

Hardware Product Cost

To develop full functionality for the app, it requires the use of a cloud storage solution. After researching multiple options, our team decided to utilize both Google's App Engine and the Google Cloud SQL for SQL Server. We decided to begin using these services with minimum instances, storage capacity, RAM, etc. with the understanding that we will likely have to upgrade our plans in the future after release and there is increased usage of our cloud storage. The combined monthly cost for these Google services is \$453.42 [1]. These services are not necessary during the planning phases of development, so we only intend to purchase them in month three of our development timeline, when application construction officially begins. The four-month total for these services is \$1813.68.

Additionally, our team decided it would be best to purchase four smartphones for development purposes. Since the application will be released on both the Apple App Store and Google Play Store, our team will receive two iPhone 11's and two Google Pixel 4's. The Google Pixel 4 base model costs \$799 [2], totaling \$1598 for the pair. A base model iPhone 11 costs \$699 [3], coming out to \$1398 for both of them. For the entirety of the development cycle, the combined hardware costs amount to \$4809.68.

Software Product Cost

For technical development of the application, our team plans to work with the Dart programming language within the Flutter UI toolkit. Flutter is a free and open source product [4], so it wouldn't cost the team anything to use it for development.

Upon completion of the application, we plan to publish it to the Google Play Store and the Apple App Store. Each of these digital storefronts require fees from developers. For the Play Store, there is a \$25 required fee upon registration [5]. For the App Store, there is a \$99 annual developer fee [6]. Both of these fees make up the entirety of our software costs, so the total cost during our development cycle amounts to \$124.

Personnel Cost

Our company intends to hire four skilled software developers to complete this project. In order to compete with other software developer salaries in the industry, we intend to compensate each of our employees with a \$75,000 yearly salary. For ease in our calculations, this salary comes in at \$6250 per month. So, $4 \text{ developers} * \$6250/\text{month} * 6 \text{ months of development}$ equals a total of \$150,000 in personnel costs over our development cycle.