Constraints:

The primary constraint on this project will be scheduling. Each member of the team will have other module commitments, which could have an impact on the amount of time spent on the application development. A possible result of this constraint is that some application feature requirements may not be implemented, voice activation for instance, or the app being developed on iOS.

Additionally, there are specific application requirements provided in the overview that we have not previously done/used in other projects, such as using the React Native Framework or voice activation. Consequently, we will have to spend time learning how to successfully implement these in the project.

We will have no budget throughout this project, which could become a constraint as there may be certain features that can’t be implemented without purchasing specific software. We are planning on using the resources provided by the University to design and develop the application and therefore, we are limited to what these resources provide.

Approach:

We will be using an Agile framework to complete the project, in the form of a Scrum management approach. With this approach, we will split the team into different roles, focusing on different sections of the project and complete iterations of work - also called sprints. We will begin the project by identifying and prioritising the project tasks. Most of our sprints will be one week, the team will meet weekly to discuss the development of the project and to decide who will complete which of the tasks in the upcoming sprint. These meetings will also be used to present completed work and review our progress. During the week, the Project Manager will be monitoring the progress made by each member so that processes can be adapted if problems occur.

We have considered other approaches, however, feel this is the most beneficial for the project due to its proven benefits including improved communication between the team and client, quick identification of problems and increased efficiency.

The project phases we intend to follow reflect the ‘Waterfall’ development; beginning with initial research. We will research similar concept applications to identify possible user requirements, common layouts, structures, content, and designs. We will also use this research to identify what users aren’t being provided with the current applications available.

Using this research, along with our client brief we will then construct basic designs including wireframes to identify possible structures, hierarchy, and relationships between features. More detailed designs will then be constructing which will incorporate colour schemes and navigation features.

Once our designs have been approved by the client, we will begin the implementation stage of our project. The application will be developed for the Android platform initially, using Java and JavaScript programming languages. We will use GitHub extensively throughout the project, keeping all modified code in a central repository. This will allow each team member to access, modify and upload changes to files related to the project. All other members will be notified of changes made – keeping the whole team up to date on project progress.

Once we have completed the development stage of the project, we will begin testing the mobile application to ensure it reaches a high standard for functionality, usability, and consistency. Any issues that are identified during the testing process will be resolved before deployment, provided there is time available.

The appropriate documentation will be completed throughout the project, primarily throughout the code to ensure that any developer accessing it following the project’s completion will be able to read and understand what we have written during development. We will also provide other documentation including a test plan, test cases and a user and technical guide.

Learning Outcomes:

On completing this group project, primarily I would like to have improved my ability to work as part of a team, through developing skills in communication and conflict management. This is a good opportunity to acquire these skills and to use the situation as an example when asked in job interviews. I would also like to improve my ability to consider differing opinions/ideas because this is something I will have to do daily once I get employed

Additionally, I would like to establish skills specific in working directly with a client, primarily completing the project professionally and identifying complex problems and developing new approaches to resolving them as this is another skill I will need to develop for future projects after graduation.