**Technical & Commercial Proposal**

# QR Based Food Ordering System for Restaurants

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**Created By -**

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# 1. Company Introduction

Code Creador is a leading provider of cutting-edge technological solutions for the hospitality industry. With a strong focus on innovation and efficiency, we specialize in delivering digital solutions that streamline operations, enhance customer experiences, and drive business growth. Our team of experts combines years of experience in software development, cloud services, and data analytics to provide tailored solutions that meet the unique needs of each client.

We are committed to empowering businesses in the restaurant and hospitality sectors with user-friendly, scalable, and secure platforms. Our solutions enable businesses to stay ahead of the competition by embracing modern technology to improve processes, optimize workflows, and enhance overall performance.

At Code Creador, we believe in fostering long-term partnerships with our clients, understanding their challenges, and working together to achieve success. We pride ourselves on our dedication to excellence, customer satisfaction, and continuous improvement.

# 2. Executive Summary

Code Creador proposes the development and implementation of a QR Code Restaurant Menu Maker and Contactless Table Ordering System designed to enhance the dining experience while improving operational efficiency. This solution allows customers to scan a QR code at their table, view a digital menu, place orders, and complete payments—all without physical menus or direct interaction with staff.

The system integrates seamlessly with the restaurant's POS system, ensuring smooth order processing and payment. It offers backend features such as order management, customer profiles, and detailed analytics to help optimize restaurant operations.

Our solution is customizable, supporting various payment gateways and languages, and is scalable for any restaurant size. By adopting this solution, restaurants can improve customer satisfaction, reduce errors, and streamline service—all while embracing modern technology for safer, more efficient dining.

# 3. Scope of Work

The proposed QR Code Restaurant Menu Maker and Contactless Table Ordering System will include the following key features and deliverables:

**1. QR Code Menu Maker**

- A system to create digital menus for restaurants, including options to input menu items, descriptions, prices, and images.
- Generate unique QR codes for individual tables or the entire restaurant for easy access to the digital menu.

**2. Contactless Table Ordering System**

- Customers can scan the QR code at their table using their smartphones to access the digital menu.
- The system allows customers to browse through menu categories, select items, and place orders directly from their devices.
- Orders are sent directly to the kitchen or bar, minimizing physical contact and improving order accuracy.

**3. Restaurant POS Integration**

- Seamless integration with the restaurant's existing POS system to ensure that orders placed via the contactless system are processed efficiently.
- Integration for payment processing, supporting multiple payment methods such as credit cards, PayPal, and regional payment gateways.

**4. Frontend Features**

- Home page with language options, item search, category filtering, and a subscription section.
- Menu page with grid and list view, item variations, and the ability to add products to the cart.
- Checkout page for secure payment processing via integrated gateways.

**5. Backend Features**

- Comprehensive admin dashboard for managing items, variations, addons, orders, customer profiles, and transactions.
- Reports and analytics to track sales, popular items, and customer preferences.
- User management system for different access levels (admin, staff, customers).

## 6. Payment Gateway Integration

- Support for various global and regional payment gateways such as PayPal, Stripe, RazorPay, and more, for secure and seamless transactions.

## 7. Security & Compliance

- Secure login systems for admins and staff, including password protection and user role management.
- Compliance with relevant security standards for payment processing and data protection.

## 8. Customization and Support

- Customization options for branding, design themes, and currency settings.
- Ongoing technical support, software updates, and maintenance to ensure smooth operation.

This solution is designed to be user-friendly, scalable, and easy to implement, allowing restaurants to enhance their service offerings while adapting to the growing demand for contactless and digital interactions in the hospitality industry.

# 4. Project Goals and Objectives

**Goals:**

1. **Enhance Customer Experience:**
   Provide a seamless, contactless ordering system for improved order accuracy and faster service.
2. **Increase Operational Efficiency:**
   Automate orders, reduce physical menus, and streamline communication between customers and staff.
3. **POS System Integration:**
   Ensure smooth order processing through integration with the restaurant's POS system.
4. **Support Contactless Dining:**
   Enable customers to order and pay through their mobile devices, reducing physical contact.
5. **Data-Driven Insights:**
   Provide reports and analytics to help restaurants make informed decisions.

**Objectives:**

1. **Develop a Digital Menu:**
   Create an easy-to-use menu accessible via QR code.
2. **Payment Gateway Integration:**
   Support secure payment options like PayPal and Stripe.
3. **Optimize Backend Management:**
   Provide a dashboard for easy management of items, orders, and customer data.
4. **Ensure Seamless POS Integration:**
   Sync orders with the POS system for accurate processing.
5. **Customization Options:**
   Allow for menu design and pricing customization.
6. **Scalability:**
   Design the system to grow with the restaurant.
7. **Ongoing Support:**
   Provide continuous technical support and updates.

This solution aims to improve the dining experience while enhancing operational efficiency using modern, contactless technology.

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# 5.Technology Stack

| Frontend | ReactJS / VueJS, HTML5, CSS3, JavaScript, Bootstrap/Tailwind CSS |
|---|---|
| Backend | Node.js / Express.js, PHP / Laravel |
| Database | MySQL / PostgreSQL, MongoDB (optional) |
| Payment Gateways | UPI, Stripe, PayPal, RazorPay |
| Cloud & Hosting | AWS / Google Cloud |

# 6. Project Methodology

## Agile Methodology

The development of the QR Code Restaurant Menu Maker and Contactless Table Ordering System will follow the **Agile methodology**, ensuring flexibility, continuous improvement, and client involvement.

**Key Phases:**

1. **Planning & Requirements Gathering:** Define project scope and gather detailed requirements from the client.
2. **Sprint Planning:** Break the project into 2-4 week sprints with clear goals and deliverables.
3. **Design & Development:** Develop frontend and backend features, with regular client check-ins.
4. **Testing & QA:** Conduct continuous testing to ensure system performance and usability.
5. **Client Review & Feedback:** Hold sprint review sessions with the client to gather feedback and make adjustments.
6. **Deployment & Delivery:** Deploy the final system and provide ongoing support and maintenance.
7. **Iteration & Improvement:** Regular updates based on user feedback for continuous system enhancement.

Agile methodology allows for flexibility, rapid iterations, and ensures the system meets client needs throughout the project lifecycle.

# 7. Deliverables

1. **Digital Menu System :** A fully functional QR Code Menu Maker with customizable digital menus for restaurants.
2. **Contactless Table Ordering System :** An integrated system that allows customers to place orders and make payments via their smartphones using QR codes.
3. **POS Integration :** Seamless integration with the restaurant's POS system to process orders and payments.
4. **Frontend Development :** A responsive, user-friendly interface for both customers and restaurant staff, including menu browsing, order placement, and payment.
5. **Backend Dashboard :** A comprehensive admin panel for managing menu items, orders, customer data, and reports.
6. **Payment Gateway Integration :** Integration with multiple payment methods (PayPal, Stripe, RazorPay, etc.) for secure, contactless payments.
7. **Testing & Quality Assurance :** Thorough testing to ensure the system is bug-free, secure, and performs optimally across all devices.
8. **Client Review & Feedback Reports :** Documentation of client feedback and changes made after each sprint review.
9. **Deployment & Final Delivery :** The complete system deployed in a live environment, ready for use.
10. **Post-Deployment Support & Maintenance :** Ongoing support and maintenance to ensure smooth operation and regular updates.

These deliverables will ensure the successful deployment and operation of the QR Code Restaurant Menu Maker and Contactless Table Ordering System.

# 8. Project Timeline

The project will be completed in 8 weeks, following an Agile methodology with multiple sprints. Here's the breakdown:

- **Week 1: Planning & Requirements Gathering**
  The project will begin with defining the project scope, gathering detailed client requirements, and finalizing technical specifications.
- **Week 2: Sprint 1 - Design & Development**
  UI/UX design will be created, and development will begin on the frontend and backend structure of the system.
- **Week 3: Development & Integration**
  The focus will be on continuing frontend development, integrating QR code generation, and setting up the digital menu for the restaurant.
- **Week 4: POS Integration & Testing**
  The POS system will be integrated, and basic functionality will be tested to ensure smooth operation, addressing any issues.
- **Week 5: Payment Gateway Integration & QA**
  Payment gateways like PayPal and Stripe will be integrated, and testing will be done to ensure secure transaction flow. Bug fixes will be performed as needed.
- **Week 6: Finalizing Features & Client Review**
  Features like order management and backend dashboard will be finalized. A client review session will be held to gather feedback and make necessary adjustments.
- **Week 7: Testing & Final Adjustments**
  Comprehensive testing will be conducted, issues will be resolved, and the system will be refined based on client feedback.
- **Week 8: Deployment & Final Delivery**
  The system will be deployed in the live environment, and final checks will be made before the project is officially handed over, with post-deployment support provided.

This timeline ensures a structured, iterative development process with regular client involvement and feedback, leading to a successful project delivery.

# 9. Cost Estimate

The total estimated cost for the QR Code Restaurant Menu Maker and Contactless Table Ordering System is **50,000 INR**.

**Payment Terms:**

- **Advance Payment (25% - 12,500 INR):**
  Due upon project initiation, covering the initial planning and requirements gathering phase.
- **UI/UX Design (25% - 12,500 INR):**
  Due after the completion and approval of the UI/UX design, before the development phase begins.
- **Frontend Development (25% - 12,500 INR):**
  Due upon completion of the frontend development, including all features and functionalities for the customer-facing system.
- **UAT (User Acceptance Testing) & Deployment (25% - 12,500 INR):**
  Due upon successful completion of UAT, following client feedback, and prior to the deployment of the final system to the live environment.

# 10. Terms and Conditions

1. **Project Scope :** Development will follow the agreed scope. Any additional features outside the scope will incur extra charges and affect the timeline.
2. **Timely Feedback :** The client must provide timely feedback at each stage to avoid delays in the project timeline.
3. **Development Phases :** The project will be completed in phases, with each phase building on the previous one. Milestone-based progress will be followed.
4. **Testing & UAT :** Continuous testing will be performed, and the client will conduct User Acceptance Testing (UAT) before final approval. Any issues identified will be addressed.
5. **Revisions :** Minor revisions are included within the scope. Significant changes will incur extra charges.
6. **Deployment :** The system will be deployed after successful UAT and client approval.
7. **Post-Deployment Support :** 30 days of post-deployment support will be provided. Ongoing support will be available at additional cost.
8. **Intellectual Property :** Upon full payment, intellectual property rights for the developed system will be transferred to the client.
9. **Confidentiality :** Both parties agree to keep project-related information confidential.
10. **Termination :** Either party may terminate the project with written notice. Payments for work completed up to termination will be due.

These terms will guide the development process and ensure the project is completed smoothly and on time.

# 11. Conclusion

This proposal outlines the development of the **QR Code Restaurant Menu Maker and Contactless Table Ordering System** to enhance efficiency, reduce contact, and improve customer experience. With a clear scope, structured timeline, and defined payment terms, we are committed to delivering a high-quality solution on time and within budget.

We look forward to working with you to implement this innovative solution and transform your restaurant operations.

For any questions, please contact:
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