Hotel Management

Room Booking

- Customers would be booking the rooms with online portal. They are required to register themselves with email id prior to book the rooms
- Rooms would be having different type (Basic, Luxury) and have specific rent.

Service management

- Customers would be availing the services like food, laundry, site visits
- Food services would be charged based upon selection of food from menu.
- laundry services would be charged as Rs20/cloth
- Site visits would offer specific rates on the basis of per day charges and selection of vehicle

Invoice management

```
CREATE TABLE customers (
    customer_id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(100),
    email VARCHAR(100) UNIQUE NOT NULL,
    phone VARCHAR(15)
);
```

Table: rooms

```
CREATE TABLE rooms (
    room_id INT AUTO_INCREMENT PRIMARY KEY,
    room_type ENUM('Basic', 'Luxury') NOT NULL,
  rent_per_day DECIMAL(10,2));
```

```
CREATE TABLE bookings (
    booking_id INT AUTO_INCREMENT PRIMARY KEY,
    customer_id INT,
    room_id INT,
    check_in DATE,
    check_out DATE,
    FOREIGN KEY (customer_id) REFERENCES customers(customer_id),
    FOREIGN KEY (room_id) REFERENCES rooms(room_id)
);
```

Table: services

```
CREATE TABLE services (
    service_id INT AUTO_INCREMENT PRIMARY KEY,
    service_type ENUM('Food', 'Laundry', 'SiteVisit') NOT NULL
);
```

Table: food_menu

```
CREATE TABLE food_menu (
    food_id INT AUTO_INCREMENT PRIMARY KEY,
    item_name VARCHAR(100),
    price DECIMAL(10,2)
);
```

Table: food_orders

```
CREATE TABLE food_orders (
    order_id INT AUTO_INCREMENT PRIMARY KEY,
    booking_id INT,
    food_id INT,
    quantity INT,
    FOREIGN KEY (booking_id) REFERENCES bookings(booking_id),
    FOREIGN KEY (food_id) REFERENCES food_menu(food_id)
);
```

Table: laundry_services

```
CREATE TABLE laundry_services (
    laundry_id INT AUTO_INCREMENT PRIMARY KEY,
    booking_id INT,
    clothes_count INT,
    cost DECIMAL(10,2) GENERATED ALWAYS AS (clothes_count * 20) STORED,
    FOREIGN KEY (booking_id) REFERENCES bookings(booking_id)
);
```

Table: site_visits

```
CREATE TABLE site_visits (
    visit_id INT AUTO_INCREMENT PRIMARY KEY,
    booking_id INT,
    vehicle_type VARCHAR(50),
    days INT,
    rate_per_day DECIMAL(10,2),
    total_cost DECIMAL(10,2) GENERATED ALWAYS AS (days * rate_per_day) STORED,
    FOREIGN KEY (booking_id) REFERENCES bookings(booking_id)
);
```

Table: invoice

```
CREATE TABLE invoice (
    invoice_id INT AUTO_INCREMENT PRIMARY KEY,
    booking_id INT,
    room_charge DECIMAL(10,2),
    food_charge DECIMAL(10,2),
    laundry_charge DECIMAL(10,2),
    site_visit_charge DECIMAL(10,2),
    total_amount DECIMAL(10,2) GENERATED ALWAYS AS (
        room_charge + food_charge + laundry_charge + site_visit_charge
    ) STORED,
    FOREIGN KEY (booking_id) REFERENCES bookings(booking_id)
);
```