

Hotel Management System

Entities:

1. Guest

-Guest ID	(primary key, varchar)	- Id of the guest
-First Name	(varchar)	- First name of the Guest
- Last Name	(varchar)	- Last name of the Guest
- Address	(varchar)	- Address of the Guest
- Phone Number	(number)	-Phone number of the guest
- Email	(varchar)	- Email of the guest
- Date of Birth	(varchar)	- DOB of the Guest
- ID Proof Type	(varchar)	- Id proof of the Guest
- ID Proof Number	(number)	- Id proof number
- Nationality	(varchar)	- Nationality of guest

2. Hotel

Id (Primary Key, varchar): Id of the Hotel

Name:(varchar) The official name of the hotel.

Location: (varchar) The geographical location, including address, city, and country.

Star Rating: (number) The hotel's classification based on the level of luxury and services provided (e.g., 3-star, 5 -star).

Room Types: (varchar) Different types of rooms available (e.g., single, double, suite).

Amenities: (varchar) Features and facilities offered, such as free Wi-Fi, pool, gym, spa, restaurant, and parking.

Price Range: (number) The cost of staying at the hotel, usually provided as a range or average per night.

Check-in/Check-out Times: (number) Standard times for guest check-in and check-out.

Reviews and Ratings: (varchar) Customer feedback and ratings on various platforms.

Services: (varchar) Additional services offered, such as room service, laundry, concierge, and airport shuttle.

Accessibility: (varchar) Information on how accessible the hotel is for people with disabilities, including wheelchair access and other facilities.

3. Room

- Room ID(vvarchar) - Id of the room
- Room Number(number) – Number of the Guest
- Room Type(vvarchar) – Type of the room
- Bed Type (number) = Room number
- Room Rate (number) – Price of the room
- Floor Number (number) – Floor number of the room
- Room Status (varchar) – Availability of the room
- View (varchar) – View from the room
- Amenities (varchar) – Facilities of the room

- Maximum Occupancy(number) : No of persons allowed in a room

4. Employee

- Employee ID (varchar, Primary key) – Id the employee
- First Name (varchar) – First name of the employee
- Last Name (varchar)- Last Name of the employee
- Job Title (varchar) – Type of JOB
- Department Id (varchar, Foreign Key) – DID of the employee
- Date of Hire (number) – Hiring Date
- Contact Number (number) – Phone Number
- Email (varchar) – Email of the employee
- Work Schedule (number) – Timing of the employee
- Salary (number) – salary of the employee

5. Invoice

- Invoice ID (varchar , Primary Key) : Id of the invoice
- Guest ID (varchar, Foreign key) : GID of the Guest
- Invoice Date (number) – Date of the Invoice
- Total Amount (number) – Amount to be Paid
- Tax Amount (number) – Tax Amount

- Discount (number) – Discount allowed to the guest
- Payment Due Date (number) – Due Date
- Payment Status (varchar) – Paid or not
- Itemized Charges (number) – Charges of the Items

6. Payment

- Payment ID (varchar, Primary Key) – Id of the Payment
- Invoice ID (Varchar, Foreign Key) – ID of the invoice
- Guest ID (varchar, Foreign Key) – ID of the Guest
- Payment Date (number) – Date of the payment
- Payment Amount (number) – Amount to be Paid
- Payment Method (varchar) – Methods of payment
- Transaction ID (varchar) – Id of the transaction
- Payment Status (varchar) – Paid or Not
- Currency (varchar) – Cuurency of payment
- Payment Notes (number) : Amount Paid

7. Department

- DID (varchar) : Department ID of the Employee
- Phone (number) : Phone number of the Employee
- Function (varchar) : Work of the employee
- Name (varchar) : Name of the Employee
- Head (Varchar) : Manager of the Employee

- Process (varchar) : how to perform the job
- Goals (varchar) : Goals to be achieved
- Structure (varchar) : Structure of the Department
- Budget(number) : Budget of the Department

8. Feedback

- Feedback ID (varchar, Primary Key) : FID of the Guest
- Guest ID (varchar, Foreign Key): GID of the guest
- Feedback Date (number) : Date of the Feedback
- Rating (number) : stars provided by Guest
- Comments (varchar) : Feedback Provided by the guest
- Service ID (varchar) : ID of the service
- Employee ID (varchar, Foreign key) : ID of the Employee
- Resolution Status (varchar) : Status
- Follow-up Date (number) : Date of follow

9. Inventory

- Item ID (varchar , Primary key) : ID of the item
- Item Name (varchar) : Name of the employee
- Item Description (varchar) : About the item
- Quantity on Hand (number) : Amount of the item
- Reorder Level (number) : Level of the recorder

- Supplier ID (varchar, Composite Key) – ID of the supplier
- Purchase Date (number) : Purchase date of the item
- Unit Cost (number) : Cost of the item
- Item Category (varchar) : Category of the item
- Expiry Date (number) : Expiry date of the item

10. Staff

- Id (number, Primary Key) : Id of the Staff
- Name (varchar) : Name of the staff
- Skills (varchar) : Skills of the staff
- Job Title(Varchar): Job that they perform
- Type (varchar) : Type of Job
- Phone (number) : Phone number of the staff
- Email (varchar) : email of the staff
- Age (number) : Age of the staff
- Salary (number): salary of the staff
- DID (varchar, Foreign key) : DID of the Staff

Entity-Relationship Diagram



