

Mobile App Testing (Cycling Route Marker)

iOS Provisioning & Registration

Android .apk binaries can be downloaded and installed on any Android device that you have access on (the device password is usually sufficient). Most of this section covers **iOS requirements**.

To run pre-release apps on iOS devices without an Apple Enterprise account, ad-hoc provisioning is used. However, in this provisioning system, both the build system and device running the development version must be aware of each other. **A development profile (so that developer mode can be turned on) will be installed on the iOS device, and developer mode requires a device restart before activating each time it is turned off.** A QR code to registering your device with the development profile:



Open the following link on your iOS devices (or scan the QR code) and follow the instructions to install the development profile:

<https://expo.dev/register-device/92972b70-adcb-4d7b-ac2e-a69dfb762b5d>

The QR code above is the same as the link below, and leads to an active device registration link for the current application development profile provided by Expo [DM lhuan130@asu.edu on Slack if it is broken at any point, and I will update this document and DM you a reply with the updated link & QR]. It will register the device UDID with the Expo provisioning profile associated with this project and Apple's app build system so that this project's future builds can be installed and run on your iOS devices. **Please be aware that any device IDs registered with this link will be visible to the team member** (currently Larry - lhuan130@asu.edu) **in charge of iOS builds because EAS builds requires an Apple**

Developer Account to be associated with a provisioning group; if you are not okay with this, we can determine alternative ways to provide testing.

<https://expo.dev/register-device/92972b70-adcb-4d76-ac2e-a69dfb762b5d>

NOTE: There are some known security issues with developer mode involving untrusted installations or programs, so only keep it on for as long as is necessary.

To quote the Expo/EAS-Builds Internal Distribution guide: "You can register new devices at any time, but builds that were created before the device was registered will not run on newly registered devices; only builds that are created after the device is registered will be installable." As such, if you intend to test iOS devices it might be better to register a device intended for testing use as soon as possible.

If a screen telling you to "Connect to Development Server" shows up, you have installed a development build (for debugging purposes) and not a preview build. Preview builds will load the app immediately instead of starting on the "Connect to Development Server" screen; these are builds for testing while on the move and without the dev server. **The sponsor's testing/evaluations should not be done on development builds, as running a dev server requires access to the code repository at the exact commit of the build. Please request a preview build.**

Running Builds

This section is for the team's use of the build system.

You need an Apple Developer account to run iOS builds, but no account is needed for Android builds. For now, only one developer has this and we will likely never need extremely frequent iOS builds; as such, there is no need for anyone else to go get one.

So long as you are registered with the project (and its organization; invites are already sent) on Expo, you can run Android builds.

The commands and steps for preparing for a build and using EAS on Windows (Powershell) are included in the [builds and versioning document](#).

Acquiring Builds

This section is for the sponsor, as the team can see the builds on expo.dev

Links to a specific build version will be sent to you using Slack in the group DM or email when we have a build version that you have requested or that we feel comfortable asking for direct feedback on. While the install links have a lifetime of 2 weeks, once installed the app will persist until another version is installed. Feel free to request a quick build of the working branch or a working link if you require it.

Slight changes at the end of the app name may signify a revision number or task number; those are used by the team to distinguish versions. The app name is unimportant for the moment, as adjusting it now is asking for more errors to debug and the project tags are currently a cosmetic fixture.