- **Scalability:**

- System should be able to scale with increased traffic and future features like online payments.
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6. Technical Requirements

- **Front-End:**
 - HTML5, CSS3, JavaScript (optional: React.js or Vue.js)
 - Use Bootstrap or Material Design for responsive layouts.
 - **Back-End:**
 - Node.js, Python (Django/Flask), or PHP (Laravel).
 - MySQL, PostgreSQL, or MongoDB.
 - RESTful API for communication between front-end and back-end.
 - **Hosting:**
 - Use Nginx or Apache.
 - Hosting options include AWS, Heroku, or DigitalOcean.
 - SSL certificates for HTTPS.
 - **Third-Party Services:**
 - Email: SendGrid, Mailgun, or SMTP.
 - SMS: Twilio or Nexmo.
 - Google Maps API for branch location display and address validation.
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8. Project Timeline and Resources

- **Phase 1:** Requirements Gathering & Planning.
- **Phase 2:** Design & Prototyping.
- **Phase 3:** Development.
- **Phase 4:** Testing.
- **Phase 5:** Deployment.
- **Resources Needed:**
 - Front-End Developer.
 - Back-End Developer.
 - UI/UX Designer.
 - QA Tester.
- **Project Management Tools:**
 - Version Control: GitHub or GitLab.
 - Task Tracking: Jira