CSE 335: Principles of Mobile Application Development, Homework 2: Extended Healthcare Application

Due: April 27th by 11:59 pm Online 100 Points

<u>Note:</u> This homework is an individual homework. Please do not collaborate. Also, this homework should be completed in XCode using swiftUI.

<u>Description:</u> You will be extending homework #I you have developed to add data persistence. Functionality of the application will remain the same with following modifications.

Health Indicators:

Suppose that the individuals with underlying health conditions monitor following indicators daily at home and input to the app to keep track of the fluctuation of these indicators daily.

- Blood pressure (Systolic/Diastolic)
- Weight in pounds
- Morning sugar level
- Any Symptoms

Once the user enters the data, insert data into a CoreData data storage or Firebase storage. Make sure to have the date information is also added to the data (month and day) storage. So, you will be storing blood pressure, weight, sugar level, and the data collection date for each record.

Your app should have the following three functionalities:

- Enter data for a given day.
- View my health (ask the user to enter the date range, for example the user can say show data from 03/10-03/20)
 - You can show the entries for blood pressure, sugar, and weight only.
 You are free to design a good UI for this.

Note: No need to implement the Am I at Risk functionality.

External Resources:

How to draw graphs using swiftUI

https://developer.apple.com/documentation/charts/creating-a-chart-using-swift-charts

Good YouTube video https://www.youtube.com/watch?v=4utsyqhnS4g

Grading Criteria:

- 1. Correct UI functionality (10 Pts)
- 2. Use the MVVM architecture correctly (Frist, study the MVVM examples discussed in the class and then design the MVVM for this application) (20 Pts)
- 3. CoreData or Firebase Implementation (30 Pts)
- 4. View Health Data for a given date range (30 Pts)
- 5. Correctness of the functionality (10)

Note: CoreData or Firebase and/or View Health Data for a given date range implementations are needed to get points for part I and 2.

Submission: make a zip file containing your complete project and upload to the canvas