BI-WEEKLY REPORT II

Project: Well-Being Data Anonymisation with IOS
Client: GOSH
Team 33

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Project stage: Developing stage

Project description:
Develop a mobile phone app and a way of representing data arising from app usage.
Enable:

- A method for representing sensor data arising on a phone in an app.
- The app to visualise the data on phone and via exports to a Linode based database.
- The resulting database to be augmented with web-based form data,
- Data to be used to inform a mathematical model to predict circumstances and trends using Python and Java scripts.
- A model to be persisted and updated by the mobile phone user.
- An environment whereby the resulting app can be deployed
- App users to share anonymised data.
- The persistence of anonymised app data (coded to FIHR and SNOMED) on a Linode server representing data in an outbound postcode map.
- Postcode maps of anonymised data to be understood by the general public.

Overview
For the past two weeks, we've continued learning the different libraries of swift required to build our app such as UIKit, HealthKit, and MessageUI. We divided the role of learning these libraries amongst team members, one for each of the libraries.

We also further clarified the requirements of our projects with Joseph. In our first weekly online meeting, we clarified our project and the overlap it has with the WellWellWell app on android. Based on the accessible functionalities on IOS, we decided we are unable to implement the full scope of the "5 ways of wellbeing" as described in the NHS. Therefore, we chose to refocus our attention onto building an app that monitors the wellbeing of the elderly people living alone. We also discussed the market research that we've done on similar apps that helps family and friends monitor the wellbeing of elderly living alone, in order to better understand the market demand for these apps, and also take inspiration from the design of these other applications to see what features could be included in our app.

From this, we built a runnable prototype in Figma, we looked from the perspective of an elderly user and determined a set of functionalities that would be necessary and desirable, drew a few basic sketches so it has as simple an interface as possible so it's simple for elderly people to use. We sent the prototype for Joseph to review.

In the second week, Joseph modified the target audience for our app, which became carers who spends a lot of time indoors, and overtime due to neglecting the importance of spending time with family and friends, have deteriorating wellbeing and develop symptoms of depression. He reviewed our prototype and sketched a different UI more suitable for the new target audience, and also with a different purpose.

We've also started building parts of the app, such as the ability to move between pages, and also explored the functionality to send messages using MessageUI.

During the period that is covered by the report, we have met with our client and we discussed what the app would look like, and the exact functionality of each pages in the app. This meeting took place with the Android team as well, to ensure that we both had an app that looked the same regardless of how the back-end code worked. During this meeting, the reason for the creation of this

app was emphasised. Hopefully, the result of using this app would result in full time carers ensuring that that are looking after each other. Our client had talked to clinicians and heard back that we should walk for 10 minutes a day, consecutively, to ensure that are well-being is high. Based on this, we will create an algorithm that can then calculate the well-being score.

Completed tasks

- First version prototype made
- Requirements updated
- Make progress in learning swift
- Looked in specific libraries
- Start building the app

Reviewing rate of progress
Tasks completed in time.

We are still in the coding sprint.

Identifying problems to be resolved
The next problem that we have to solve would be working out the scope of the training with the Apple team, i.e. figuring out exactly what we will need to know in order to be able to complete the information. As well as this, we then have to figure out a date for this training to take place.

Next steps (next 2 weeks)
To show the potential users of the app what the program will look like, we will build a prototype on Figma according to the user journey and design presented to us by our client. They will be able to see how the pages transition from one to another and have a look into how the app looks like and have a deeper look into the language used in the app. This will enable the users of our app to give us critical feedback into how the app should work.

While receiving the feedback, we will be building the main functionality of the app. Create pages of the app that will allow the user to enter their details, their carer network (the contact details of these people). We will also implement the key features of the app, which is where the user will be given a weekly score based off the amount of time they spent moving consistently, and the implementation of the message being sent across.

We will also build the website where we can display the work that we have done so that others can view what we have done and the research that we have done.