USING A PERSONAL DEVICE

The beauty of mobile apps is that you can take them anywhere. You may find that you want to share your programming progress with friends and coworkers. But before you can begin running your code on a physical device, you must have an account on the Apple Developer website. Accounts are free, so don't worry.

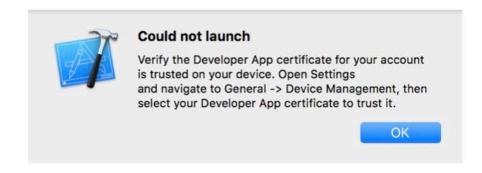
Using a web browser, go to developer.apple.com and click Account. You can sign up using your existing Apple ID. If you don't have an Apple ID, go ahead and create one—it's also free. Once you've entered your Apple ID, your developer account is good and you can head on back to Xcode.

(A free account enables you to run your iOS apps on only one physical device. If you want to distribute your apps to multiple devices or publish them to the App Store, you'll need to enroll in the Apple Developer Program.)

Now you'll need to tell Xcode about your new developer account. Open Xcode Preferences using the keyboard shortcut Command-Comma, and select the Accounts button near the upper-left corner. Click the "+" button in the lower-left corner, and Add Apple ID from the menu. After entering your credentials, you're ready to run and debug apps on a physical iOS device.

Connect your iOS device to your Mac using the appropriate USB cable. Xcode will automatically download the necessary information from the device and will display its name in the Scheme menu. Choose the name of your physical device—which will typically be at the top of the list, before the device simulators.

Build and run the app again. You may receive the following prompt, asking you to trust the developer certificate. Follow the instructions within the alert to allow the device to run your apps.

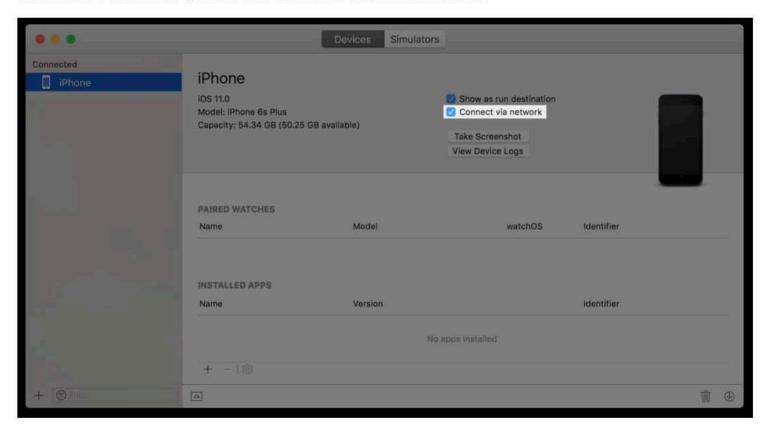


Build and run once more, and you should see the same simple white screen on your iOS device. To stop the app from running, click the Stop button near the left end of the Xcode toolbar.

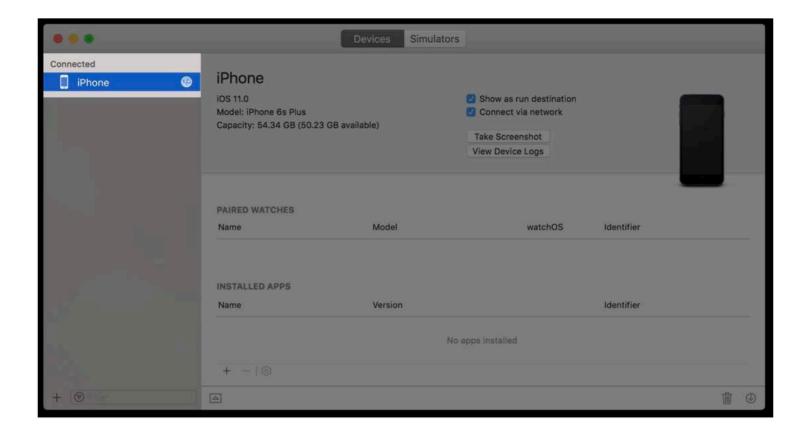
Building and Running Wirelessly

Xcode also gives you the option of deploying an app to your device over your network. To do this, connect your iOS device to your Mac using the appropriate USB cable, and open the Devices and Simulators window by selecting Devices and Simulators from the Window dropdown.

Ensure that your device is selected in the list furthest to the left in the Devices and Simulators window. Check the Connect via network box.



If your device is on the same network as your Mac, you'll see a globe appear next to your devices name within a few moments. This indicates that your device is wirelessly connected.



You can now disconnect the USB cable connecting your device to your Mac, and build and run your app wirelessly.

In most cases, the above steps are sufficient for wireless pairing. However, if this does not work for you, you might be on a corporate or institutional network where the system administrator has put in place certain network restrictions. In this case, simply open the Devices and Simulators window, hold Control and click on your device, then click Connect via IP Address in the dropdown presented. You'll then need to find your device's IP Address from your device's Settings, enter it in the prompt, and click Connect. This should successfully pair your device.