BI-WEEKLY REPORT VI

Project: Well-Being Data Anonymisation with IOS

Client: GOSH

Team 33

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University College London

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Project stage: Testing stage

Project description:

Develop a mobile phone app and a way of representing data arising from app usage.

Enable:

- Track Steps Data
- Display the steps data on a graph
- Predicts User Wellbeing
- Prompts User to adjust Weekly Score on Wellbeing
- Prompts User to Contact Friends if Immobile for 2 days
- Prompts User to contact friends if haven't spoken in a week
- Prompts User to take a walk if haven't walked for 1000 steps in a day
- Wellbeing score that can be anonymize and exported and stored in a server anonymize and exported and stored in a server
- Exported data that must then be used to calculate the well-being for the corresponding out-bound area and placed on a heat-map

Should

- Be able to share the users data/progress (graphs) as an image in a text message
- Be able to export the users data/progress as PDF
- Links within the app to sponsor contacts
- Ask the users permission to start the tracking

Could

- A way to get minimum number of steps inputted
- Pre-composed messages where the user can select options, i.e. who they want to contact, where they wish to go, when to meet … etc.
- Page to get existing user contact details within the phone into the app

Overview

We have now finalised the app by adding in the last few features that was required. Some of the final features that we have added is making the app more user friendly, for example when the settings page is pressed, it navigates to the beginning pages where you can refill certain information such as name, contacts, activities...etc. At first, it was wiping out all of this information, now pre-fills this information so that instead of re-entering all the data, they now edit the data instead.

Another feature that was added to ensure user-friendliness was that the nudges that they get are on Sundays. This ensures that the user has time to sit down and honestly reflect upon what they believe their well-being score is because they are more likely to be free on a Sunday than any other weekday.

We also finalised the app work by embedding the links with which the user can click onto and navigate to pages on the internet where they can learn more about their well-being and find the support they need.

The anonymisation feature was later added to the application. This ensure that Local Differential Privacy is protecting our user's data. Only 70% of the data that is sent is correct to the database. This ensures that if the database was to be hacked, it cannot be tracked down to one person. Everything is confidential.

As well as completing off that feature, we successfully sent across data to the server from the phone off in JSON format. It sends the data of the user's postcode, well-being score, number of steps taken and error rate. This information is then taken over at the server side and is displayed in a graph format.

Last Wednesday, on the 4th of March, our app was presented to a group of potential users in Wales. They got to see what we were working on. From the meeting, we heard back really positive responses from the users through our client. Some of the things they liked were how they will be assisted when it came to the set up and they liked that the graphs were a conversation starter for the users. For this to be a success, Paul contacted our client to talk through how to set up the app on the phone and so that final changes could be made.

We have also now moved onto the beginnings of the testing stages. Throughout this project, we have been testing the app on the iPhone 7+ to ensure that all the features have been working. Now that we have completed the project, we have testing on one other device, the iPhone 6 (which was used to demonstrate the app on Wednesday).

During the finalising stages, Paul has been fixing any other bugs to ensure user friendliness.

Completed tasks

- Focused on sending across our data to the json server in JSON format
- Received the finalised UI design, and implemented those features
- Testing on difference devices in X-code
- Anonymisation features completed (Local Differential Privacy)
- Making app user-friendly

Reviewing rate of progress

On time, moving onto testing and debugging phase

Identifying problems to be resolved (next 2 weeks)

Testing on the iPhone SE resulted in UI not being as smooth as can be.

Next steps (2 weeks)

Within the next 2 weeks, we will finalize our app and continue the testing. Currently we have started testing on an apple device with a smaller screen, the iPhone SE and have come across UI formatting problems. The screens that are larger than iPhone 6, that have been tested, have no problem when it comes to rendering the UI correctly onto the screen. However, smaller screens seem to be displaying it

a little differently. This is because of how constraints work in X-code and how we were focusing on getting the key functionalities working on a larger screen before moving onto design.

We will also be finalising our website and our videos and making posters to document, explain and represent the work that we have been doing over the past year in this project.