Project Deliverable 3

Requirements

Phase 3 Deliverable must contain the goal of this phase of the project, a description of the creation of the database schema and instance, and a description of the application programs. It must also provide any revisions made to the specifications described in the Phase 2 Deliverable. It must further describe the problems encountered in Phase 3 and justify the solutions.

1. Run SQL commands for creating tables, including primary keys, secondary keys, and foreign keys. Run SQL command files that populate each table. Each table is required to have a sufficient number of tuples. Keep in mind the relationships between tables and plan your data accordingly. You should be able to run these command files successfully with no errors and no integrity violations.

2. You are to develop an application system for the **HealthTrack Personal Wellness Platform** database. The following are the menus to be developed. All applications described below must be implemented. You may add more functions and menus if you want.

   Main menu:
   - Account Info
   - Book an Appointment (with a provider)
   - Create a Wellness Challenge (for other users)
   - Monthly Health Summary (key metrics and appointments for the month)
   - Search Records (based on user Health ID, provider, appointment type, date range, etc.)
   - Sign Out

   Account functions:
   - Modify personal details
   - Add/remove email address
   - Add/remove phone number
   - Add/remove/link a healthcare provider

   Summary functions:
   - Total number of appointments for a user in a range of dates.
   - Average/min/max of a specific health metric (e.g., weight, blood pressure) per month.
   - The wellness challenges with the most participants.
   - The most active users (users who have logged the most health records or completed the most challenges).

What is expected:

1. A description of your implementation and any problems you faced.
2. The SQL commands that create your tables.
3. The SQL commands that populate your tables.
4. The complete source code for your application.
5. A printout of the use of the program (screenshots).

The program must run.

Make sure you have ample sample data in your tables so that you can sufficiently perform and illustrate all required tasks.

If you miss a task, mention which one. If you have implemented a task with similar functionality, it helps to mention it.

You should be prepared to demonstrate your project. The dates for the demo will be announced in class. You should reserve a time slot to demo during these days.