

## **Skills and resources audit**

A look into what skills and resources the team will require and how they will acquire them to complete the piece of software defined in Scope of Work.

As a team we have gone through much deliberation to determine the following skills and resources that will be used in our project. The process the team went through was as follows: a thorough audit of each individual's skills was conducted. Please see the TeamSkillsAudit page for the complete listing of the team's skills. The most common skills that the members shared were given priority in our decision process. The team worked from top down to determine the exact requirements. For example we would take a high level feature that was required such as the data needs to be persistent then we looked out how we would achieve that. In that case we would need a database and since most everyone had experience with SQL we chose an MYSQL database.

### **Skills**

#### **Soft Skills**

Professionalism and communication will be a key part to the success of the project because it is a group task where the group must come together build a solution. Here is a list of soft skills the team has identified that are important.

- Empathy - They understand and can relate to how others are feeling
- Able to make sacrifices for the team, sometimes a solution that is easy for you will not be easy for the team e.g. a programming language
- Communicate thoughts in a manner that doesn't emotionally hurt others (e.g. "This is a dumb idea")
- Provide honest helpful feedback

Team believes these skills can be achieved by always reminding each other of them. For example when someone starts thinking about a selfish solution we remind them that we value sacrifices for the team and that they agreed to this already.

#### **Technical Skills**

The project must provide a useful piece of software to the client's problems. Therefore our team must gain some technical knowledge in the following areas. The technical knowledge required has been determined as a group but the expert in each field lead the decision.

#### **Programming Languages**

- Java is required for the Android app, everyone already has knowledge of this language
- Swift is required for the iOS app, Adam has experience working with this language so he will mentor the team on how to write Swift
- PHP, Javascript, HTML, CSS is required for the web app. Everyone on the team already has some experience with these languages

## **Resources**

### **Dev Ops**

The application must be delivered to the client, to do this we need to utilise some infrastructure to host our applications. \* The Android app will be deployed on the Google play store. Zihao has extensive experience already doing this so he will be guiding the team on how this will be done \* The iOS app will be deployed on the app store. Adam has knowledge in this area and already has a dev account so he will be able to give the team insight into how this is done \* The Back end, database, and website will be hosted using Heroku. David already has experience dealing with this type of deployment so he will be guiding the team on this task

### **Tech Stacks/Frameworks**

- For the website the following frameworks will be used: Vuetify, Laravel, Nuxt and Vue. In addition the database will be a MYSQL server and the webserver will be Nginx the default provided by Heroku
- For Android, Android studio and Android developers tools for eclipse will be used to develop the app
- For iOS, test flight will be used during development to deliver the app for testing. Apple XCode and Intelli AppCode will be used to write the iOS app

### **How the team will deal with any knowledge gaps**

- The team will mainly use Youtube to gain any additional knowledge that is required
- David also has books on web development that he will share
- Codecademy is a useful resource to learn about the practical side of programming
- The documentation for each technology will also prove to be a useful resource
- There are many helpful online tutorials on medium.com