

# Online Food Delivery System

## Scenario

You are building a database for an online food delivery platform similar to **Swiggy** or **Zomato**.

The platform manages:

- Restaurants and their menus
- Customers and their orders
- Delivery drivers
- Ratings and reviews
- Payments and delivery times

This system will help management:

- Track performance of restaurants
  - Identify customer purchase patterns
  - Monitor delivery performance
  - Improve marketing campaigns
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## Suggested Tables

### 1. Restaurants

- restaurant\_id (PK)
- name
- city
- cuisine\_type
- rating (avg rating from reviews)

### 2. Menu

- menu\_id (PK)
- restaurant\_id (FK)
- dish\_name
- price
- category (Main Course, Dessert, Beverage, etc.)

### 3. Customers

- customer\_id (PK)
- name
- phone
- city
- join\_date

### 4. Orders

- order\_id (PK)

- customer\_id (FK)
  - restaurant\_id (FK)
  - order\_date
  - delivery\_time\_minutes
  - driver\_id (FK)
  - payment\_mode (UPI, Card, Cash)
5. **Order\_Details**
- order\_detail\_id (PK)
  - order\_id (FK)
  - menu\_id (FK)
  - quantity
6. **Drivers**
- driver\_id (PK)
  - name
  - phone
  - vehicle\_type
  - join\_date
7. **Reviews**
- review\_id (PK)
  - order\_id (FK)
  - customer\_id (FK)
  - restaurant\_id (FK)
  - rating (1–5)
  - review\_text
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## Business Problems

### Customer & Order Insights

1. List the **top 3 most-ordered dishes** in each city.
2. Find customers who spent **more than ₹5000 in the last month**.
3. Identify customers who placed **orders from more than 5 different restaurants**.
4. Show **repeat customers** (placed more than 3 orders in the last 2 months).
5. List customers who have **never given a review**.

### Restaurant Performance

6. Find the restaurant with the **highest number of orders** in the last quarter.
7. List restaurants whose **average rating is below 3.5**.
8. Identify the **most popular cuisine type** across all cities.
9. Calculate total revenue for each restaurant in the last month.
10. Find restaurants that have **at least one dish priced above ₹1000**.

## Delivery & Driver Efficiency

11. Calculate **average delivery time by driver**.
12. Identify the **fastest driver** in terms of average delivery time.
13. Find the percentage of **late deliveries** (e.g., >40 minutes) per driver.

## Menu & Order Details

14. List dishes that were **never ordered** in the last 6 months.
15. For each restaurant, find the **most profitable dish** (highest total sales amount).