CS Capstone Design

Alpha Prototype Demo Grading Sheet (100 pts)

TEAM: TenseMed Dynamics

Overview: The purpose of the Alpha Prototype Demo is to clearly demonstrate the extend to which all core user flows envisioned for the product are supported by the current implementation. The flow of the demo is very natural: you simply introduce each of the major usage scenarios, and then follow through each of them, just as an end-user would in using the product. Grading is based on how completely the current product supports all key functional aspects within a coherent, realistic user flow. Interface refinement, clunkiness, and aesthetics should be ignored for now; the focus is simply on functional ability to complete the user flow.

This template is fleshed out by the team, approved by the team mentor, and brought to demo as a grading sheet.

Overview of major product use cases

Based on the Requirements document and subsequent development discussions with your client and mentor, briefly describe each of the key use cases for your product:

UC1:User Registration and Authentication In order to access the application's features, users must register and authenticate their account. This use case involves filling out a bare minimum form with information like email and password. This is to reinforce security with the app as we will be capturing biometrics which will need to be securely stored.

UC2: Device Connection and Control One of our most important features is the connection of the medical device to the mobile application. Users will be able to connect and disconnect the device from the application for ease of use. The stable Bluetooth connection will ensure that the device will not unexpectedly disconnect when the user is expecting to use it.

UC3: Biometric Data Monitoring Capturing the biometric data of the users allows users to see their heath improve right at their fingertips. Users will be able to connect to the device via Bluetooth, start their therapy session, and see the live data being displayed on the application.

UC4: User Profile and Settings Management Users will have profiles where they will be able to customize their information. They will be able to change their profile image and name. Updating information like their care provider's information. This information would be stored in the database and users will be able to see their changes made to their profile.

User Flows: Detailed walk-through for each use case:

In this section, we outline the demonstrations of each use case that we have prepared, giving a step-by-step outline of the user flow that would be followed by a real user for that use case.

Use case 1: User Registration and Authentication

<u>User Flow:</u> Step by step overview of user interactions with product

- 1. Start up the app on a mobile device
- 2. Click Sign Up to create an account

- 3. Enter their email address and password to create an account
- 4. Login into the newly created account
- 5. Follow the authentication process

Evaluation and Comments:

- ✓ Convincingly demo'd each of listed challenges?
- ✓ Other evaluative comments:

Use Case 2: Device Connection and Control

User Flow: Step by step overview of user interactions with product

- 6. Show that the device will automatically disconnect from any device trying to connect to it without a key.
- 7. Show that the device keeps a connection when connected from the app.
- 8. Show that the device is sending data to the app.

Evaluation and Comments:

- ✓ Convincingly demo'd each of listed challenges?
- ✓ Other evaluative comments:

Use Case 3: Biometric Data Monitoring

<u>User Flow:</u> Step by step overview of user interactions with product

- 9. After connecting the device to the app, show live data tracking from the device to the the app
- 10. Possibly show different data points like timestamps and heart rate

Evaluation and Comments:

- ✓ Convincingly demo'd each of listed challenges?
- ✓ Other evaluative comments:

Use Case 4: User Profile and Settings Management

<u>User Flow:</u> Step by step overview of user interactions with product

- 11. Show the newly created User Profile
- 12. Show that users can change their profile photo
- 13. Show users can change information like name, breed, etc.

Evaluation and Comments:

- ✓ Convincingly demo'd each of listed challenges?
- ✓ Other evaluative comments:

Known short-comings: Functionality still deficient/missing:

If there were challenges you listed earlier that were *not* covered by a demo, list here. This will hopefully be a short list...but better to be clear about where you are. If you have items here, you could list (if applicable) any pending plans/schedule to get this implemented.

C1: Scalability With only a semester left, the application is being built on a smaller scale. We are keeping scalability in mind but the codebase must be simple and easy enough to manage. As this project grows to the scale that the client wants, the database will need to be transferred to a large database which may cause issues.