

2E Running on a virtual device

We've created a project. We can run it. And we've got all of the tools installed, well, all except emulated/simulated devices. Let's install those and give them a test run and our setup will be complete.

The Android emulator

1. Open Android Studio. From there, open the Android Virtual Device (AVD) Manager.
2. Select "Create Virtual Device". Add a device or two that you'd like to test on.
3. Start up one of those emulators. You'll see a software version of an Android device open on the screen.
4. In a terminal window run "flutter devices". You should be able to see your emulator running. Interact with it a bit. It behaves just like a physical device.
5. Open VS Code. Note in the lower right corner that there's a list of devices. Look for your device there and select it.
6. Run your Flutter app. Verify that it is running in this emulator.

The iOS simulator

If you have a Mac with Xcode, let's try to run your app on an iOS simulator.

7. Open Xcode. From within Xcode, open a simulator. Alternatively you can open a terminal/command window run this command:
`open -a Simulator`
8. You should see an iOS simulated device start up on your screen. Give it a test drive. Tap on a few icons. Play around a bit.
9. Again, flutter devices should now show your new simulated iOS device. Make sure it's listed.
10. In VS Code, run your app in the debugger and choose to run it in your iOS device. Step through the debugger. Make a change to the source code and prove to yourself that hot reload works even in the simulator.