12/11/2013 Minutes

Attendees:

Charlie, George, James, Metka (Client).

Metka indicated that she would like us to ask her questions and Charlie suggested that we’d show her where we are with establishing the requirements:

Charlie outlined that I have designed the basic questionnaire program, she has developed the part of the app that will analyse the data and plot the graphs, and James has been looking at how to export the data to a website and a database that he has created.

**Functional Requirements**

Charlie suggested that the first thing we really need to know is what questions she would like the app to ask of the patients.

She gave us a list of questions in a booklet taken from her hospital, and said that we could use questions from this.

She indicated that she would like the questions to take less than 5 minutes to do.

George suggested that the sleep hygiene questions would generate the score, and whether the overall effort being made by the patient was good or average/needs improvement.

George showed Metka a couple of sample sketches of the “reward screen”, which shows the funny images that will show when the daily questionnaire is completed, as well as points for improvement, a joke, and a score.

Metka said she liked the Prince Charles and Artful dodger images.

She particularly liked seeing the points for improvement.

She said that 20 questions would be too much.

She reminded us that a lot of patients would be depressed, she preferred 10-12.

She would like there to be 2-3 sleep quality questions, and 9 sleep hygiene questions.

She’d like the questions in the booklet, plus how many times did you wake up during the night.

George showed her the prototype. She said that she likes the idea of bigger buttons, and the conversational tone of the questions.

**User Description:**

She said that being able to use the app on smartphones was more important than on tablets.

She was pleased with us initially developing it for android.

She said our patients would be between 18 and 65 (at this stage) and most of these would be above 20.

**Social environment requirements:**

Charlie confirmed that she would like the theme of the app to be cheerful and motivational.

Metka indicated that she’d like the idea of using positive images such as a cartoon of the sun in the welcome page, and as radio buttons.

She said that our product will first be tested on non-clinical patients.

Then it will be shown to the Ethics Committee, during this stage it will only be used by 1 or 2 clinicians, but after this it will be expanded to 100 clinicians, each of whom will have about 20 patients.

**Data requirements:**

Charlie said we will develop it with the intention of a large number of users for scalability.

**Organisational requirements:**

Charlie asked if each clinician would each need to have a separate login and only be able to see their patients data.

Metka indicated that this wouldn’t be necessary but she would need to double check with the information governance committee. For now, she’d like there to be separate accounts for each clinician, although each clinician can access all the data.

She would like the android app to be for sale on ucl app server, not on the android store. It would be uploaded to their phone with a “prescription” from their doctor.

The doctor could also provide each patient with a login and a password, which then gets saved to the phone.

**More functional requirements:**

Charlie asked Metka about the tips page:

James showed her an example of our tips page sketch, she said that she would just like recommendations to be returned to the patient after they have completed their first two week course. (recommendations for ways in which they can improve, but also what they have performed well on).

Metka said that she would only like to have statistics and graphs initially after two weeks, and every 4 weeks thereafter. She would not like there to be daily monitoring, as it doesn’t encourage long term use.

We went through the sleep tone generation part of the app:

James said that we could not use music because of copyright law, George indicated that royalty free albums are about 70 dollars, and even still cannot be used if they aren’t used as background music.

James suggested we use sound effects, he found and played a sample of sounds from other apps,

Metka was unimpressed with the synthetic sounds. She said her patients might find them irritating.

She would prefer for us to record real life sounds.

We agreed to do one of people walking on sand, another of wind chimes being blown, and a third of waves breaking.

These sounds could just run on a loop, and we could record them ourselves.

Metka said that she only wanted three, particularly walking on sand.

George said that he would make 42 images for the questionnaire, metka said that would be enoguh, if people wish to use the app for longer than 6 weeks they can repeat.

George asked how frequently the data should be submitted to the doctor. Metka said she would only like it fortnightly.

Metka also said she only cares about the patients beign able to see their graphs after two weeks.

We agreed that the data will be stored to the phone.

The app will also have a Submit to Clinician button that appears after two weeks.

Metka asked what server we would use for the website.

We agreed that intiially we would build it on our server, but it may be changed to her hospital’s server once Metka and Dean have had a meeting.

Charlotte then showed Metka several pie charts, and barcharts. George mentioned that these will be paired with advice on how they can improve, but also what they have performed well on, Metka approved.

Charlotte asked what specific plots would be of use to the clinician.

Metka said she doesn’t want more than 4 graphs/piecharts.

The main focus is what areas of their sleep hygiene they need to improve on, the patients shouldn’t receive more than one graph or two.

The clinicians would not like more than 4 graphs either.

She would like graphs for ALL the aspects of quality of sleep.

She specifically asked for graphs of:

How long does it take you to fall asleep,

How refreshed do you feel

How would you rate your overall quality of sleep

How many times do you remember waking up.

She doesn’t want any statistics being sent to the doctor. Just the graphs.

She’d also like comparison of graphs on one pair of axes, once more than one submission has been made.

Metka said that she thinks patients will find graphs more motivational.

**Prototype review:**

George gave a walkthrough of the screenshots of the app.

Metka was happy with the login page, but suggested the doctor should set up the password for the patient.

She also asked us to come up with the name for the app.

We also need to come up with the widget for the app.

Metka said she did not want the first screen to be too busy. She’d like there to be 3 flash screens, a WELCOME with the app name, an image, and then the option to get started.

The menu also has too many options, Metka said. We discussed the pages, the stats page has to stay there all the time, the tips screen doesn’t need to be there, that can be kept in the statistics screen

Metka said that she would only like graphs to be submitted every two weeks to the doctor, and to the patient.

She would like there to be a button saying Send to Clinician.

Charlie showd her a rival, Sleep Diary. Metka said that one of her patients was using this of her own accord.   
James asked her what she likes and doesn’t like about the app. Metka said that she would speak to her and get back to us.

George said that there was still quite a lot on the menu screen.

James showed her his prototype of the website.

James asked her if the doctors would have to register (the clinicians). Or if we should register all the clinicians.

Metka said she would like for us to give them a password, rather than for them be able to register themselves.

James asked her what she would find helpful on the homepage for each clinician.

She just said name and patient number. The condition of the patient is not necessary.

When the clinician clicks on a patient, it comes up with the 4 graphs, and what went well and not so well during each period

Metka said she would like the page to be simple because the clinicians will not have much time to look at the data.

James said there would be a search function in the list of patients. Metka suggested it would be ordered by patient name, but was indifferent. James also suggested he could group the patients by clinician. Metka said she didn’t mind.

George checked that their understanding of the wristband was correct, although we had not started planning for it. Metka said that the wristband really wasn’t necessary. She indicated that Dean had asked for there to be an external device. She expected patients not to use it.

Charlie said that we would do it anyway to get the extra marks, and add it on separately, if that was ok with her.

Metka said that was fine as long as ther was an option to use the app without it.

Charlie suggested that we’ll send her a draft requirements document on Wednesday (in 8 days time) so that she could make any amendments to it before our final deadline on Sunday.

**Setting up work packages after Metka left:**

I am going to record a windchime sound loop

Charlie would do the sea and the walking on sound.

We agreed on half hour blocks for each.

Our app is to be looked at by the Ethics board, this means it will have to meet higher standards then previously anticipated.

We confirmed that she wanted a separate password and login for each user.

James said it would not be a problem.

George agreed to write up the minutes and put them on the github as quickly as possible

Charlie would work on the graphing programming.

George would work on the questionnaire programming, using abstract classes and inheritance, with error handling.

The team agreed that the data would be stored on the phone, the graphs would be drawn on the phone as high resolution images, and then they would be sent directly to the website.

George agreed to come up with the “areas for improvement”, and would then sync this up with james’ website.

We agreed to send over 4 images and a .txt file with the tips in it.