# Requirement Specification and ERD
# For
# Hotel Management System

*The main objective of the entire activity is to automate the process of day to day activities of Hotel like:*

- Room  activities,
- Admission of a New Customer,
- Assign a room according to customer's demand,
- Checkout of a computer and releasing the room
- Finally compute the bill etc.
- Packages available.
- Advance online bookings.
- Online Cancellation.
- List of  Regular customers.
- Feedbacks
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### Requirements from users point of view

- *Each Hotel has different kinds of rooms*
- *Each room has different facilities*
- Each hotel can have more 1 room of same type
- Services should be associated with a room type
- A room should be in a hotel
- A customer *can book any number of rooms at any hotel*
- *An employee can work at only hotel*
- *Every booking is associated with hotel, room and customer*
- *Every booking will have a unique payment*
- *Can Cancel the room at any point*
- *Can choose the payment method*
- *Availability of room*

*Entities and their attributes :*

*HOTEL ENTITY : Attributes of Hotel are*
- *hotel_id,*
- *hotel_name,*
- *hotel_type,*
- *hotel_rent,*
- *hotel_description,*
- *hotel_address*

### ROOMS Entity: Attributes of rooms are
- room_number,
- room_category,
- room_type,
- room_description,

### SERVICES Entity: Attributes of Services are
- service_id,
- service_name,
- service_type,
- service_description

### PAYMENTS Entity: Attributes of Payments are
- payment_id,
- payment_date,
- payment_amount,
- payment_description

### BOOKING Entity: Attributes of Booking are
- booking_id,
- booking_title,
- booking_type,
- booking_date,
- booking_description

### CUSTOMERS Entity: Attributes of Customers are
- customer_id,
- customer_name,
- customer_mobile,
- customer_email,
- customer_address

### EMPLOYEE Entity: Attributes of Employee are
- emp_id,
- emp_name,
- emp_contact,
- emp_salary,
- emp_address,
- emp_designation

## Description of HMS Database:

- **Each entity (Customers,Services,Booking,Rooms,Hotel,Employee) contains primary and unique keys.**
- **The entity Services,Booking has binded with Hotel,Rooms entities with foreign keys.**
- **There is one-one and one-many relations between Booking,Payments,Customers, Hotel**
- **All the entities Booking,Services,Hotel,Customers are normalized to reduce duplicacy of records.**

ERD:

**Employee**

Emp_id

Emp_name
Emp_contact
Emp_salary
Emp_address
Emp_Designation

Works

**Hotel**

Hotel_id
Hotel_name
Hotel_type
Hotel_rent
Hotel_Description
Hotel_address

Stays

**Customer**

Custer_Id

Custer_Name
Customer_Mob
Customer_Email
Customer_Address

Books

Check_in_Date
Check_out_Date

**Booking**

Booing_Id

Booking_Tittle
Booking_Type
Booking_Date
Booking_Description

Has

**Room**

Room_number

Room_Category
Room_Type
Room_Description

Has

**Payment**

Payment_Id

Payment_Date
Payment_Amount
Payment_Description

**Services**

Service_Id

Service_Name
Sevice_Type
Service_Description