QR Code Ordering Locator

System Overview – QR Code Ordering Locator

The **QR Code Ordering Locator** is a digital restaurant ordering solution that streamlines the dining experience for both customers and restaurant staff. The system is composed of **three main interfaces**:

1. **Customer Mobile App** – for browsing the menu, placing and tracking orders.

2. **Cashier Mobile App** – for managing orders, updating order statuses.

3. **Admin Dashboard (Restaurant Admin)** – for managing menus, tables, staff, and overall system operations.

The solution ensures efficiency by using **QR codes per table**, allowing customers to instantly access menus, place orders, and track order progress in real-time.

Functional Requirements

Customers (Mobile App)

FR-1 Sign in with email and password.
FR-2 Signup with (name, email, phone, password).
FR-3 logout.
FR-4 reset password.
FR-5 Update profile.
FR-6 Submit an enquiry.
FR-7 View platform name and logo and social/contact channels: Facebook (link to facebook_url), WhatsApp (tap-to-chat with whatsapp_number), Phone numbers (click-to-call phone_number, second_phone_number) in header/footer.
FR-8 Scan QR code on table to load menu.
FR-9 View menu categories and products with details.
FR-10 Add product to cart and submit order.
FR-11 Track order status (Pending → In Preparation → Ready → Delivered).
FR-12 Rate orders and leave reviews.
FR-13 Receive notifications on order status changes.
FR-14 View **About section**: image + description.
FR-15 Access **Terms & Conditions** page.

Cashier (Mobile App)

FR-16 Sign in with email and password.
FR-17 logout.
FR-18 reset password.
FR-19 Update profile.
FR-20 View orders.
FR-21 Change order status (Pending → In preparation → Ready → Delivered).
FR-22 Reprint QR codes for tables.

Restaurant Admin (Mobile/Web)

FR-23 Sign in using email and password.
FR-24 Reset password.
FR-25 Update profile.
FR-26 logout
FR-27 Update restaurant with name, logo, working hours, about_image, about_description and terms_and_conditions, manage contact/social info (facebook_url, whatsapp_number, phone_number, second_phone_number), and preview changes before saving (overwriting the single settings row).
FR-28 Generate unique QR code per table.
FR-29 Create, read, update, delete (CRUD) cashiers.
FR-30 CRUD menu categories and products.
FR-31 View/update orders history.
FR-32 View / hide inappropriate enquiries.

Core Data - Suggested

- **User**: id, name, email, phone, password, role(admin, cashier, customer).
- **setting**: (one row) id, name, logo_url, address, working hours, about_image_url, about_description, terms_and_conditions, facebook_url, whatsapp_number, phone_number, second_phone_number.
- **Table**: id, number.
- **Category**: id, name.
- **Product**: id, name, description, image, price, category_id.
- **Order**: id, customer_id, table_id (optional), total_price, status, timestamps.
- **orderItem**: id, product_id, order_id, quantity, price.
- **order_status_changes:** id, order_id, status, created_at.
- **Review**: id, order_id, customer_id, rating, comment.
- **Enquiry**: id, content, customer_id.