

The Development Process Lab

In this lab, we're going to create our initial app and see if we can't get it running in one or more places, a physical device and an emulated one.

1. Create a new React Native app.
`expo init daam --template blank --npm`
2. Run your new app by navigating into the new directory and running:
`npm run start`
3. If you try any of the options (android, iOS, q), they shouldn't work unless you or someone else has done some installation and setup. Try them out.

Let's make them work

Running on a physical device

4. Whip out your trusty phone or tablet, one that you don't mind installing some software on.
5. Go to the App Store or Play Store and install the Expo app.
6. After the install and setup are complete, go ahead and open the Expo app.
7. Scan the QR code that is hopefully still in browser. If it isn't, hit "q" or if you need to re-start it, expo start again. Then scan the QR code. You should see your app running on your device. Cool, right?
8. Back on your development machine, open your project in an IDE and make a change or two to the main App.js component. You should see those changes immediately on your device.

Running on an iPhone/iPad simulator

If you're not on a Mac computer, you won't be able to do this section. (Thanks, Apple. 🙄)

9. Make sure that Xcode is installed. If it isn't go ahead and install it.
10. Make sure that the simulator is installed. If not, install that also. (Hint: Open Xcode, go preferences-components- simulators - pick a simulator or two - hit install)
11. Go back to your command window where expo start is running. Hit "i" or the Expo dev tools and click "Run on iOS simulator".
12. This should kick off a simulator and run your app in it. You should now be able to see your app running in the simulator on your Mac.
Troubleshooting:
 - If the simulator never starts, manually open it through Xcode (Open Developer Tool - Simulator). Then try "Run on iOS simulator" again.
 - If the simulator starts but your app doesn't come up, look for the Expo app and tap it.
13. Again, make a couple of changes to the app in your IDE and save. You should see the new version in the simulator.

Running it in the Android emulator

We can't ignore Android now, can we? You can run your app through Android Studio.

14. If you have Android Studio installed, go ahead and open it. On the splash screen you can choose *Configure* (lower right) or open our daam project and hit the *Tools* menu.
15. Choose AVD Manager. You should see a list of emulators installed. If you don't see one, click "Create Virtual Device" and add one.

16. Pick a device and hit the play button (a green arrow to the right).
17. Make sure your emulator is running and hit "a" in the command window or click "Run on Android device/emulator". The server may 'install' Expo on your device if needed. You should see your app running in the emulator.

At this point you may be running your app in three places simultaneously. And changing App.js will result in the app refreshing in all three so you can see how it'll look on multiple devices.

Once you can see your app running in at least one place -- your physical device, an iOS emulator, or an Android emulator -- you can be finished.