

BI-WEEKLY REPORT III

Project: Well-Being Data Anonymisation with IOS

Client: GOSH

Team 33

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Project stage: Final stages of development

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

We finalised the prototype made in figma. One of our team members worked alongside another team member on the other team to come up with a design that would be used by the potential users. We then got updated feedback from our client who wanted it to look similar to an existing app as they were both being made for the same company. This meant that we then updated the prototype so that it fit the criteria a little more. After a few weeks, our client had met with the clients and had heard feedback about the design, which also resulted in a few tweaks that had to be made.

In the past few weeks over the Christmas holidays, we started to properly build our final app. We separated out the features that we wanted to get done separately and then got it done. For example, Paul did the messaging feature within the app, Lishen did the pedometer and Karunya did the graphing features of the app. We successfully got our own pages done. Currently fake data is being used to build the graphs. By the end of the holidays, however, everything wasn't integrated properly, i.e. the data that was being collected within the app wasn't being used elsewhere within the app where it was needed, everything wasn't connected.

Within the past week, Paul has been working on integrating the app together by connecting everything together. The data that is being inputted by the user is being successfully used elsewhere. The app is in the process of being fully linked. However, not everything is fully integrated.

We had a meeting with another team, the Machine Learning team (a group of 4th year students) with our client. We found out about how they linked into our project and what they were building. They were going to be responsible for coming up with the model which would be used to come up with a better and more accurate well-being score predictor. Currently we are calculating the well-being score as a percentage of what they should be aiming for (separately for footsteps and calls), finding the average of the 2 and then converting it to a ratio of out of 10 as the well being score is between 0 and 10.

One member from our team then met with some of the members of the Machine Learning team along with the Android team to inform them about what was happening within our app, to show them a video demo of what we had built so far. We also learnt more closely about how they would be working with us. They would not only be creating a model that updates the way the well-being score is counted, but also providing a way in which the app can constantly be updated, through an interface. They also informed us about how this app would be the interface to which the users well-being score will be sent to, which will then take on the process of sending this data to a linode server which will then display this data on a heat-density map displayed on a web application.

We were also set a new deadline of February first week to get a working version of the app to be completed by. This deadline is so that our client can then pass the app on so that it can be tested by real users of the app. This will ensure that we can fix any bugs that were noticed during this period and to see whether there are any changes that the users would also like.

Completed Tasks

- Prototype finalised
- Built a lot of the features within our app separately
 - Graph Pages
 - Messages successfully implemented
 - PDF working
 - Pedometer working ...etc.
- Met with the ML team and discussed what we are to do

Reviewing rate of progress

On track -

In the final part of the coding sprint

Next steps

Our next steps for this app would be to connect everything together. While connecting the app together, new bugs have appeared with the pedometer. These bugs will have to be dealt with to ensure that the users have a smooth user experience when using this app.

We will also be heavily working on updating the UI of the current app. Currently the app looks very plain, with the basic functionality included only right now, it doesn't look anything like the current proto-type but has many of the features that are required. We will be working on changing the background colours, of editing the appearances of the text fields, the buttons.. etc. to ensure that they are looking like something similar to the app that the prototype is showing.

Sooner or later, our apps will also be tested by potential users of the system. For then, we will have to have a working app so that they can see what the purpose of this app is. They will hopefully then give us feedback about what they liked about the app and what they didn't like about the app and then using this feedback we can then do a final iteration of building to ensure that the users get the effective app they want and will use.