**Healthcare System - Patient & Appointment Management**

This is a simple desktop application developed using **Python Tkinter** and **SQLite3** to manage patients and appointments for a healthcare system.

**Features**

* Add new patients with details (Name, Age, Gender, Contact, Medical History)
* View a list of all patients
* Schedule appointments for patients
* View all appointments

**Requirements**

* Python 3.x
* Tkinter (comes built-in with Python)
* SQLite3 (comes built-in with Python)

No external libraries are needed.

**Setup Instructions**

**1. Clone or Download the Code**

Download or clone this repository to your local machine.

git clone <repository-link>

*(Or simply download the .py file.)*

**2. Create the Database and Tables**

You **must manually create** the healthcare.db database and two tables before running the program.

You can create it with a simple Python script or any SQLite tool.

**Python Script to Create Tables:**

import sqlite3

# Connect to database

conn = sqlite3.connect('healthcare.db')

cursor = conn.cursor()

# Create patients table

cursor.execute('''

CREATE TABLE IF NOT EXISTS patients (

id INTEGER PRIMARY KEY AUTOINCREMENT,

name TEXT NOT NULL,

age INTEGER,

gender TEXT,

contact TEXT,

medical\_history TEXT

)

''')

# Create appointments table

cursor.execute('''

CREATE TABLE IF NOT EXISTS appointments (

id INTEGER PRIMARY KEY AUTOINCREMENT,

patient\_id INTEGER,

appointment\_time TEXT,

FOREIGN KEY (patient\_id) REFERENCES patients (id)

)

''')

conn.commit()

conn.close()

📢 **Important:** Make sure the database file (healthcare.db) is located in the **same folder** as your main application script.

**3. Run the Application**

Run the main Python file:

python your\_script\_name.py

This will open the Healthcare System window with 3 tabs:

* Add Patient
* View Patients
* Appointments

**How to Use**

**Add Patient**

1. Go to the **"Add Patient"** tab.
2. Fill in the patient details.
3. Click **"Add Patient"**.
4. The patient is saved to the database and appears in the View tab.

**View Patients**

1. Switch to the **"View Patients"** tab.
2. View all patients in a table.

**Schedule Appointment**

1. Go to the **"Appointments"** tab.
2. Select a patient from the dropdown.
3. Enter the appointment time (e.g., "2025-04-30 14:00").
4. Click **"Save Appointment"**.
5. The appointment will be saved and displayed below.

**Project Structure**

| **File** | **Purpose** |
| --- | --- |
| main\_script.py | Main application script |
| healthcare.db | SQLite database (auto-created) |