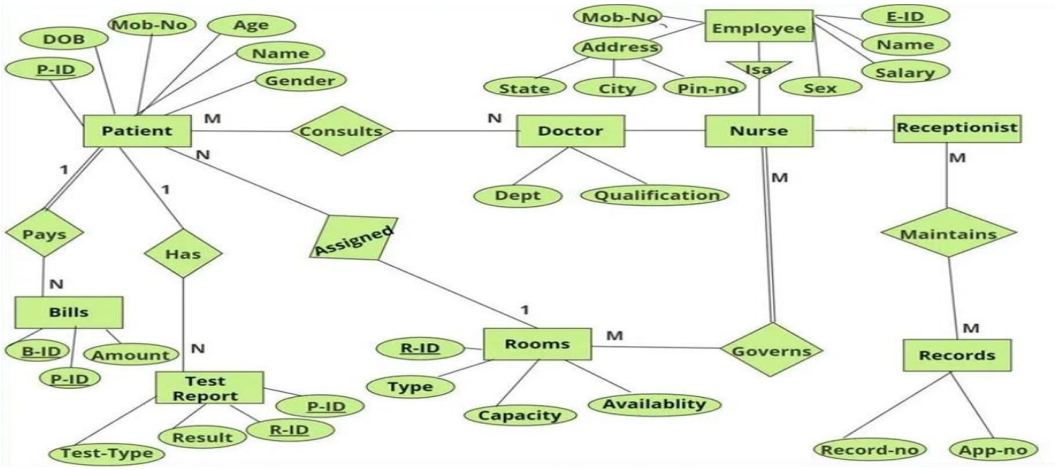
Hospital data base

ER Diagram



Pictorial Representation

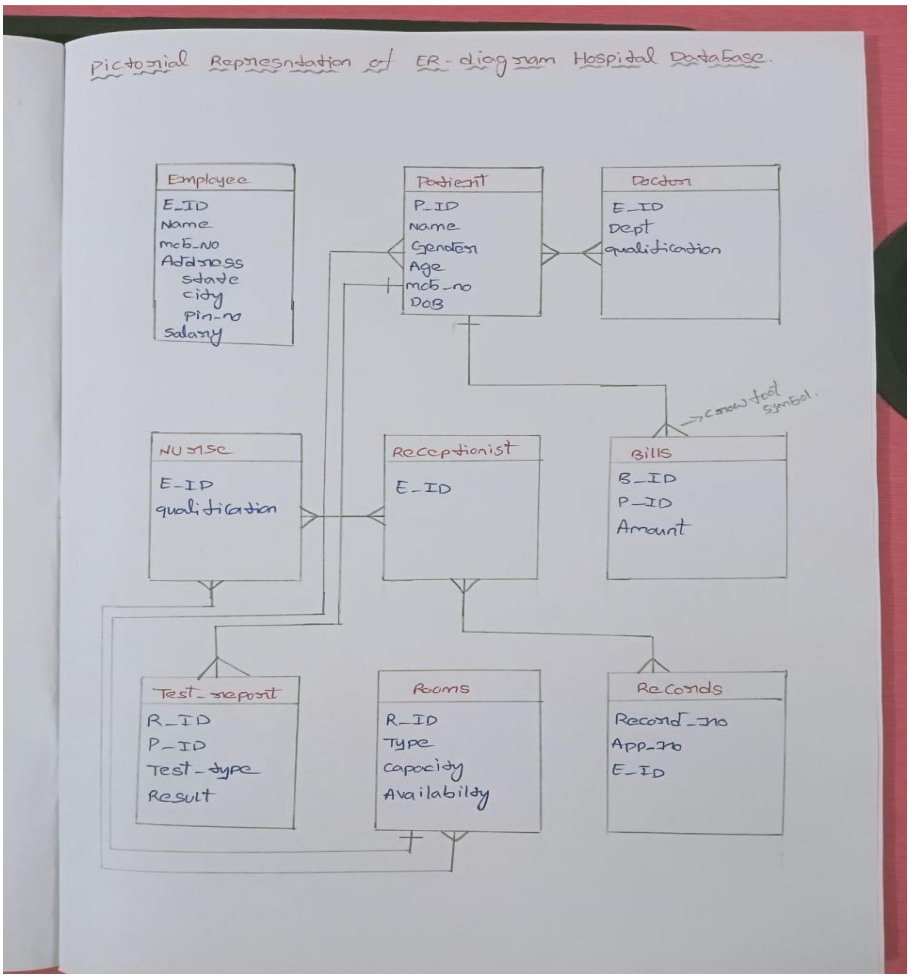


Table Creation

a) Patient Table:

```
CREATE TABLE Patient (
    P_ID INT PRIMARY KEY,
    Name VARCHAR(100),
    Gender CHAR(1),
    Age INT,
    Mob_No VARCHAR(15),
    DOB DATE
);
```

b) Employee Table:

```
CREATE TABLE Employee (
    E_ID INT PRIMARY KEY,
    Name VARCHAR(100),
    Mob_No VARCHAR(15),
    Address VARCHAR(255),
    State VARCHAR(50),
    City VARCHAR(50),
    Pin_no VARCHAR(10),
    Sex CHAR(1),
    Salary DECIMAL(10,2)
);
```

c) Doctor Table (Subclass of Employee):

```
CREATE TABLE Doctor (
    E_ID INT PRIMARY KEY,
    Dept VARCHAR(50),
    Qualification VARCHAR(100),
    FOREIGN KEY (E_ID) REFERENCES Employee(E_ID)
);
```

d) Nurse Table (Subclass of Employee):

```
CREATE TABLE Nurse (
   E_ID INT PRIMARY KEY,
   Qualification VARCHAR(100),
   FOREIGN KEY (E_ID) REFERENCES Employee(E_ID)
);
```

e) Receptionist Table (Subclass of Employee):

```
CREATE TABLE Receptionist (
   E_ID INT PRIMARY KEY,
   FOREIGN KEY (E_ID) REFERENCES Employee(E_ID)
);
```

f) Room Table:

```
CREATE TABLE Room (
   R_ID INT PRIMARY KEY,
   Type VARCHAR(50),
   Capacity INT,
   Availability VARCHAR(10)
);
```

g) Bills Table:

```
CREATE TABLE Bills (
   B_ID INT PRIMARY KEY,
   P_ID INT,
   Amount DECIMAL(10,2),
   FOREIGN KEY (P_ID) REFERENCES Patient(P_ID)
);
```

h)Test Report Table:

```
CREATE TABLE Test_Report (
   R_ID INT PRIMARY KEY,
   P_ID INT,
   Test_Type VARCHAR(50),
   Result VARCHAR(255),
   FOREIGN KEY (P_ID) REFERENCES Patient(P_ID)
);
```

i) Records Table (Maintained by Receptionist):

```
CREATE TABLE Records (
   Record_no INT PRIMARY KEY,
   App_no INT,
   E_ID INT,
   FOREIGN KEY (E_ID) REFERENCES Receptionist(E_ID)
);
```

INSERTION OF DATA

Patient Table:

INSERT INTO Patient (P_ID, Name, DOB, Age, Gender, Mob_No) VALUES

(1, 'John Doe', '1985-04-12', 39, 'M', '9876543210'),

(2, 'Jane Smith', '1990-09-05', 34, 'F', '9988776655'),

(3, 'Michael Brown', '1972-01-21', 52, 'M', '9123456789'),

(4, 'Emily Davis', '1988-11-30', 36, 'F', '9871236540'),

(5, 'David Wilson', '2000-06-15', 24, 'M', '9812345670'),

(6, 'Sarah Johnson', '1995-02-11', 29, 'F', '9123987654'),

(7, 'James Lee', '1965-08-25', 59, 'M', '9198765432'),

(8, 'Laura Clark', '2001-12-07', 22, 'F', '9988771234'),

(9, 'Robert Lewis', '1983-03-15', 41, 'M', '9876549870'),

(10, 'Olivia Martinez', '1992-10-19', 32, 'F', '9123459876');

Employee Table

INSERT INTO Employee (E_ID, Name, Mob_No, Address, State, City, Pin_no, Sex, Salary) VALUES

(1, 'Dr. Adam Parker', '9812341234', '101 Elm St', 'CA', 'Los Angeles', '90001', 'M', 120000),

(2, 'Dr. Karen Miller', '9812345678', '202 Maple Ave', 'CA', 'Los Angeles', '90002', 'F', 115000),

(3, 'Nurse Samuel Green', '9123456789', '303 Oak St', 'NY', 'New York', '10001', 'M', 80000),

(4, 'Nurse Emily White', '9812349876', '404 Pine St', 'NY', 'New York', '10002', 'F', 85000),

(5, 'Receptionist Amy Thompson', '9876543211', '505 Cedar St', 'TX', 'Dallas', '75201', 'F', 45000),

(6, 'Dr. Robert Baker', '9123987650', '606 Birch St', 'IL', 'Chicago', '60601', 'M', 125000),

(7, 'Dr. Nancy Turner', '9123459812', '707 Spruce St', 'IL', 'Chicago', '60602', 'F', 130000),

(8, 'Nurse Ryan Scott', '9812346523', '808 Ash St', 'TX', 'Dallas', '75202', 'M', 82000),

(9, 'Receptionist Laura Harris', '9871231234', '909 Fir St', 'CA', 'Los Angeles', '90003', 'F', 47000),

(10, 'Dr. Brian Collins', '9129876543', '1010 Palm St', 'NY', 'New York', '10003', 'M', 118000);

---

3. Doctor Table

INSERT INTO Doctor (E_ID, Dept, Qualification) VALUES

(1, 'Cardiology', 'MD'),

(2, 'Pediatrics', 'MD'),

(6, 'Orthopedics', 'MD'),

(7, 'Dermatology', 'MD'),

(10, 'Neurology', 'MD');

---

4. Nurse Table

INSERT INTO Nurse (E_ID, Qualification) VALUES

(3, 'BSN'),

(4, 'BSN'),

(8, 'BSN');

---

5. Receptionist Table

INSERT INTO Receptionist (E_ID) VALUES

(5),

(9);

---

6. Rooms Table

INSERT INTO Room (R_ID, Type, Capacity, Availability) VALUES

(101, 'General', 2, 'Available'),

(102, 'Private', 1, 'Occupied'),

(103, 'ICU', 1, 'Available'),

(104, 'General', 2, 'Available'),

(105, 'Private', 1, 'Occupied'),

(106, 'ICU', 1, 'Available'),

(107, 'General', 2, 'Available'),

(108, 'Private', 1, 'Occupied'),

(109, 'General', 2, 'Available'),

(110, 'ICU', 1, 'Available');

---

7. Bills Table

INSERT INTO Bills (B_ID, P_ID, Amount) VALUES

(1, 1, 5000.00),

(2, 2, 3000.00),

(3, 3, 4500.00),

(4, 4, 3200.00),

(5, 5, 1500.00),

(6, 6, 2800.00),

(7, 7, 3500.00),

(8, 8, 2200.00),

(9, 9, 4700.00),

(10, 10, 6000.00);

---

8. Test Report Table

INSERT INTO Test_Report (R_ID, P_ID, Test_Type, Result) VALUES

(1, 1, 'Blood Test', 'Normal'),

(2, 2, 'X-Ray', 'Fracture detected'),

(3, 3, 'MRI', 'Normal'),

(4, 4, 'Blood Test', 'High Cholesterol'),

(5, 5, 'CT Scan', 'Normal'),

(6, 6, 'Ultrasound', 'Normal'),

(7, 7, 'X-Ray', 'Clear'),

(8, 8, 'Blood Test', 'Anemia detected'),

(9, 9, 'CT Scan', 'Normal'),

(10, 10, 'Blood Test', 'Normal');

---

9. Records Table

INSERT INTO Records (Record_no, App_no, E_ID) VALUES

(1, 1001, 5),

(2, 1002, 9),

(3, 1003, 5),

(4, 1004, 9),

(5, 1005, 5),

(6, 1006, 9),

(7, 1007, 5),

(8, 1008, 9),

(9, 1009, 5),

(10, 1010, 9);

Relationships and their dependencies

The diagram appears to represent an Entity-Relationship (ER) model for a hospital management system, with various entities like Patient, Doctor, Employee, Nurse, Rooms, and their attributes, relationships, and cardinalities.

Independent and Dependent Tables:

1. **Independent Tables** (Entities that do not depend on other entities):
    - Patient
    - Employee
    - Doctor (Note: Employee can be a generalization of Doctor and Nurse)
    - Nurse
    - Receptionist
    - Room
2. **Dependent Tables** (Entities that depend on other entities):
    - Bills (Depends on Patient)
    - Test Report (Depends on Patient)
    - Records (Maintained by Receptionist)