**Interest in the field- Charlotte**

As a group we have a combined interest in the medical field. Stephen spent his placement year working for GSK a large pharmaceutical company, through Charlotte’s personal experiences she thought the application would be extremely useful and all four members of JustHealth took the module e-health, which we hoped would compensate each other.

**Target Audience - Charlotte**

From our research we identified that we do not need to generalize who the specific target audience is. The main requirement is that the patient has an on going health condition and have a carer visit them in their home regularly. We are **not** providing this for patients that are already in a care home.

As a group we have decided that as long as the app is simple and easy to use we do not see why we need to restrict the target audience.

We have made the following assumptions before implementation of the application:

* A relationship between a carer and a patient already exists
* A Carer could have more then one patient
* When a patient ticks to say they have taken the medication it has physically been taken.

**Project management- Charlotte**

During the process of this project we followed an iterative development approach. Each iteration was a two-week cycle in which by the end we would have a ‘finished’ product. At the start of each iteration we would plan out the process, create test cases in order to run test driven development and create designs for the features to implement.

Each week we meet at least twice, on a Monday to hold planning meeting to discuss the previous weeks work or reflect on the previous iteration, plan for the following week, review the Gantt, review the Risk document and the issues raised. Our second meeting would be on a Friday after our supervisor meeting to discuss the outcome of the week’s work and anything points raised from our supervisor meeting. As a group we would sometimes meet on a day during the week to have pair programming sessions.

All tasks for each week were put on ‘Trello’, which is a collaboration tool that organised the project into boards based on each iteration. ‘Trello’ allowed us to track what work was completed, in progress, who was working on it and when it needed to be completed by.

Our work was all uploaded to ‘Git Hub’; this is a web-based repository, which allows us to have version control and a code management system. Whilst implementing a feature we would create a branch off master and once completed we would create a pull request and merge the branch to master. ‘Git Hub’ also allowed us to create and track issues. This ensured we were able to stay on top of bugs and rate them by priority and set times they needed to be fixed by.

Below is outlined the “ideal” process that we aimed to follow for every prece of functionality. We didn’t manage to follow this 100% for every little piece of work, but for the most part it worked well.

1. Identify a piece of functionality to work on
2. Write a card on Trello to document this feature, who is assigned, when it is due and what needs to be done
3. Create a git branch from either master, or an existing parent branch for a wider piece of functionality
4. Write general test cases for this test. Here we would select the inputs and outputs we would expect from a piece of functionality
5. A developer, or pair, would work on this feature, committing work to the git repository
6. Once completed a pull request would be created
7. All tests would be run and the team would review the request
8. On completion of all tests, the pull request would be merged to the parent branch

Our goal with this development process is to ensure that anything on the master branch is deployable at any time. Through the running of tests and review on any pull request, we could attempt to ensure that master was kept clean of any bugs or issues. If an issue was found, it would be logged on the GitHub issues page.

**Performance measures (measuring success)- Charlotte**

As a team we tried to measure our performance continually throughout the project. At the end of each iteration we reviewed our overall performance and judged ourselves on the aims we set at the start of the two weeks. Over Christmas we also held a review meeting where we reflected on the term and looked back at the requirements we had set.

During the project we had to releases: release 1 over Chistmas where we gained user feedback on the product and release 2 at project fair where we asked people to try out the app and answer some basic questions.

**Limitations- Charlotte**

Our project has one main limitation; this is that we are unable to actually check that the patient physically takes the medication. As mentioned we assume that if the patient ticks they have taken their medication then we trust this has been taken. Other limitations for our project is that the elderly generation may struggle to use the technology we created, however to tackle this we have tried to create both the web application and the mobile application as simple and clear as possible.

**Future developments- Charlotte**

With our project there is a large scope for future developments. The way the platform has been created will make it easy to create an iOS application and for support of smart watches. Other software developments we could are:

* Alerting the pharmacy if they are low on medication
* API to support accessories- enabling patient to take their own heart rate/ blood pressure
* Text to speech functionality
* Emergency alarm button
* A family and friends interface so they are able to talk with the carer and track their relative’s medication and appointments
* Primary/ Secondary Carers to account for holidays
* Wheelchair request accessibility alerting (integrated with TFL)
* Live chat service- a patient is able to call or instant message their relative or carer.