

# ANALYSIS

## ENTITIES AND ATTRIBUTES

### **Room**

- Room\_id(PK)
- Type
- Status
- Price\_per\_night

### **Customers**

- customer\_id(PK)
- surname
- first\_name
- phone\_number
- email
- booking\_history

### **Hotel\_services**

- Hotel\_id(PK)
- services
- description
- price
- opening\_hrs

### **Room\_reservations**

- reservation\_id(PK)
- arrival\_date

- departure\_date
- number\_of\_guests
- special\_preferences
- reservation\_status

### **Billing & payment**

- Payment & Billing\_id(PK)
- room\_cost
- additional\_services\_used
- tax
- other\_charges
- payment\_method
- status

### **Customer feedback**

- feedback\_id(PK)
- rating
- comments
- date

## **2.Relationships & Cardinality**

### **1.Customer to Reservations:**

- One-to-Many (1:N)
- A guest can make multiple reservations, but each reservation is linked to a single guest.

### **2. Rooms to Reservations:**

- One-to-Many (1:N)
- A room can be booked by many guests over time,

but each reservation involves one room.

### **3. Reservations to Payments:**

- One-to-One (1:1) or One-to-Many (1:N)
- Each reservation can have one or multiple payments.

### **4. Reservations to Hotel\_Services:**

- Many-to-Many (M:N)
- A reservation can include multiple services, and each service can be part of multiple reservations.

### **5. Customer to feedbacks:**

- Many-to-Many (1:N)
- A Customer can leave multiple feedbacks.

### **6. Customer to Hotel\_services:**

- One-to-Many (1:N)
- A customer can enjoy many services and each service is available to one Customer.

### **7. Reservations to Feedback:**

- One-to-One (1:1) or One-to-Many (1:N)
- Each reservation can have one or multiple feedbacks.

