Conceptual Schema of the Project:-

1. User Table: To store information about all users

Key Components:

- ID: Primary Key
- username
- password_hash
- role_id: Foreign Key of Table ‘Roles’
- created_at
- updated_at
- email

2. Roles Table: To define different user roles

Key Components:

- ID: Primary Key
- role_name

3. Patients Table: To store patient specific information

Key Components:

- ID: Primary Key
- user_id: Foreign Key of Table ‘User’
- first_name
- last_name
- dob (date of birth)
- medical_record_number

4. Medical Professionals Table: To store details about medical staff

Key Components:

- ID: Primary Key
- user_id: Foreign Key of Table ‘User’
- first_name
- last_name
- title
- department

5. Devices Table: To manage medical devices

Key Components:

- ID: Primary Key
- name
- type
- manufacturer

6. PatientDevice Table: To assign devices to patients

Key Components:

- ID: Primary Key
- patient_id: Foreign Key of Table ‘Patients’
- device_id: Foreign Key of Table ‘Devices’
- assigned_date

7. Measurements Table: To store readings from the devices

Key Components:

- ID: Primary Key
- patient_device_id: Foreign Key of Table ‘PatientDevice’
- measurement_value
- measurement_time
- type (e.x., blood pressure, glucose level)

8. Appointments Table: To manage appointments

Key Components:

- ID: Primary Key
- patient_id: Foreign Key of Table ‘Patients’
- professional_id: Foreign Key of Table ‘Medical Professionals’
- appointment_time
- status
- notes

9. Messages Table: For communications

Key Components:

- ID: Primary Key
- sender_id: Foreign Key of Table ‘User’
- receiver_id: Foreign Key of Table ‘User’
- message_content
- message_time
- status (e.g., sent, received, read)

10. Notifications Table: To send alerts and reminders

Key Components:

- ID: Primary Key
- user_id: Foreign Key of Table ‘User’
- notification_content
- notification_time
- status (e.g., pending, delivered)