

Software Engineering 14:332:452

Group #9

User Documentation

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[GitHub](#)



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Our application should be compatible with any iOS device running iOS 11 or above and with any android device running android 5.0 or above. Due to these OS requirements, the device should have a color display with size restriction of a 4 inch display (iPhone 5s) or above for smartphones; for tablets, there should be a 7.9 inch display or above. Our application also restricts the user to operate only in portrait mode. For demonstration purposes, we chose to run it on a Google Pixel virtual machine.

In order to store our information, we are using the Firebase database. This is where we will be storing the user's login information, such as email and password. It will also store saved recipes, dietary preferences, and so on. We chose Firebase over say AWS because of the ease of compatibility and there was less of a learning curve to understand how to use and work with Firebase. With a group of new software engineers who had not previously worked with Firebase, this was the best option. The default options granted with FireBase surpass those of AWS, as more free tools are available.

Our application, as mentioned above will be able to run on iOS and Android devices. In order to achieve this, we have used Flutter and Dart as our main coding language. Dart uses HTML and CSS-like code for help designing the application, and a JavaScript like backend. Flutter is compatible with both Apple and Android products, meaning that we won't need to write two different codes for the two products. One Flutter code can be used to be run on two different devices, with just a few modifications. Flutter runs on Dart - a client-optimized programming language for apps on multiple platforms. Dart was developed by Google and is used to build mobile, desktop, server, and web applications. Dart is an object-oriented, class-based, garbage-collected language with C-style syntax. Dart can compile to either native code or JavaScript.

To code this project, we have used Visual Studio Code. VS Code allows the use of multiple coding languages, as well as an emulator for iOS and Android, so testing of the application can be done in real time. VS Code is also superior to the other popular alternative, Android Studio, as it is far more lightweight and supports running our project on more resource-constrained devices. VS Code offers multiple extensions, one of which is called Live Share. Live Share turns code into a giant Google Doc, allowing for collaboration between team members to be able to skip pulling code from GitHub, and automatically start coding on VS Code directly.