# **Hotel Management System**

## Members:

- Sachin Hansda (111601019)
- Surendra Baskey (111601027)
- Akash Cheerla (111601029)

# **Contributions:**

## Sachin:

## Week 1:

Requirement specifications and relations between entities

#### Week 2:

Collectively developed schema with other group members, mostly correcting the schemas and sql queries for schema development

## Week 3:

Added few more entities and their attributes, discussed roles, views and triggers

## Surendra:

## Week 1:

Made ERD

## Week 2:

Collectively developed schemas with group members, most parts were done by him

## Week 3:

Extended the ERD, discussed roles, views, triggers

# Akash:

## Week 1:

Created of different entities and their attributes

## Week 2:

Collectively developed schema with other group members

## Week 3:

Wrote roles, views and triggers with few discussions with other group members

# 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,
- occupied

#### SERVICES Entity: Attributes of Services are

- service\_id,
- service\_name,
- service\_type,
- service\_description

#### PAYMENT 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

#### **CUSTOMER 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

#### FEEDBACK Entity: Attributes of Feedback

#### are

- feedback\_date
- rating
- review

#### FOOD\_SERVICE Entity: Attributes of Food\_service are

- food\_service\_id
- food\_service\_date
- food service time
- food\_service\_bill

#### FOOD\_ORDER Entity: Attributes of Food\_order are

- Food
- Quantity
- Price

#### VEHICLE\_RENT Entity: Attributes of Vechicle\_rent are

- Vehicle\_type
- Vehicle no
- Rental\_date
- Rental time
- Rental\_rate

#### CAB Entity: Attributes of Cab are

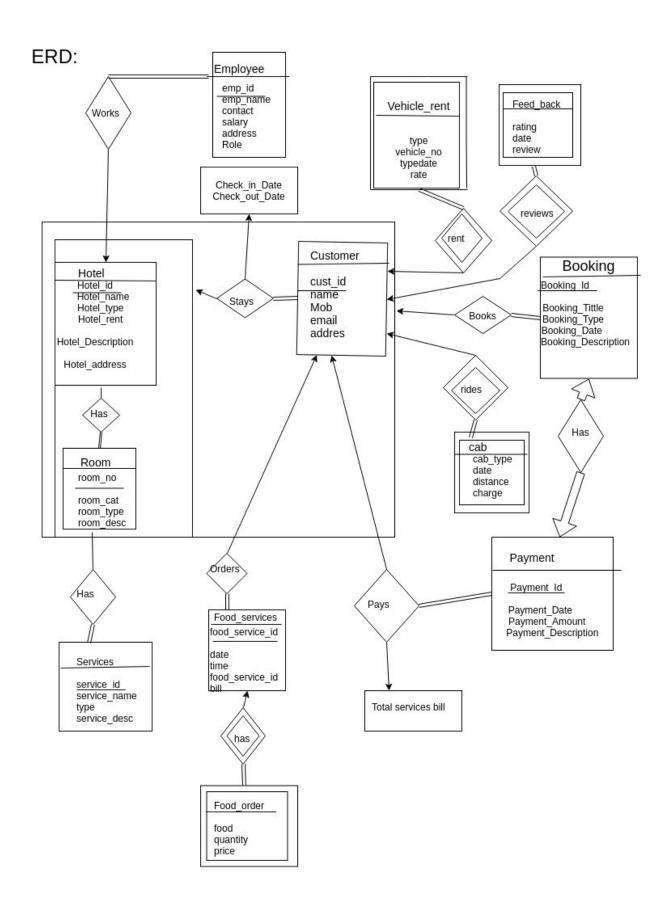
- Cab\_type
- Cab\_no
- Cab\_date
- Cab\_time
- Cab rate
- Distance

Bill Entity: Attributes of Bill are

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# 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,
- All the entities Booking, Services, Hotel, Customers are normalized to reduce duplicacy of records.



## Roles:

- Customer:
  - 1. multiple users can have the role of Customer
  - 2. They can only book rooms, food and have access of their own history.
  - 3. Can check the availability of rooms and services.
  - 4. Can give ratings and reviews

## • Manager :

- 1. Can have the access to every data that belongs to that hotel they work in.
- 2. Cannot edit the customers ratings and reviews,

#### Admins:

Sachin, akash, surendra.

## Views:

- 1. Customers booking history
- 2. Availability of rooms
- 3. Review and ratings
- 4. Location

# Triggers:

1. After\_checking\_out

When a customer checks out bill should be generated