HOTEL MANAGEMENT SYSTEM

This hotel management project comprises essential tables for rooms, guests, reservations, staff, services, room services, and payments. It facilitates basic functionalities such as room bookings, guest management, service requests, and payment tracking within a small-scale hotel environment, ensuring efficient coordination of hotel operations.

Project by mr.shubham rai

GUIDED BY – MR SAMIR WARSOLKAR SIR

SHUBHAM RAI

[SHUBHAMNEWDAY@GMAIL.COM](mailto:SHUBHAMNEWDAY@GMAIL.COM)

BATCH ID= T315

HOTEL MANAGEMENT SysTEM

PROJECT FOR SQL MODULE

1. Description

This hotel management project is designed to streamline operations within a small-scale hotel environment. It includes essential tables for managing rooms, guests, reservations, staff, services, room services, and payments. The system enables functionalities such as booking rooms, managing guest information, handling service requests, and tracking payments. Through effective coordination of these components, the project aims to enhance efficiency and customer satisfaction in hotel operations.

This database contain 7 tables:

1. ROOMS
2. GUESTS
3. RESERVATIONS
4. STAFF
5. SERVICES
6. ROOM\_SERVICES
7. PAYMENTS

How these tables/ entities are related to each other is shown pictorially on next

Page through ER diagram ,i.e.,ENTITY RELATIONSHIP DIAGRAM.

2.ER.Diagram (Entity Relation- Diagram) for HOTEL MANAGEMENT SYSTEM:

TABLE GUESTS

Guest\_id(PK)

First\_name

Last\_name

Email

Phone\_number

CREATE STAFF

Staff\_id(PK)

First\_name

Last\_name

Position

Department

Email

Phone\_number

TABLE ROOMS

Room\_id(PK)

Room\_number

Room\_type

Rate\_per\_night

Status

TABLE RESERVATIONS

Reservation\_id(PK)

Guest\_id(FK)

Room\_id(FK)

Check\_in\_date

Check\_in\_out

Total\_amount

Payment\_status

TABLE ROOM\_SERVICES

Room\_service\_id(PK)

Reservation\_id(FK)

Service\_id(FK)

Quantity

Total\_price

TABLE SERVICES

Service\_id(PK)

Service\_name

Description

Price

TABLE PAYMENTS

Payment\_id(PK)

Reservation\_id(FK)

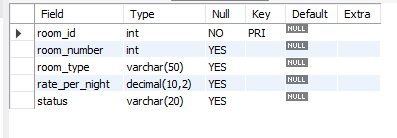
Payment\_date

Amount\_paid

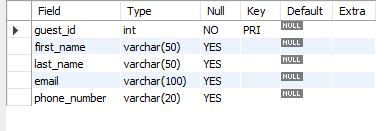
Payment\_method

1. TABLE DESCRIPTIONS

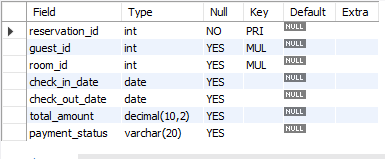
1.ROOM.



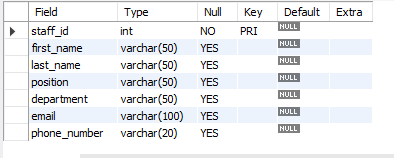
1. GUESTS



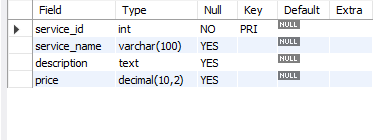
1. RESERVATIONS



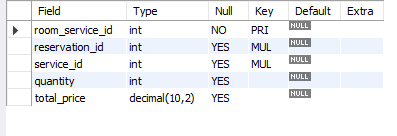
1. STAFF:



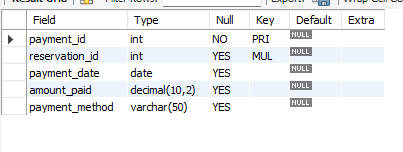
1. SERVICES:



1. ROOM\_SERVICES:



1. PAYMENTS:



1. COMMANDS:

CREATE DATABASE : HOTEL MANAGEMENT SYSTEM

SELECT DATABASE HOTEL\_MANAGEMENT\_SYSTEM;

-- Rooms Table

CREATE TABLE Rooms (

room\_id INT PRIMARY KEY,

room\_number INT,

room\_type VARCHAR(50),

rate\_per\_night DECIMAL(10, 2),

status VARCHAR(20)

);

-- Guests Table

CREATE TABLE Guests (

guest\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(100),

phone\_number VARCHAR(20)

);

-- Reservations Table

CREATE TABLE Reservations (

reservation\_id INT PRIMARY KEY,

guest\_id INT,

room\_id INT,

check\_in\_date DATE,

check\_out\_date DATE,

total\_amount DECIMAL(10, 2),

payment\_status VARCHAR(20),

FOREIGN KEY (guest\_id) REFERENCES Guests(guest\_id),

FOREIGN KEY (room\_id) REFERENCES Rooms(room\_id)

);

-- Staff Table

CREATE TABLE Staff (

staff\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

position VARCHAR(50),

department VARCHAR(50),

email VARCHAR(100),

phone\_number VARCHAR(20)

);

-- Services Table

CREATE TABLE Services (

service\_id INT PRIMARY KEY,

service\_name VARCHAR(100),

description TEXT,

price DECIMAL(10, 2)

);

-- Room\_Services Table

CREATE TABLE Room\_Services (

room\_service\_id INT PRIMARY KEY,

reservation\_id INT,

service\_id INT,

quantity INT,

total\_price DECIMAL(10, 2),

FOREIGN KEY (reservation\_id) REFERENCES Reservations(reservation\_id),

FOREIGN KEY (service\_id) REFERENCES Services(service\_id)

);

-- Payments Table

CREATE TABLE Payments (

payment\_id INT PRIMARY KEY,

reservation\_id INT,

payment\_date DATE,

amount\_paid DECIMAL(10, 2),

payment\_method VARCHAR(50),

FOREIGN KEY (reservation\_id) REFERENCES Reservations(reservation\_id)

);

TABLE ROOMS:

INSERT INTO Rooms (room\_id, room\_number, room\_type, rate\_per\_night, status) VALUES

(1, 101, 'Single', 50.00, 'Available'),

(2, 102, 'Single', 50.00, 'Available'),

(3, 103, 'Single', 50.00, 'Occupied'),

(4, 104, 'Single', 50.00, 'Available'),

(5, 105, 'Single', 50.00, 'Available'),

(6, 201, 'Double', 75.00, 'Available'),

(7, 202, 'Double', 75.00, 'Available'),

(8, 203, 'Double', 75.00, 'Available'),

(9, 204, 'Double', 75.00, 'Available'),

(10, 205, 'Double', 75.00, 'Available'),

(11, 301, 'Suite', 150.00, 'Available'),

(12, 302, 'Suite', 150.00, 'Available'),

(13, 303, 'Suite', 150.00, 'Available'),

(14, 304, 'Suite', 150.00, 'Available'),

(15, 305, 'Suite', 150.00, 'Available'),

(16, 401, 'Penthouse', 300.00, 'Available'),

(17, 402, 'Penthouse', 300.00, 'Available'),

(18, 403, 'Penthouse', 300.00, 'Available'),

(19, 404, 'Penthouse', 300.00, 'Available'),

(20, 405, 'Penthouse', 300.00, 'Available'),

(21, 501, 'Family', 100.00, 'Available'),

(22, 502, 'Family', 100.00, 'Available'),

(23, 503, 'Family', 100.00, 'Available'),

(24, 504, 'Family', 100.00, 'Available'),

(25, 505, 'Family', 100.00, 'Available');

TABLE GUESTS:

INSERT INTO Guests (guest\_id, first\_name, last\_name, email, phone\_number) VALUES

(1, 'John', 'Doe', 'john.doe@example.com', '+1234567890'),

(2, 'Jane', 'Smith', 'jane.smith@example.com', '+1987654321'),

(3, 'Michael', 'Johnson', 'michael.johnson@example.com', '+1122334455'),

(4, 'Emily', 'Brown', 'emily.brown@example.com', '+1567890123'),

(5, 'David', 'Wilson', 'david.wilson@example.com', '+1324354657'),

(6, 'Sarah', 'Anderson', 'sarah.anderson@example.com', '+1789054321'),

(7, 'Christopher', 'Martinez', 'christopher.martinez@example.com', '+1432987654'),

(8, 'Amanda', 'Taylor', 'amanda.taylor@example.com', '+1876543210'),

(9, 'James', 'Thomas', 'james.thomas@example.com', '+1247389056'),

(10, 'Jennifer', 'Hernandez', 'jennifer.hernandez@example.com', '+1987654321'),

(11, 'Matthew', 'Young', 'matthew.young@example.com', '+1123456789'),

(12, 'Jessica', 'King', 'jessica.king@example.com', '+1654327890'),

(13, 'Daniel', 'Lee', 'daniel.lee@example.com', '+1789054321'),

(14, 'Ashley', 'Clark', 'ashley.clark@example.com', '+1432987654'),

(15, 'Andrew', 'Lewis', 'andrew.lewis@example.com', '+1890765432'),

(16, 'Elizabeth', 'Walker', 'elizabeth.walker@example.com', '+1247389056'),

(17, 'Ryan', 'Hall', 'ryan.hall@example.com', '+1324354657'),

(18, 'Olivia', 'Allen', 'olivia.allen@example.com', '+1567890123'),

(19, 'Nicholas', 'Green', 'nicholas.green@example.com', '+1234567890'),

(20, 'Samantha', 'Baker', 'samantha.baker@example.com', '+1987654321'),

(21, 'Tyler', 'Gonzalez', 'tyler.gonzalez@example.com', '+1122334455'),

(22, 'Madison', 'Nelson', 'madison.nelson@example.com', '+1789054321'),

(23, 'Justin', 'Carter', 'justin.carter@example.com', '+1432987654'),

(24, 'Emma', 'Hill', 'emma.hill@example.com', '+1876543210'),

(25, 'Brandon', 'Wright', 'brandon.wright@example.com', '+1247389056');

TABLE RESERVATIONS:

INSERT INTO Reservations (reservation\_id, guest\_id, room\_id, check\_in\_date, check\_out\_date, total\_amount, payment\_status) VALUES

(1, 1, 1, '2024-05-01', '2024-05-05', 200.00, 'Paid'),

(2, 2, 6, '2024-05-03', '2024-05-07', 300.00, 'Paid'),

(3, 3, 11, '2024-05-02', '2024-05-06', 600.00, 'Paid'),

(4, 4, 16, '2024-05-04', '2024-05-08', 1200.00, 'Paid'),

(5, 5, 21, '2024-05-01', '2024-05-03', 200.00, 'Paid'),

(6, 6, 2, '2024-05-06', '2024-05-08', 100.00, 'Paid'),

(7, 7, 7, '2024-05-02', '2024-05-04', 150.00, 'Paid'),

(8, 8, 12, '2024-05-03', '2024-05-07', 600.00, 'Paid'),

(9, 9, 17, '2024-05-05', '2024-05-09', 1200.00, 'Paid'),

(10, 10, 22, '2024-05-01', '2024-05-05', 400.00, 'Paid'),

(11, 11, 3, '2024-05-07', '2024-05-10', 150.00, 'Paid'),

(12, 12, 8, '2024-05-04', '2024-05-06', 300.00, 'Paid'),

(13, 13, 13, '2024-05-06', '2024-05-09', 450.00, 'Paid'),

(14, 14, 18, '2024-05-08', '2024-05-12', 900.00, 'Paid'),

(15, 15, 23, '2024-05-02', '2024-05-04', 200.00, 'Paid'),

(16, 16, 4, '2024-05-09', '2024-05-13', 200.00, 'Paid'),

(17, 17, 9, '2024-05-05', '2024-05-07', 150.00, 'Paid'),

(18, 18, 14, '2024-05-07', '2024-05-10', 450.00, 'Paid'),

(19, 19, 19, '2024-05-03', '2024-05-07', 400.00, 'Paid'),

(20, 20, 24, '2024-05-01', '2024-05-03', 200.00, 'Paid'),

(21, 21, 5, '2024-05-08', '2024-05-11', 300.00, 'Paid'),

(22, 22, 10, '2024-05-04', '2024-05-06', 150.00, 'Paid'),

(23, 23, 15, '2024-05-06', '2024-05-08', 300.00, 'Paid'),

(24, 24, 20, '2024-05-02', '2024-05-06', 400.00, 'Paid'),

(25, 25, 25, '2024-05-09', '2024-05-13', 400.00, 'Paid');

TABLE STAFF:

INSERT INTO Staff (staff\_id, first\_name, last\_name, position, department, email, phone\_number) VALUES

(1, 'Michael', 'Smith', 'Manager', 'Management', 'michael.smith@example.com', '+1234567890'),

(2, 'Jennifer', 'Johnson', 'Front Desk Clerk', 'Front Desk', 'jennifer.johnson@example.com', '+1987654321'),

(3, 'Christopher', 'Williams', 'Housekeeping Supervisor', 'Housekeeping', 'christopher.williams@example.com', '+1122334455'),

(4, 'Jessica', 'Jones', 'Maintenance Technician', 'Maintenance', 'jessica.jones@example.com', '+1567890123'),

(5, 'Matthew', 'Brown', 'Restaurant Manager', 'Food & Beverage', 'matthew.brown@example.com', '+1324354657'),

(6, 'Amanda', 'Garcia', 'Concierge', 'Guest Services', 'amanda.garcia@example.com', '+1789054321'),

(7, 'David', 'Rodriguez', 'Bellhop', 'Guest Services', 'david.rodriguez@example.com', '+1432987654'),

(8, 'Ashley', 'Martinez', 'Chef', 'Food & Beverage', 'ashley.martinez@example.com', '+1876543210'),

(9, 'John', 'Hernandez', 'Bartender', 'Food & Beverage', 'john.hernandez@example.com', '+1247389056'),

(10, 'Emily', 'Lopez', 'Spa Therapist', 'Spa', 'emily.lopez@example.com', '+1987654321'),

(11, 'Daniel', 'Gonzalez', 'Fitness Instructor', 'Fitness Center', 'daniel.gonzalez@example.com', '+1123456789'),

(12, 'Samantha', 'Perez', 'Event Coordinator', 'Events', 'samantha.perez@example.com', '+1654327890'),

(13, 'Ryan', 'Wilson', 'Security Officer', 'Security', 'ryan.wilson@example.com', '+1789054321'),

(14, 'Olivia', 'Flores', 'Valet Attendant', 'Guest Services', 'olivia.flores@example.com', '+1432987654'),

(15, 'Nicholas', 'Torres', 'IT Specialist', 'IT', 'nicholas.torres@example.com', '+1890765432'),

(16, 'Emma', 'Rivera', 'Housekeeping', 'Housekeeping', 'emma.rivera@example.com', '+1247389056'),

(17, 'Brandon', 'Long', 'Front Desk Clerk', 'Front Desk', 'brandon.long@example.com', '+1324354657'),

(18, 'Madison', 'Scott', 'Housekeeping', 'Housekeeping', 'madison.scott@example.com', '+1567890123'),

(19, 'Tyler', 'Nguyen', 'Chef', 'Food & Beverage', 'tyler.nguyen@example.com', '+1234567890'),

(20, 'Elizabeth', 'Kim', 'Concierge', 'Guest Services', 'elizabeth.kim@example.com', '+1987654321'),

(21, 'Justin', 'Harris', 'Front Desk Clerk', 'Front Desk', 'justin.harris@example.com', '+1122334455'),

(22, 'Hannah', 'Lee', 'Housekeeping', 'Housekeeping', 'hannah.lee@example.com', '+1789054321'),

(23, 'William', 'King', 'Bellhop', 'Guest Services', 'william.king@example.com', '+1432987654'),

(24, 'Taylor', 'Wright', 'Maintenance Technician', 'Maintenance', 'taylor.wright@example.com', '+1876543210'),

(25, 'Lauren', 'Green', 'Event Coordinator', 'Events', 'lauren.green@example.com', '+1247389056');

TABLE SERVICES:

INSERT INTO Services (service\_id, service\_name, description, price) VALUES

(1, 'Room Cleaning', 'Daily cleaning of the guest room', 20.00),

(2, 'Laundry Service', 'Washing and ironing of clothes', 15.00),

(3, 'Room Service', 'Delivery of food and beverages to the guest room', 10.00),

(4, 'Spa Massage', 'Relaxing massage at the hotel spa', 50.00),

(5, 'Fitness Training', 'Personal training session at the fitness center', 30.00),

(6, 'Airport Shuttle', 'Transportation service to and from the airport', 25.00),

(7, 'Valet Parking', 'Convenient parking service with valet assistance', 10.00),

(8, 'Concierge Assistance', 'Assistance with reservations, recommendations, and arrangements', 0.00),

(9, 'In-Room Dining', 'Selection of meals and beverages delivered to the guest room', 20.00),

(10, 'WiFi Access', 'High-speed internet access throughout the hotel', 0.00),

(11, 'Business Center', 'Access to computers, printers, and other office equipment', 0.00),

(12, 'Swimming Pool Access', 'Access to the hotel swimming pool', 0.00),

(13, 'Sauna Session', 'Relaxing sauna session at the hotel spa', 20.00),

(14, 'Conference Room Rental', 'Rental of conference room for meetings or events', 100.00),

(15, 'Babysitting Service', 'Professional childcare service for guests with children', 20.00),

(16, 'Car Rental', 'Rental of vehicles for transportation during the stay', 50.00),

(17, 'Tour Booking', 'Arrangement of guided tours and excursions', 0.00),

(18, 'Gift Shop Purchases', 'Purchase of souvenirs and gifts from the hotel gift shop', 0.00),

(19, 'Pet Sitting Service', 'Professional pet care service for guests traveling with pets', 25.00),

(20, 'Dry Cleaning', 'Dry cleaning and pressing of clothing items', 10.00),

(21, 'Shoe Shine Service', 'Shoe shining service to keep footwear in top condition', 5.00),

(22, 'In-Room Safe Rental', 'Rental of in-room safe for storing valuable items', 5.00),

(23, 'Limousine Service', 'Luxury transportation service with a chauffeur-driven limousine', 100.00),

(24, 'Golf Course Access', 'Access to the hotel golf course for guests who enjoy golfing', 50.00),

(25, 'Photocopying Service', 'Photocopying service for documents and other materials', 0.10);

TABLE ROOM\_SERVICES:

INSERT INTO Room\_Services (room\_service\_id, reservation\_id, service\_id, quantity, total\_price) VALUES

(1, 1, 3, 2, 20.00),

(2, 2, 9, 1, 20.00),

(3, 3, 4, 1, 50.00),

(4, 4, 1, 1, 20.00),

(5, 5, 7, 1, 10.00),

(6, 6, 2, 3, 45.00),

(7, 7, 5, 1, 30.00),

(8, 8, 8, 1, 0.00),

(9, 9, 10, 1, 0.00),

(10, 10, 14, 1, 100.00),

(11, 11, 17, 2, 0.00),

(12, 12, 21, 1, 5.00),

(13, 13, 12, 1, 0.00),

(14, 14, 19, 1, 25.00),

(15, 15, 20, 2, 20.00),

(16, 16, 6, 1, 25.00),

(17, 17, 11, 1, 0.00),

(18, 18, 3, 2, 20.00),

(19, 19, 16, 1, 50.00),

(20, 20, 22, 1, 5.00),

(21, 21, 13, 1, 20.00),

(22, 22, 18, 1, 0.00),

(23, 23, 23, 1, 100.00),

(24, 24, 24, 1, 50.00),

(25, 25, 25, 10, 1.00);

TABLE PAYMENTS:

INSERT INTO Payments (payment\_id, reservation\_id, payment\_date, amount\_paid, payment\_method) VALUES

(1, 1, '2024-05-05', 200.00, 'Credit Card'),

(2, 2, '2024-05-07', 300.00, 'Cash'),

(3, 3, '2024-05-06', 600.00, 'Credit Card'),

(4, 4, '2024-05-08', 1200.00, 'Credit Card'),

(5, 5, '2024-05-03', 200.00, 'Cash'),

(6, 6, '2024-05-08', 100.00, 'Credit Card'),

(7, 7, '2024-05-04', 150.00, 'Cash'),

(8, 8, '2024-05-07', 600.00, 'Credit Card'),

(9, 9, '2024-05-09', 1200.00, 'Credit Card'),

(10, 10, '2024-05-05', 400.00, 'Cash'),

(11, 11, '2024-05-10', 150.00, 'Credit Card'),

(12, 12, '2024-05-06', 300.00, 'Cash'),

(13, 13, '2024-05-09', 450.00, 'Credit Card'),

(14, 14, '2024-05-12', 900.00, 'Credit Card'),

(15, 15, '2024-05-04', 200.00, 'Cash'),

(16, 16, '2024-05-13', 200.00, 'Credit Card'),

(17, 17, '2024-05-07', 150.00, 'Cash'),

(18, 18, '2024-05-10', 450.00, 'Credit Card'),

(19, 19, '2024-05-07', 400.00, 'Cash'),

(20, 20, '2024-05-03', 200.00, 'Credit Card'),

(21, 21, '2024-05-11', 300.00, 'Cash'),

(22, 22, '2024-05-06', 150.00, 'Credit Card'),

(23, 23, '2024-05-08', 300.00, 'Cash'),

(24, 24, '2024-05-06', 400.00, 'Credit Card'),

(25, 25, '2024-05-13', 400.00, 'Cash');

1. SUB-QUERIES:

1. \*Query 1\*: Retrieve the total amount paid for all reservations.

SELECT SUM(amount\_paid) AS total\_amount\_paid

FROM Payments;

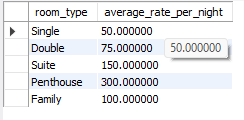


2. \*Query 2\*: Get the average rate per night for all room types.

SELECT room\_type, AVG(rate\_per\_night) AS average\_rate\_per\_night

FROM Rooms

GROUP BY room\_type;



3. \*Query 3\*: Count the number of reservations made by guests whose last name starts with 'S'.

SELECT COUNT(\*) AS reservation\_count

FROM Reservations

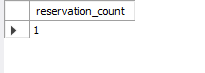
WHERE guest\_id IN (

SELECT guest\_id

FROM Guests

WHERE last\_name LIKE 'S%'

);



4. \*Query 4\*: Retrieve the service names and their prices for services with a price greater than $20.00.

SELECT service\_name, price

FROM Services

WHERE price > 20.00;



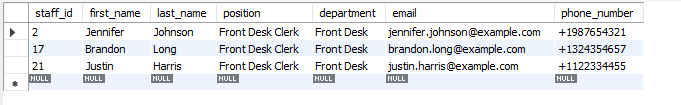
5. \*Query 5\*: List the staff members who work in the Front Desk department.

sql

SELECT \*

FROM Staff

WHERE department = 'Front Desk';



1. \*Subquery Question 1\*: Retrieve the first and last names of guests who made reservations with a total amount greater than the average total amount of all reservations.

sql

SELECT first\_name, last\_name

FROM Guests

WHERE guest\_id IN (

SELECT guest\_id

FROM Reservations

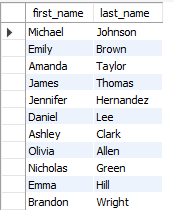
WHERE total\_amount > (

SELECT AVG(total\_amount)

FROM Reservations

)

);



2. \*Subquery Question 2\*: Get the room numbers and types for rooms that have been booked for reservations with a payment status of 'Paid'.

sql

SELECT room\_number, room\_type

FROM Rooms

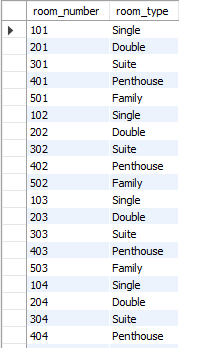
WHERE room\_id IN (

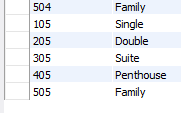
SELECT room\_id

FROM Reservations

WHERE payment\_status = 'Paid'

);





3. \*Subquery Question 3\*: List the first and last names of guests who have booked the most expensive room type.

sql

SELECT first\_name, last\_name

FROM Guests

WHERE guest\_id IN (

SELECT guest\_id

FROM Reservations

WHERE room\_id IN (

SELECT room\_id

FROM Rooms

WHERE room\_type = (

SELECT room\_type

FROM Rooms

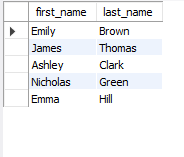
ORDER BY rate\_per\_night DESC

LIMIT 1

)

)

);



4. \*Subquery Question 4\*: Display the service names for services that have been booked by guests whose last name is 'Martinez'.

sql

SELECT service\_name

FROM Services

WHERE service\_id IN (

SELECT service\_id

FROM Room\_Services

WHERE reservation\_id IN (

SELECT reservation\_id

FROM Reservations

WHERE guest\_id IN (

SELECT guest\_id

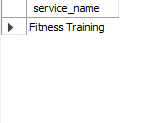
FROM Guests

WHERE last\_name = 'Martinez'

)

)

);



5. \*Subquery Question 5\*: Show the total amount paid by guests who booked rooms with a room rate per night greater than the average room rate per night.

sql

SELECT SUM(amount\_paid) AS total\_amount\_paid

FROM Payments

WHERE reservation\_id IN (

SELECT reservation\_id

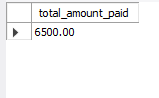
FROM Reservations

WHERE room\_id IN (

SELECT room\_id

FROM Rooms WHERE rate\_per\_night > ( SELECT AVG(rate\_per\_night)

FROM Rooms ) ));

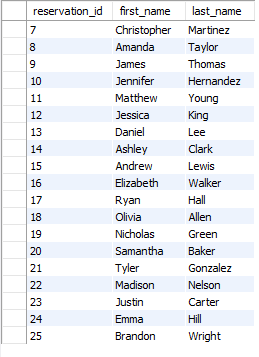


1. \*Query 1\*: Retrieve the details of all reservations along with the corresponding guest's first and last name.

SELECT Reservations.reservation\_id, Guests.first\_name, Guests.last\_name

FROM Reservations

JOIN Guests ON Reservations.guest\_id = Guests.guest\_id;

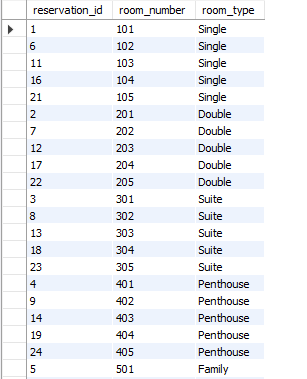


2. \*Query 2\*: Get the room number and type for each reservation.

SELECT Reservations.reservation\_id, Rooms.room\_number, Rooms.room\_type

FROM Reservations

JOIN Rooms ON Reservations.room\_id = Rooms.room\_id;



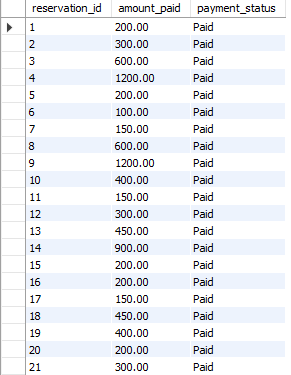


3. \*Query 3\*: List the total amount paid for each reservation along with the payment status.

SELECT Reservations.reservation\_id, Payments.amount\_paid, Reservations.payment\_status

FROM Reservations

JOIN Payments ON Reservations.reservation\_id = Payments.reservation\_id;

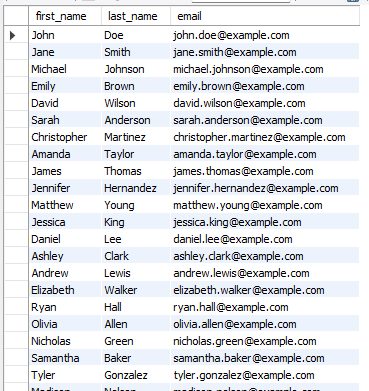


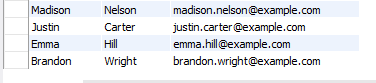


4. \*Query 4\*: Display the first and last names of guests along with their email addresses.

SELECT Guests.first\_name, Guests.last\_name, Guests.email

FROM Guests;

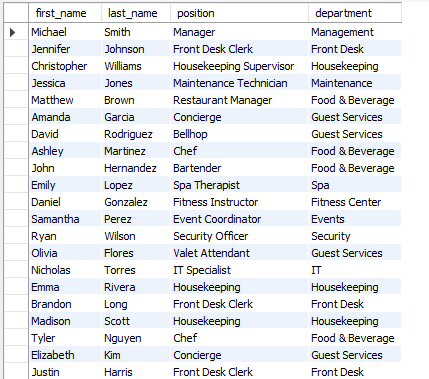




5. \*Query 5\*: Show the position and department of each staff member.

SELECT Staff.first\_name, Staff.last\_name, Staff.position, Staff.department

FROM Staff;





OBSERVATION

The hotel management project demonstrates a well-structured database schema for organizing essential hotel operations. It efficiently manages room bookings, guest information, service requests, and payment tracking. The project's simplicity makes it suitable for small-scale hotel environments, ensuring effective coordination of operations while prioritizing customer satisfaction. However, it may benefit from additional features such as reporting capabilities or integration with external systems for enhanced functionality and scalability.

CONCLUTION

The hotel management system project involves designing a comprehensive database schema to manage various aspects of hotel operations, including rooms, guests, reservations, staff, services, and payments.

Key components of the project include:

- Defining tables for different entities such as rooms, guests, reservations, staff, services, and payments.

- Establishing relationships between these entities to accurately represent their interactions and dependencies.

- Populating the tables with sample data to simulate real-world scenarios.

- Demonstrating SQL queries to retrieve, manipulate, and analyze data stored in the database.

- Visualizing the database structure using an Entity-Relationship (ER) diagram to illustrate the connections between tables and their attributes.

Overall, the project aims to provide a robust framework for managing hotel operations efficiently, from handling guest reservations to tracking payments and ensuring smooth staff coordination. It showcases the application of database concepts and SQL queries in a practical scenario, offering insights into the complexities of managing a hotel's data infrastructure.

*THANK YOU*