

ASSIGNMENT

NAME: K. Mahesh

REG. NO: 192372293

COURSE: CSA 0593

Q: Hotel Reservation and Management database Develop a database to handle hotel reservation, guest, rooms, reservations, billing.

⇒ Hotel Reservation and Management Database Assignment :-

• Develop a SQL database that will handle the following requirements in a hotel reservations and management system. This system should be designed to manage guest details, rooms reservations, billing, amenities and reporting.

Part 1: Database Design :-

1) Design Database Schema:

• Guests: Store information on each guest, including their ID, name, contact, information, and any loyalty or membership details.

200 • Rooms:- store information on each room, including RoomID, type, price per night, and status.

• Reservation:- store information about information reservations, including reservation ID, guest ID, room ID, check in date, check out date,

• Billing:- Store billing information including bill ID, reservation ID, amount, payment status and payment method.

* constraints:-

• Enforce referential integrity through primary and foreign keys

2) Create ERD Diagram:

• create an entity-relationship diagram to visually outline the database tables and relationships.

Part 2: stored procedures:-

1. Room Availability check procedure :

• create a stored procedure checkRoomAvailability that accepts room type and dates as parameters

• Returns the availability status based on given dates.

2) Make reservation procedure :

- Create a stored procedure. Makesreservation that accepts guest ID, room ID, and reservation date.
- check room availability updates the room status and inserts the reservation details into the Reservation table if available.

3) Process checkout procedure :

- Create a stored procedure processcheckout that accepts reservation ID as a parameter.
- updates the reservation status, generates a bill and free up the room.

Part 3: Triggers :-

1) Check in Trigger :

- implement a trigger Before check in on the reservations table to automatically update room status.

2) Check-out trigger :

- implement a trigger After checkout on the reservation table to automatically update room status.

Part 4: Reporting Queries :-

1) Room occupancy Report:

- Generate a report of all rooms, showing which room are currently occupied and which are available.

2) popular Amenities usage Report:

- Generate a report listing the most each amenities has been used.

3) Revenue Generation by Room type:

- Generate a report showing the total revenue generated by each room type. (