Deployment Plan

The Virtual Pace Trainer (name in progress) is a LED light strip that is programmed to run at certain speeds and colors designated by the user. For a user to be able to configure and set different parameters, the medium in which they interact with the Virtual Pace Trainer is through a mobile app that is connected to a microcontroller via Bluetooth. For a user to have access to the mobile application, it must be deployed to the app store. The following is the process to get an app deployed to the app store for users to readily access it.

**Code Sign**

For iOS, an app must have distribution provisioning profile so it can be beta tested. For a app to be released fully to the app store, it must have a distribution certificate. To gain a certificate the developer must be part of the Apple Developer Program.

To be part of the Apple Developer Program there are different steps that must be taken that are dependent on who is enrolling into the program. As an individual or sole proprietor, you simply sign up by providing basic personal information. To enroll as an organization, you must have a D-U-N-S Number so the organization’s identity and legal status can be established. A D-U-N-S number is a given to business by a Dun & Bradstreet. Through D&B, a D-U-N-S number can be requested. Furthermore, an organization must have proof that they are a legal entity and the person applying must have legal authority to bind an organization to legal agreements. Finally, an organization must have a publicly available website and the domain name must be associated with the organization. Additionally, you must pay an annual fee of $99 to be in the Apple Developer Program.

To Code Sign an application, you must sign in as an Apple Developer and receive a key or license for the app. For an app to launch on the device, that device must be registered to the team’s provisioning profile.

**iTunes Connect**

To get an app on the app store, an iTunes Connect organization must be created with an Apple ID that is part of the Apple Developer Program. iTunes Connect allows an organization to manage content on the app store. To add a new app to iTunes Connect, you must create a new record and include details like the name of the app, the default language, the SKU, etc.

**Upload**

Before submitting the app for review to iTunes Connect, the app must be built to the deployment target device. Once the app is built, you must upload it to iTunes Connect and add details about the app’s metadata and Privacy Policy.

**Submit**

Under iTunes Connect, there should be an option to see the build that you uploaded. If done correctly, an option should be available that allows you to submit for review. Once submitted, app store approval should take 1-3 days. Once approved the app can take up to 24 hours to appear on the app store. If the app is rejected, you can use the resolution center to submit an appeal once the necessary changes have been fixed to meet Apple’s compliance standards.

For the Google Play store, the process is similar but much simpler. First the app needs to be created in the “Play Console” this is done by selecting an option to create an application, select the default language and title of the app, and create the app’s store listing. To get an app ready for testing or production, a build is made with the required Android App Bundles and APKs.In the play console, there is an option to manage releases and once the release is edited, it can be reviewed and rolled out for release.