

Create an ERD:

The online food delivery system is a platform that connects customers with restaurants, enabling users to browse menus, place food orders, and make secure payments. It maintains detailed records of restaurants, dishes, and available inventory while managing order processing and payment transactions. Additionally, the system allows users to track their orders and submit reviews, providing valuable feedback to both restaurants and other customers.

## Business Rules

### 1. User Registration and Address Details

- Every individual registering with the system must be assigned a unique identifier.
- Users must provide their full name, a unique email address, and a complete shipping address.
- The shipping address must include two address lines, a suburb, and a city.
- Each suburb is tied to one specific city.

### 2. Restaurant Onboarding

- Every restaurant must register with the system using a unique identifier.
- Restaurants are required to supply their name and physical address and specify the type of cuisine they offer.
- A restaurant must list the dishes it offers, with each dish belonging solely to the restaurant that offers it.

### 3. Dish Management and Inventory

- Every dish available for order must have a unique identifier.
- For each dish, the system must record the name, a description, the price, and the quantity available in inventory.
- A dish is offered by one restaurant, and a restaurant can offer several dishes.

### 4. Order Placement

- Registered users must be able to place orders through the system.
- Every order must have its own unique identifier and must be linked to the user who placed it.
- When an order is placed, users may include one or more dishes.

- If a user orders more than one copy of the same dish, the system must record the total quantity for that dish in the order.

#### 5. Order Total Calculation

- Upon confirmation, the system must calculate the total price of the order by summing the cost of each dish multiplied by its quantity.
- This total price must be stored as part of the order record.

#### 6. Payment Processing

- Every order must be linked to a single payment transaction.
- Each payment transaction must have a unique identifier and include details such as the payment date, the amount, and the payment method used.

#### 7. Review Submission

- Users who have placed orders are permitted to submit reviews for dishes they have ordered.
- Every review must be assigned a unique identifier and include a rating along with optional review text.
- A user may review a dish only once, while each dish may receive multiple reviews from different users.

#### 8. Data Integrity and Uniqueness

- The system must enforce uniqueness for key identifiers: for example, no two users should have the same email address, and no two restaurants should share the same RestaurantCode.
- Similarly, each order, dish, payment, and review must have a unique identifier to avoid duplication.

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