דו"ח הפרויקט - שלב א'

שם המגיש: נעם מנדלבאום
המערכת: בית חולים
היחידה הנבחרת: מחלקה בבית החולים

תוכן עניינים

מבוא

מערכת הניהול של בית החולים "שערי צדק" כוללת מספר ישויות מרכזיות: רופאים, מטופלים, מחלקות וקשרי רופאים-מטופלים. המערכת נועדה לנהל את כל המידע הרלוונטי אודות המטופלים, הרופאים והמחלקות, על מנת לאפשר ניהול יעיל ומקצועי של כל המידע הנדרש לפעילות תקינה של בית החולים.

ישויות

1. **רופאים (Doctors):**

   טבלת הרופאים תכיל את כל הרופאים העובדים בבית החולים.

   - **DoctorID (PK)** – מספר זיהוי של הרופא.
   - **FirstName** – שם פרטי של הרופא.
   - **LastName** – שם משפחה של הרופא.
   - **Specialty** – מומחיות הרופא.
   - **Phone** – מספר טלפון של הרופא.
   - **EmailDateOfBirth** – תאריך לידה של הרופא.
   - **HireDate** – תאריך העסקה של הרופא.
   - **Salary** – משכורת הרופא.
   - **DistanceFromHospital** – מרחק מגורים מבית החולים.
   - **DepartmentID (FK)** – מזהה המחלקה אליה משתייך הרופא.

2. **מטופלים (Patients):**

   טבלת המטופלים תכיל את כל המטופלים המאושפזים בבית החולים.

   - **PatientID (PK)** – מספר זיהוי של המטופל.

- **FirstName** – שם פרטי של המטופל.
- **LastName** – שם משפחה של המטופל.
- **Phone** – מספר טלפון של המטופל.
- **Address** – כתובת המגורים של המטופל.
- **DateOfBirth** – תאריך לידה של המטופל.
- **Gender** – מגדר המטופל.
- **AdmissionDate** – תאריך קבלת המטופל.
- **ReleaseDate** – תאריך שחרור המטופל.
- **DepartmentID (FK)** – מזהה המחלקה בה מאושפז המטופל.

3. מחלקות (Departments):

טבלת המחלקות תכיל את כל המחלקות בבית החולים.

- **DepartmentID (PK)** – מספר זיהוי של המחלקה.
- **DepartmentName** – שם המחלקה.
- **BuildingName** – שם הבניין בו נמצאת המחלקה.
- **Floor** – מספר הקומה בה נמצאת המחלקה.
- **Phone** – מספר טלפון של המחלקה.
- **TotalBeds** – מספר מיטות כולל במחלקה.
- **OccupiedBeds** – מספר מיטות בשימוש כרגע.
- **HeadOfDepartment** – שם ראש המחלקה.

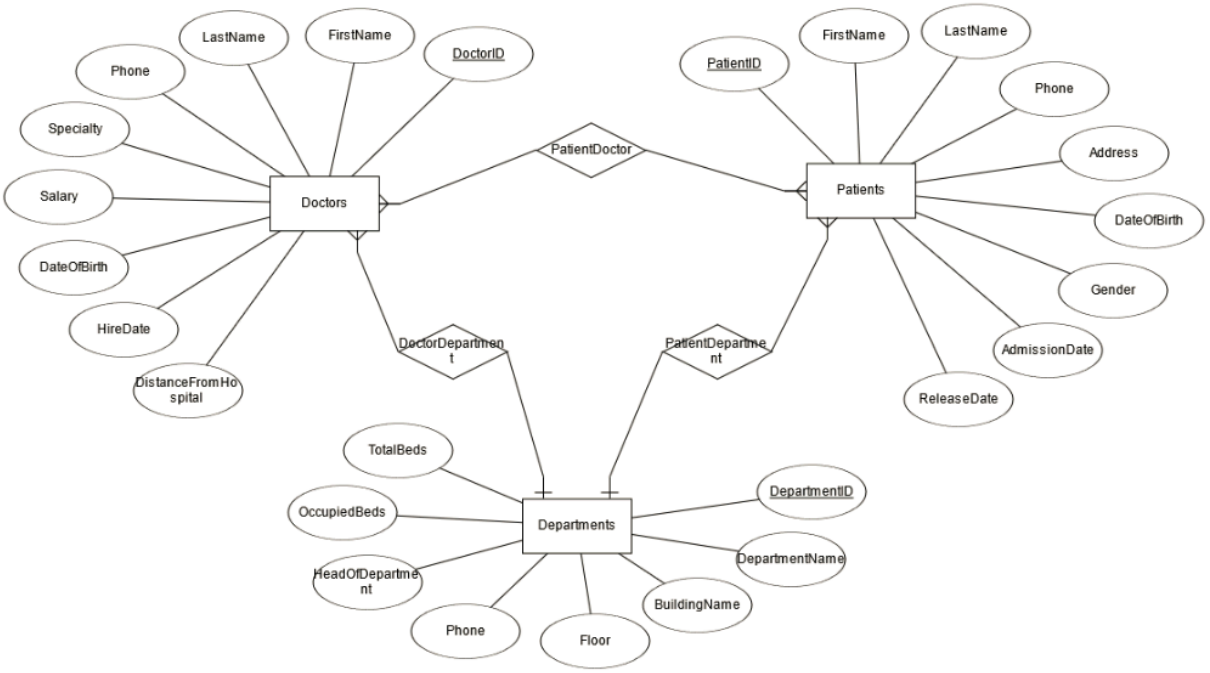
קשרים בין הישויות

PatientDoctor:

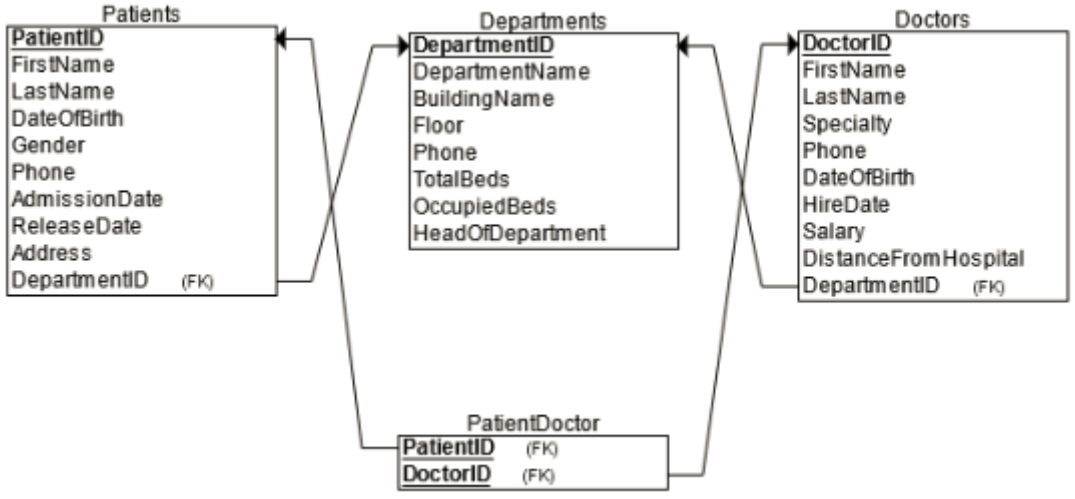
טבלת קשרים המאפשרת את ניהול הקשר בין רופאים למטופלים.

- **PatientID (FK)** – מספר זיהוי של המטופל.
- **DoctorID (FK)** – מספר זיהוי של הרופא.

תרשים ERD



תרשים DSD



כל הסכמות עומדות ב-3NF

הטבלאות בפרויקט זה עוצבו כך שהן עומדות בדרישות של נרמול לרמה של 3NF, להלן הסיבות לכך:

1. **נרמול לרמה 1NF**:
   - כל הטבלאות מכילות ערכים אטומיים בלבד, כלומר, כל עמודה בטבלה מכילה ערכים יחידים (לא מורכבים ולא חוזרים).
   - אין שורות כפולות בטבלאות, וכל שורה מזוהה באופן ייחודי על ידי מפתח ראשי.
2. **נרמול לרמה 2NF**:
   - כל הטבלאות עומדות בדרישות של 1NF.
   - כל המאפיינים הלא-מפתחותיים בטבלאות תלויים באופן מלא במפתח הראשי, ואין תלות חלקית במפתח הראשי. זה אומר שכל עמודה שאינה חלק מהמפתח הראשי תלויה פונקציונלית בכל המפתח הראשי ולא בחלק ממנו.
3. **נרמול לרמה 3NF**:
   - כל הטבלאות עומדות בדרישות של 2NF.
   - כל המאפיינים הלא-מפתחותיים תלויים ישירות במפתח הראשי בלבד ואינם תלויים במאפיינים לא-מפתחותיים אחרים. אין תלות טרנזיטיבית בין המאפיינים הלא-מפתחותיים בטבלאות.

יצירת הטבלאות

```
CREATE TABLE Departments (
    DepartmentID INT NOT NULL,
    DepartmentName VARCHAR2(15) NOT NULL,
    BuildingName VARCHAR2(15) NOT NULL,
    Floor INT NOT NULL,
    Phone VARCHAR2(13) NOT NULL,
    TotalBeds INT,
    OccupiedBeds INT,
    HeadOfDepartment VARCHAR2(15) NOT NULL,
    PRIMARY KEY (DepartmentID)
);
```

	COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
1	DEPARTMENTID	NUMBER	22	N
2	DEPARTMENTNAME	VARCHAR2	15	N
3	BUILDINGNAME	VARCHAR2	15	N
4	FLOOR	NUMBER	22	N
5	PHONE	VARCHAR2	13	N
6	TOTALBEDS	NUMBER	22	Y
7	OCCUPIEDBEDS	NUMBER	22	Y
8	HEADOFDEPARTMENT	VARCHAR2	15	N

```
CREATE TABLE Doctors
(
  DoctorID INT NOT NULL,
  FirstName VARCHAR(15) NOT NULL,
  LastName VARCHAR(15) NOT NULL,
  Specialty VARCHAR(15) NOT NULL,
  Phone VARCHAR(13) NOT NULL,
  DateOfBirth DATE NOT NULL,
  HireDate DATE NOT NULL,
  Salary INT NOT NULL,
  DistanceFromHospital FLOAT NOT NULL,
  DepartmentID INT NOT NULL,
  PRIMARY KEY (DoctorID),
  FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)
);
```

	COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
1	DOCTORID	NUMBER	22	N
2	FIRSTNAME	VARCHAR2	15	N
3	LASTNAME	VARCHAR2	15	N
4	SPECIALTY	VARCHAR2	15	N
5	PHONE	VARCHAR2	13	N
6	DATEOFBIRTH	DATE	7	N
7	HIREDATE	DATE	7	N
8	SALARY	NUMBER	22	N
9	DISTANCEFROMHOSPITAL	FLOAT	22	N
10	DEPARTMENTID	NUMBER	22	N

```
CREATE TABLE Patients (
    PatientID INT NOT NULL,
    FirstName VARCHAR2(15) NOT NULL,
    LastName VARCHAR2(15) NOT NULL,
    DateOfBirth DATE NOT NULL,
    Gender CHAR(1) NOT NULL,
    Phone VARCHAR2(13) NOT NULL,
    AdmissionDate DATE NOT NULL,
    ReleaseDate DATE,
    Address VARCHAR2(15) NOT NULL,
    DepartmentID INT NOT NULL,
    PRIMARY KEY (PatientID),
    FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)
);
```

	COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
1	PATIENTID	NUMBER	22	N
2	FIRSTNAME	VARCHAR2	15	N
3	LASTNAME	VARCHAR2	15	N
4	DATEOFBIRTH	DATE	7	N
5	GENDER	CHAR	1	N
6	PHONE	VARCHAR2	13	N
7	ADMISSIONDATE	DATE	7	N
8	RELEASEDATE	DATE	7	Y
9	ADDRESS	VARCHAR2	15	N
10	DEPARTMENTID	NUMBER	22	N

```
CREATE TABLE PatientDoctor
(
  PatientID INT NOT NULL,
  DoctorID INT NOT NULL,
  PRIMARY KEY (PatientID, DoctorID),
  FOREIGN KEY (PatientID) REFERENCES Patients(PatientID),
  FOREIGN KEY (DoctorID) REFERENCES Doctors(DoctorID)
);
```

	COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
1	PATIENTID	NUMBER	22	N
2	DOCTORID	NUMBER	22	N

הכנסת נתונים

1. סקריפט פייתון

```python
import random
import csv
import os
from datetime import datetime, timedelta

# Define the output path
output_path = r"C:\Users\noamm\Desktop\1 שנה ג\סמסטר ב\מיני פרוייקט בבסיסי נתונים\מיני פרוייקט\לימודים\pythonDataGenerated"


# Function to generate a phone number
2 usages
def generate_phone():
    return '05' + ''.join([str(random.randint(a: 0, b: 9)) for _ in range(8)])


# Function to generate random names
3 usages
def generate_name():
    first_names = ['John', 'Jane', 'Alice', 'David', 'Michael', 'Sara', 'James', 'Emily', 'Robert', 'Linda']
    last_names = ['Smith', 'Johnson', 'Williams', 'Jones', 'Brown', 'Davis', 'Miller', 'Wilson', 'Moore', 'Taylor']
    return random.choice(first_names), random.choice(last_names)


# Function to generate a random date between two dates
4 usages
def generate_date(start_date, end_date):
    delta = end_date - start_date
    random_days = random.randint(a: 0, delta.days)
    return start_date + timedelta(days=random_days)
```

```python
# Generate data for Departments table
with open(os.path.join(output_path, 'departments_data.txt'), 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(['DepartmentID', 'DepartmentName', 'BuildingName', 'Floor', 'Phone', 'TotalBeds', 'OccupiedBeds',
                     'HeadOfDepartment'])

    department_names = ['Gen Medicine', 'Pediatrics', 'Emerg Med', 'Surgery', 'Orthopedics', 'Obstetrics', 'Psychiatry',
                        'Neurology', 'Cardiology', 'Oncology', 'Dermatology', 'Urology', 'Gastroentero',
                        'Ophthalmology', 'Pulmonology', 'Rheumatology', 'Nephrology', 'Endocrinol', 'Infect Dis',
                        'Geriatrics']
    building_names = ['Building A', 'Building B', 'Building C', 'Building D', 'Building E']

    for department_id in range(1, 401):  # Generate 400 sample records
        department_name = random.choice(department_names)
        building_name = random.choice(building_names)
        floor = random.randint(a: 1, b: 10)
        phone = '02' + ''.join([str(random.randint(a: 0, b: 9)) for _ in range(7)])
        total_beds = random.randint(a: 20, b: 100)
        occupied_beds = random.randint(a: 0, total_beds)
        head_of_department = random.choice(generate_name()[1])  # Last name only

        writer.writerow([department_id, department_name, building_name, floor, phone, total_beds, occupied_beds,
                         head_of_department])

# Generate data for Doctors table
with open(os.path.join(output_path, 'doctors_data.txt'), 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(['DoctorID', 'FirstName', 'LastName', 'Specialty', 'Phone', 'DateOfBirth', 'HireDate', 'Salary',
                     'DistanceFromHospital', 'DepartmentID'])
```

```
    specialties = ['Cardiology', 'Neurology', 'Oncology', 'Pediatrics', 'Surgery', 'Orthopedics']
    for doctor_id in range(1, 401):  # Generate 400 sample records
        first_name, last_name = generate_name()
        specialty = random.choice(specialties)
        phone = generate_phone()
        date_of_birth = generate_date(datetime( year: 1960,  month: 1,  day: 1), datetime( year: 2000,  month: 12,  day: 31))
        hire_date = generate_date(date_of_birth + timedelta(days=6570),
                                  datetime( year: 2023,  month: 1,  day: 1))  # Hire date is after 18 years old
        salary = random.randint( a: 50000,  b: 200000)
        distance_from_hospital = round(random.uniform( a: 1,  b: 100), 2)  # Max value of 100
        department_id = random.randint( a: 1,  b: 20)  # Assuming there are 20 departments

        writer.writerow([doctor_id, first_name, last_name, specialty, phone, date_of_birth.strftime('%Y-%m-%d'),
                         hire_date.strftime('%Y-%m-%d'), salary, distance_from_hospital, department_id])

# Generate data for Patients table
with open(os.path.join(output_path, 'patients_data.txt'), 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(
        ['PatientID', 'FirstName', 'LastName', 'DateOfBirth', 'Gender', 'Phone', 'AdmissionDate', 'ReleaseDate',
         'Address', 'DepartmentID'])

    genders = ['M', 'F']
    for patient_id in range(1, 401):  # Generate 400 sample records
        first_name, last_name = generate_name()
        date_of_birth = generate_date(datetime( year: 1940,  month: 1,  day: 1), datetime( year: 2020,  month: 12,  day: 31))
        gender = random.choice(genders)
        phone = generate_phone()
        admission_date = generate_date(datetime( year: 2020,  month: 1,  day: 1), datetime( year: 2024,  month: 1,  day: 1))
        release_date = admission_date + timedelta(days=random.randint( a: 1,  b: 30))
        address = f"{random.randint( a: 1,  b: 999)} Elm St"
        department_id = random.randint( a: 1,  b: 20)  # Assuming there are 20 departments

        writer.writerow([patient_id, first_name, last_name, date_of_birth.strftime('%Y-%m-%d'), gender, phone,
                         admission_date.strftime('%Y-%m-%d'),
                         release_date.strftime('%Y-%m-%d') if random.random() > 0.5 else '', address, department_id])

# Generate data for PatientDoctor table
with open(os.path.join(output_path, 'patientdoctor_data.txt'), 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(['PatientID', 'DoctorID'])

    for patient_id in range(1, 401):  # Assuming each patient can have multiple doctors
        doctor_ids = random.sample(range(1, 401), random.randint( a: 1,  b: 3))  # Each patient can have 1 to 3 doctors
        for doctor_id in doctor_ids:
            writer.writerow([patient_id, doctor_id])

print(f"Data generation complete. Files created at: {output_path}")
```

```
DepartmentID,DepartmentName,BuildingName,Floor,Phone,TotalBeds,OccupiedBeds,HeadOfDepartment
1001,Rheumatology,Building E,6,025733112,94,62,Alice Williams
1002,Emergency Med,Building D,1,026925363,72,20,Sara Miller
1003,Pediatrics,Building C,1,021499191,22,10,Linda Taylor
1004,Neurology,Building B,10,028776100,45,8,Emily Wilson
1005,Infectious,Building E,7,027938696,40,31,Sara Davis
1006,Geriatrics,Building C,8,023993537,49,35,John Miller
1007,Rheumatology,Building E,7,023030501,76,20,Robert Smith
1008,Gen Medicine,Building B,4,021368281,57,27,Linda Smith
1009,Ophthalmology,Building A,3,025676659,88,41,John Williams
```

Configuration

General

Fieldcount: 8

End at line-end
Name in header
Skip empty lines

Quote character: "

Comment line:

Import lines: 1 ..

Field1 (+0 .. ",") DepartmentID
Field2 (+0 .. ",") DepartmentNam
Field3 (+0 .. ",") BuildingName
Field4 (+0 .. ",") Floor
Field5 (+0 .. ",") Phone
Field6 (+0 .. ",") TotalBeds
Field7 (+0 .. ",") OccupiedBeds
Field8 (+0 .. ",") HeadOfDepartm

Field Start
Relative position: 0
Absolute position
Character

Field End
Length
Character: ,

Filter

Result Preview

DepartmentID	DepartmentName	BuildingName	Floor	Phone	TotalBeds	OccupiedBeds	HeadOfDepartment
1001	Rheumatology	Building E	6	025733112	94	62	Alice Williams
1002	Emergency Med	Building D	1	026925363	72	20	Sara Miller

Select departments | Select doctors | Select patients | Select patientdoctor

	DEPARTMENTID	DEPARTMENTNAME	BUILDINGNAME	FLOOR	PHONE	TOTALBEDS	OCCUPIEDBEDS	HEADOFDEPARTMENT
1	1102	Ophthalmology	Building C	9	020318304	44	44	Wilson
2	1103	Orthopedics	Building D	4	022726618	78	59	Smith
3	1104	Rheumatology	Building B	9	022497752	20	9	Moore
4	1001	Ophthalmology	Building D	8	021715150	26	11	Brown
5	1002	Cardiology	Building D	2	021465138	61	5	Miller
6	1003	Endocrinology	Building C	8	028070012	40	34	Davis
7	1004	Nephrology	Building A	10	022810815	44	18	Jones
8	1005	Nephrology	Building A	4	025196326	22	8	Jones
9	1006	Dermatology	Building A	7	028525729	20	5	Williams
10	1007	Pediatrics	Building B	9	022159936	42	25	Miller
11	1008	Emergency Med	Building C	1	028222432	24	5	Miller
12	1009	Surgery	Building B	7	026718267	32	12	Wilson
13	1010	Neurology	Building A	2	020289577	47	14	Johnson
14	1011	Emergency Med	Building B	8	025070236	32	15	Williams
15	1012	Oncology	Building D	2	024017155	95	81	Brown
16	1013	Emergency Med	Building B	4	020811216	25	13	Davis
17	1014	Nephrology	Building D	3	021867512	89	10	Davis
18	1015	Urology	Building A	8	024041688	57	36	Moore

1 of 400 | nmandelb AS SYSDBA | [14:26:09] 400 rows selected in 0.431 seconds

2. הכנסת נתונים ע"י פקודות INSERT

```
-- Inserting data into the Departments table
INSERT INTO Departments (DepartmentID, DepartmentName, BuildingName, Floor, Phone, TotalBeds, OccupiedBeds, HeadOfDepartment) VALUES
(1, 'Cardiology', 'Building A', 1, '0256739812', 50, 30, 'John Doe');
INSERT INTO Departments (DepartmentID, DepartmentName, BuildingName,Floor , Phone, TotalBeds, OccupiedBeds, HeadOfDepartment) VALUES
(2, 'Neurology', 'Building B', 2, '0256739813', 40, 20, 'Jane Smith');
INSERT INTO Departments (DepartmentID, DepartmentName, BuildingName, Floor, Phone, TotalBeds, OccupiedBeds, HeadOfDepartment) VALUES
(3, 'Oncology', 'Building C', 3, '0256739814', 60, 40, 'Jim Beam');

-- Inserting data into the Doctors table
INSERT INTO Doctors (DoctorID, FirstName, LastName, Specialty, Phone, DateOfBirth, HireDate, Salary, DistanceFromHospital, DepartmentID) VALUES
(1, 'Alice', 'Johnson', 'Cardiology', '0587677615', TO_DATE('1975-05-20', 'YYYY-MM-DD'), TO_DATE('2000-06-15', 'YYYY-MM-DD'), 120000, 10, 1);
INSERT INTO Doctors (DoctorID, FirstName, LastName, Specialty, Phone, DateOfBirth, HireDate, Salary, DistanceFromHospital, DepartmentID) VALUES
(2, 'Bob', 'Williams', 'Neurology', '0587677616', TO_DATE('1980-11-10', 'YYYY-MM-DD'), TO_DATE('2005-09-01', 'YYYY-MM-DD'), 110000, 20, 2);
INSERT INTO Doctors (DoctorID, FirstName, LastName, Specialty, Phone, DateOfBirth, HireDate, Salary, DistanceFromHospital, DepartmentID) VALUES
(3, 'Charlie', 'Brown', 'Oncology', '0587677617', TO_DATE('1985-02-25', 'YYYY-MM-DD'), TO_DATE('2010-03-20', 'YYYY-MM-DD'), 130000, 15, 3);

-- Inserting data into the Patients table
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(1, 'David', 'Smith', TO_DATE('1990-04-12', 'YYYY-MM-DD'), 'M', '0587677618', TO_DATE('2024-07-01', 'YYYY-MM-DD'), TO_DATE('2024-07-10', 'YYYY-MM-DD'), '123 Elm St', 1);
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(2, 'Eva', 'Green', TO_DATE('1985-08-15', 'YYYY-MM-DD'), 'F', '0587677619', TO_DATE('2024-06-20', 'YYYY-MM-DD'), TO_DATE('2024-07-05', 'YYYY-MM-DD'), '456 Oak St', 2);
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(3, 'Frank', 'White', TO_DATE('1978-12-22', 'YYYY-MM-DD'), 'M', '0587677620', TO_DATE('2024-05-10', 'YYYY-MM-DD'), TO_DATE('2024-05-20', 'YYYY-MM-DD'), '789 Pine St', 3);
```

```
-- Inserting data into the Patients table
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(1, 'David', 'Smith', TO_DATE('1990-04-12', 'YYYY-MM-DD'), 'M', '0587677618', TO_DATE('2024-07-01', 'YYYY-MM-DD'), TO_DATE('2024-07-10', 'YYYY-MM-DD'), '123 Elm St', 1);
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(2, 'Eva', 'Green', TO_DATE('1985-08-15', 'YYYY-MM-DD'), 'F', '0587677619', TO_DATE('2024-06-20', 'YYYY-MM-DD'), TO_DATE('2024-07-05', 'YYYY-MM-DD'), '456 Oak St', 2);
INSERT INTO Patients (PatientID, FirstName, LastName, DateOfBirth, Gender, Phone, AdmissionDate, ReleaseDate, Address, DepartmentID) VALUES
(3, 'Frank', 'White', TO_DATE('1978-12-22', 'YYYY-MM-DD'), 'M', '0587677620', TO_DATE('2024-05-10', 'YYYY-MM-DD'), TO_DATE('2024-05-20', 'YYYY-MM-DD'), '789 Pine St', 3);

-- Inserting data into the PatientDoctor table
INSERT INTO PatientDoctor (PatientID, DoctorID) VALUES
(1, 1);
INSERT INTO PatientDoctor (PatientID, DoctorID) VALUES
(2, 2);
INSERT INTO PatientDoctor (PatientID, DoctorID) VALUES
(3, 3);
COMMIT;
```

Select departments | Select doctors | Select patients | Select patientdoctor

	DEPARTMENTID	DEPARTMENTNAME	BUILDINGNAME	FLOOR	PHONE	TOTALBEDS	OCCUPIEDBEDS	HEADOFDEPARTMENT
1	1	Cardiology	Building A	1	0256739812	50	30	John Doe
2	2	Neurology	Building B	2	0256739813	40	20	Jane Smith
3	3	Oncology	Building C	3	0256739814	60	40	Jim Beam

Select departments | Select doctors | Select patients | Select patientdoctor

	DOCTORID	FIRSTNAME	LASTNAME	SPECIALTY	PHONE	DATEOFBIRTH	HIREDATE	SALARY	DISTANCEFROMHOSPITAL	DEPARTMENTID
1	1	Alice	Johnson	Cardiology	0587677615	20/05/1975	15/06/2000	120000	10	1
2	2	Bob	Williams	Neurology	0587677616	10/11/1980	01/09/2005	110000	20	2
3	3	Charlie	Brown	Oncology	0587677617	25/02/1985	20/03/2010	130000	15	3

Select departments | Select doctors | Select patients | Select patientdoctor

	PATIENTID	FIRSTNAME	LASTNAME	DATEOFBIRTH	GENDER	PHONE	ADMISSIONDATE	RELEASEDATE	ADDRESS	DEPARTMENTID
1	1	David	Smith	12/04/1990	M	0587677618	01/07/2024	10/07/2024	123 Elm St	1
2	2	Eva	Green	15/08/1985	F	0587677619	20/06/2024	05/07/2024	456 Oak St	2
3	3	Frank	White	22/12/1978	M	0587677620	10/05/2024	20/05/2024	789 Pine St	3

Select departments | Select doctors | Select patients | Select patientdoctor

	PATIENTID	DOCTORID
1	1	1
2	2	2
3	3	3