

Note: this document should be reviewed at the end of the project to ensure it is up to date with final documentation.

API Keys and Accounts:

Current, the following accounts and keys are required to set up, build, and run the two application for a new project member:

1. iOS developer account - required for iOS mobile application build, \$99 paid tier required
 - a. Expo Go is helpful for iOS testing while developing UI, but cannot be used to deploy the application
 - b. Because EAS requires Apple silicon to build native applications for iOS, you will be required to log in to a functional developer account to proceed with iOS builds
 - c. Note: if future development no longer uses iOS for testing and development, this will no longer be a requirement
 - d. This account provides access to a device-and-app push notification key that is linked with the application and its builds; while push notifications are not a feature we have implemented, having it removes a step from each build call.
2. Expo developer account - required for mobile application builds through EAS, no paid tier required
 - a. Required to deploy builds of the application
 - b. While Expo Go does not require this (QR codes), it is helpful both for project tracking and for debugging issues between a mobile device and the dev server on your computer during testing
 - c. Best practice for handling this is to have a user Expo account create an Organization account, and add all developers to the organization
 - d. Keys and secrets held by the build service (Expo Secrets for EAS Build) should be project-restricted where possible
3. Google Developer Account - required for Google services (for Google Maps) API Key, free tier requires payment profile for identity verification
 - a. There is a paid tier for Google Development, but the Maps API at free tier comes with a set amount of monthly credit.
 - i. It is possible to go over this soft limit and end up with charges!

- ii. The key provider should monitor the billing in Google Cloud Console and disable the keys if about to go over to avoid charges.
- b. The larger the team, the more members with free-tier Google Developer accounts can provide short-term API keys for app testing
- c. Multiple keys can be made by one account; it is entirely up to the devs whether to use the same key for each mobile version and the web app or to separate each. The environment variable calls will require adjustment (app.config.js for mobile using Expo Secrets, .env for web app) manually.

Key usage in codebase:

1. Expo secrets: the organization that holds the project should use Expo Secrets to apply keys to mobile application builds. See app.config.js for the placement and naming.
2. .env: currently, the only secure way to keep our keys off the web application's client code is to store it in an .env file next to the server code. The web app's server, when making calls to the Maps API, can return results to the client without exposing the key.
3. You should use SCREAMING_CASE for all key/secret (variable) names

Handoff:

The following process will be observed when handing off the end results to the sponsor:

1. Codebase ownership (on GitHub) of the project and its end-of-semester (beginning of May 2024) state will be transferred to the sponsor, with the understanding that the team will be able to continue development on their own fork. The sponsor may ask for contact information if they want to keep up to date with the team's future work, with the expectation that they are no longer the sole stakeholder.
 - a. Members of the current project team want to have access to a working version for resumes and project portfolios.
 - b. For the purpose of those portfolios, team members may continue making modifications on their fork.
2. The sponsor will be provided with instructions on how to fully set up the necessary accounts to view project builds. This will enable them to correctly set keys, create a working product using the project's toolchains, and test to their heart's content for future ideas.
3. Instructions for continued development (for the scenario where the project is passed to another developer team) will be included in the final documentation bundle.