

A Report  
On the work done during 3<sup>rd</sup> semester subject  
Database Management System  
of  
B.Tech. Computer Engineering  
  
Hotel Management System

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Dharmsinh Desai University  
October 2022

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## **Hotel Management system**

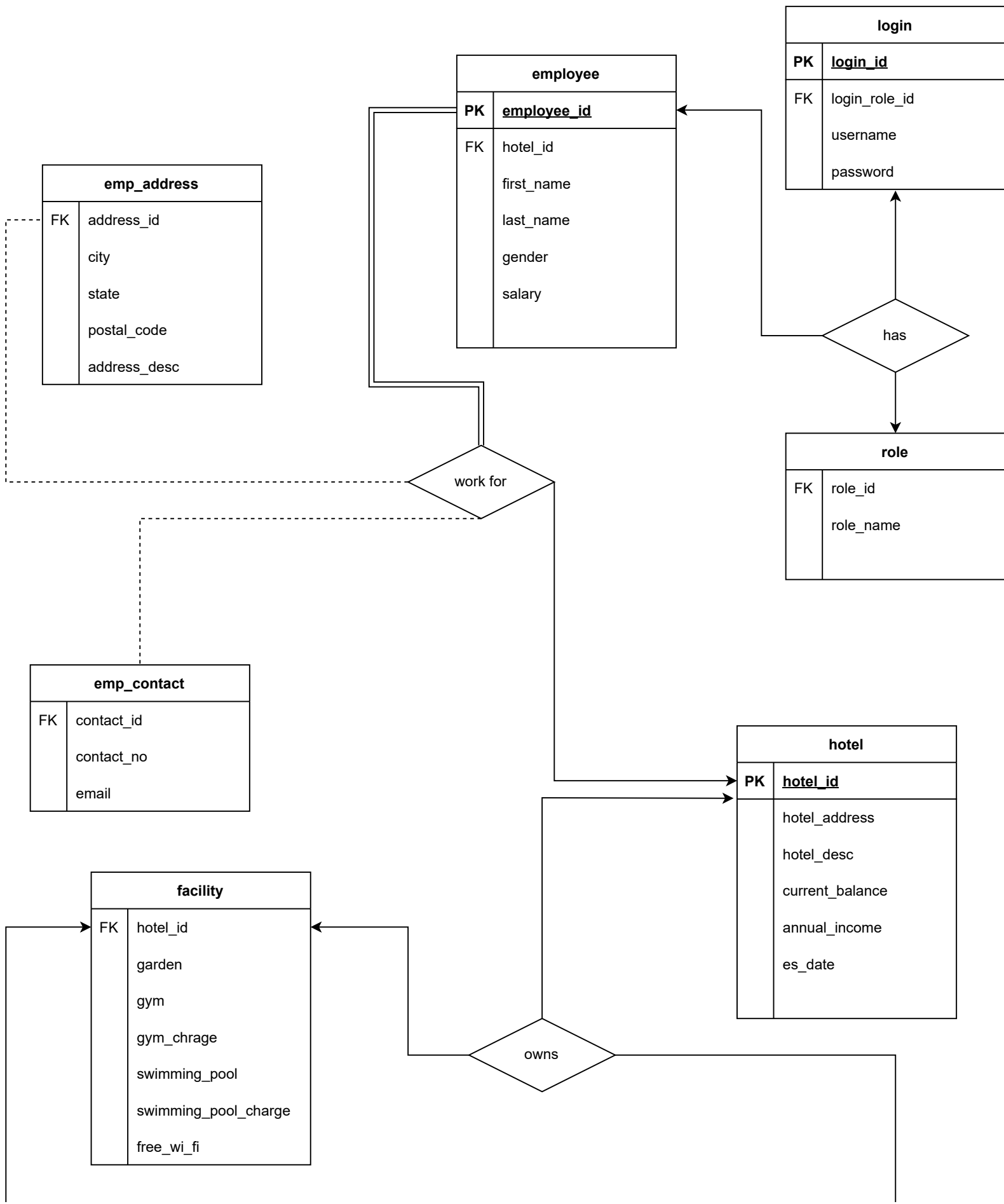
Hotel Management System is a system that provides us with reserving rooms, checking whether the rooms are vacant or not etc by using online browsing. This system is very useful to all, especially for business people. For Business people they don't have sufficient time for these then they can use these types of online Hotel Management Systems.

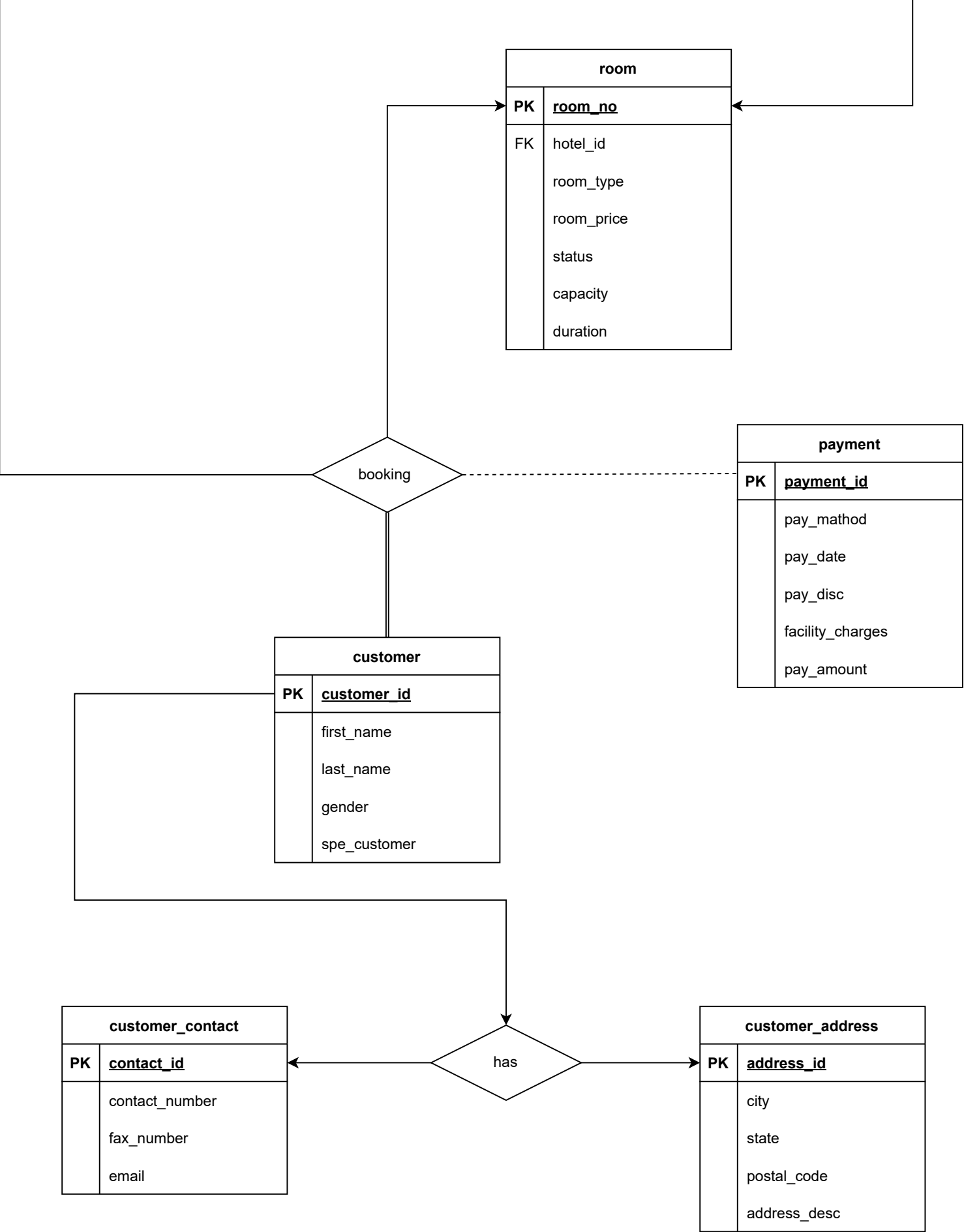
By this project we will reduce the faults in bills of their expenditure and decrease time of delay to give the bills to the customers. Additionally, we can save the customer's bills. By this project we can also include all the taxes on the bills according to their expenditures. It has a scope to reduce the errors in making the bills. Computerized bills can be printed within a fraction of seconds. Online ordering of Booking is possible by using this software. If any one wants to book a room for a few days then they can specify the specific number by seeing the types of rooms we have. The bill of this online booking is based on the type of room they can select.

HOTEL MANAGEMENT SYSTEM is a hotel reservation site script where site users will be able to search rooms availability with an online booking reservations system. Site users can also browse hotels, view room inventory, check availability, and book reservations in real-time. Site users enter duration then search for availability. After choosing the right room in the wanted hotel – all booking and reservation process is done on the site.

Our system can't provide Dining facilities in hotels, only room reservations.

# ER - Diagram





### Hotel Management System Schema

**hotel** ( hotel\_id, hotel\_address, hotel\_desc, current\_balance, annual\_income, es\_date)

**employee**( employee\_id, hotel\_id, first\_name, last\_name, gender, salary )

**role**( role\_id, role\_name )

**login**( login\_id, login\_role\_id, username, password )

**customer**( customer\_id, first\_name, last\_name, gender )

**facility**( hotel\_id, garden, gym, gym\_charge, swimming\_pool, swimming\_pool\_charge, free\_wi-fi )

**room**( room\_no, hotel\_id, room\_type, room\_price, status, capacity, duration )

**payment**( payment\_id, pay\_method, pay\_date, pay\_disc, facility\_charges, pay\_amount)

**customer\_contact**( contact\_id, contact\_number, fax\_number, email )

**customer\_address**( address\_id, city, state, postal\_code, address\_desc )

**emp\_contact**( contact\_id, contact\_no, email )

**emp\_address**( address\_id, city, state, postal\_code, address\_desc )

Database Name : **hotel\_management\_system**

**1. Hotel**

create table **hotel**

```
(  
  hotel_id varchar2(6),  
  primary key (hotel_id),  
  check(hotel_id like 'H%'),  
  
  hotel_address varchar2(30),  
  hotel_desc varchar2(20),  
  current_balance number(10, 2),  
  annual_income number(10, 2),  
  es_date date  
);
```

**Data :**

insert into hotel values

('H0001', 'Nearby chokdi', 'Anand', 1200000, 540000, '12-jan-2020');

insert into hotel values

('H0002', 'opposite to ambaji cinema', 'Jamnagar', 1250000, 640000,  
'10-june-2005');

insert into hotel values

('H0003', 'opposite to shivji temple', 'Baroda', 1000000, 840000, '12-aug-2012');

insert into hotel values

('H0004', 'behind to modi school', 'Rajkot', 2000000, 600000, '15-jan-2009');

## 2. Employee

```
create table employee(  
  
    employee_id varchar2(6),  
    check(employee_id like 'E%'),  
    primary key ( employee_id ),  
  
    hotel_id varchar2(6),  
    foreign key (hotel_id) references hotel,  
  
    first_name varchar2(10),  
    last_name varchar2(10),  
  
    gender char(1),  
    check(gender in ('M', 'F')),  
  
    salary number(7, 0)  
);
```

### Data :

```
insert into employee values ('E01', 'H0001', 'Evan', 'shah', 'M', 12000);  
  
insert into employee values ('E02', 'H0002', 'Mohan', 'patel', 'M', 15000);  
  
insert into employee values ('E04', 'H0003', 'Monali', 'Gohil', 'F', 13000);  
  
insert into employee values ('E05', 'H0004', 'Gopal', 'Gamit', 'M', 13500);
```



### 3. Role

```
create table role(
  role_id varchar2(6),
  foreign key(role_id) references employee,
  role_name varchar2(10)
);
```

**Data :**

```
insert into role values ('E02', 'Manager');
insert into role values ('E01', 'Servant');
```

### 4. Login

```
create table login(
  login_id varchar2(5),
  check (login_id like 'L%'),
  primary key ( login_id ),

  login_role_id varchar2(6),
  foreign key(login_role_id) references employee,

  username varchar2(10),
  password varchar2(10)
);
```

**Data :**

```
insert into login values ('L01', 'E01', 'Evan_shah', 'Evan@450');
insert into login values ('L02', 'E02', 'Mohan_OP', 'M@455');
insert into login values ('L03', 'E05', 'Gopal_Jay', 'Gopal@DBMS');
```

## 5. Customer

```
create table customer(  
  
    customer_id varchar2(6),  
    check(customer_id like 'C%'),  
    primary key ( customer_id ),  
  
    first_name varchar2(10),  
    last_name varchar2(10),  
  
    gender char(1),  
    check(gender in ('M', 'F'))  
);
```

### Data :

```
insert into customer values ('C01', 'Gopal', 'Shah', 'M');
```

```
insert into customer values ('C02', 'Jayoti', 'Shah', 'F');
```

```
insert into customer values ('C03', 'Jay', 'Modi', 'M');
```

```
insert into customer values ('C04', 'Mohan', 'Joshi', 'M');
```

## 6. Facility

```
create table facility(  
  hotel_id varchar2(6),  
  foreign key(hotel_id) references hotel,  
  
  garden char(1),  
  check(garden in ('Y', 'N')),  
  
  gym char(1),  
  check(gym in ('Y', 'N')),  
  gym_charge number(4),  
  
  swimming_pool char(1),  
  check(swimming_pool in ('Y', 'N')),  
  swimming_pool_charge number(4),  
  
  free_wi-fi char(1),  
  check(free_wi-fi in ('Y', 'N'))  
);
```

### Data :

```
insert into facility values ('H0001', 'Y', 'Y', 400, 'N', 0, 'Y');
```

```
insert into facility values ('H0002', 'Y', 'Y', 300, 'Y', 550, 'N');
```

```
insert into facility values ('H0003', 'N', 'Y', 600, 'N', 0, 'Y');
```

```
insert into facility values ('H0004', 'Y', 'Y', 500, 'N', 0, 'N');
```

## 7. Room

```
create table room(  
  room_no varchar2(6),  
  check(room_no like 'R%'),  
  primary key (room_no),  
  
  hotel_id varchar2(6),  
  foreign key (hotel_id) references hotel,  
  
  room_type varchar2(15),  
  room_price number(8, 2),  
  
  status char(1),  
  check(status in ('E', 'O')),  
  
  capacity number(1),  
  check(capacity in (1, 2, 3, 4, 5, 6, 7, 8, 9)),  
  
  duration number(2)  
);
```

### Data :

```
insert into room values ('R102', 'H0001', 'Delux', 5000, 'E', 2, 3);  
  
insert into room values ('R122', 'H0002', 'Super Delux', 8000, 'E', 2, 4);  
  
insert into room values ('R120', 'H0003', 'Regular', 4000, 'O', 3, 5);  
  
insert into room values ('R111', 'H0002', 'Super Delux', 8000, 'E', 1, 2);  
  
insert into room values ('R125', 'H0004', 'Super Delux', 8000, 'E', 2, 1);
```

## 8. Payment

create table **payment**(

**payment\_id** number(10),  
primary key (**payment\_id**),  
**pay\_method** varchar2(10),

**pay\_date** date,  
**pay\_disc** number(4),  
**facility\_charges** number(5),

**pay\_amount** number(8)  
);

**Data :**

**insert into payment values (1223, 'UPI', '02-January-2020', 500, 400, 4500);**

**insert into payment values (1345, 'Cash', '22-June-2021', 300, 500, 5500);**

**insert into payment values (1500, 'Cheque', '2-June-2022', 350, 650, 6500);**

### 9. Customer\_Contact

create table customer\_contact(

**contact\_id** varchar2(6),  
check(contact\_id like 'C%'),  
primary key ( **contact\_id** ),  
**contact\_number** number(10),  
**fax\_number** number(10),  
**email** varchar2(18)

);

Data :

insert into customer\_contact values ('C01', 1232324434, 92727,  
'gopal@gmail.com');

insert into customer\_contact values ('C02', 1212004434, 92700,  
'jayoti@gmail.com');

insert into customer\_contact values ('C03', 1000004434, 82707, 'jay@gmail.com');

insert into customer\_contact values ('C04', 1212000034, 72700,  
'mohan@gmail.com');

### 10. Customer\_address

```
create table customer_address(  
  address_id varchar2(6),  
  check(address_id like 'C%'),  
  primary key ( address_id ),  
  
  city varchar2(15),  
  state varchar2(15),  
  postal_code number(6),  
  address_desc varchar(50)  
);
```

**Data :**

```
insert into customer_address values ('C01', 'Jammu', 'Jammu', 420010, 'Nearby  
yellow temple');
```

```
insert into customer_address values ('C02', 'Jaipur', 'Rajasthan', 429910, 'Nearby  
hawa mahal');
```

```
insert into customer_address values ('C03', 'Amritsar', 'Punjab', 333910, 'Nearby  
Golden temple');
```

```
insert into customer_address values ('C04', 'Surat', 'Gujarat', 657575, 'Nearby  
Golden wood hotel');
```

### 11. Emp\_contact

```
create table emp_contact(  
  contact_id varchar2(6),  
  foreign key (contact_id) references employee,  
  
  contact_no number(10),  
  email varchar2(20)  
);
```

#### Data :

```
insert into emp_contact values ('E01', 4455454545, 'evan@gmail.com');
```

```
insert into emp_contact values ('E02', 4455666545, 'mohan@gmail.com');
```

```
insert into emp_contact values ('E04', 4005666545, 'monali389@gmail.com');
```

```
insert into emp_contact values ('E05', 4488866545, 'gopal34@gmail.com');
```



## 12. Emp\_address

```
create table emp_address(  
  address_id varchar2(6),  
  foreign key (address_id) references employee,  
  
  city varchar2(15),  
  state varchar2(15),  
  postal_code number(6),  
  address_desc varchar(50)  
);
```

**Data :**

```
insert into emp_address values ('E01', 'Jamnagar', 'Gujarat', '361005', 'Near Five  
By Tower');
```

```
insert into emp_address values ('E02', 'Patna', 'Bihar', '478005', 'Opposite to  
lake');
```

```
insert into emp_address values ('E04', 'Surat', 'Gujarat', '361435', 'Nearby temple');
```

```
insert into emp_address values ('E05', 'jaipur', 'Rajasthan', '455055', 'Nearby Hawa  
mahal');
```

## Triggers

1. If customer makes payment, current\_balance of hotel will be updated :

```
CREATE TRIGGER payment_trigger AFTER INSERT ON  
hotel_management_system.payment FOR EACH ROW BEGIN INSERT INTO  
hotel_management_system.hotel(current_balance)  
VALUES(current_balance + pay_amount)  
END
```

## References

- TutorialsPoints
- Naresh i technologies