

Intro to VR - Unity Build for iOS

*Apple Developer's Account is not needed, unless you want to publish your app on App Store

References

Video

<https://www.youtube.com/watch?v=-Hr4-XNCf8Y>

Documentation from Unity

<https://docs.unity3d.com/Manual/iphone-BuildProcess.html>

<https://docs.unity3d.com/Manual/BuildSettingsiOS.html>

<https://docs.unity3d.com/Manual/how-unity-builds-ios-applications.html>

Preparation

Install Xcode

Choose the Xcode that is compatible with your current MacOS version

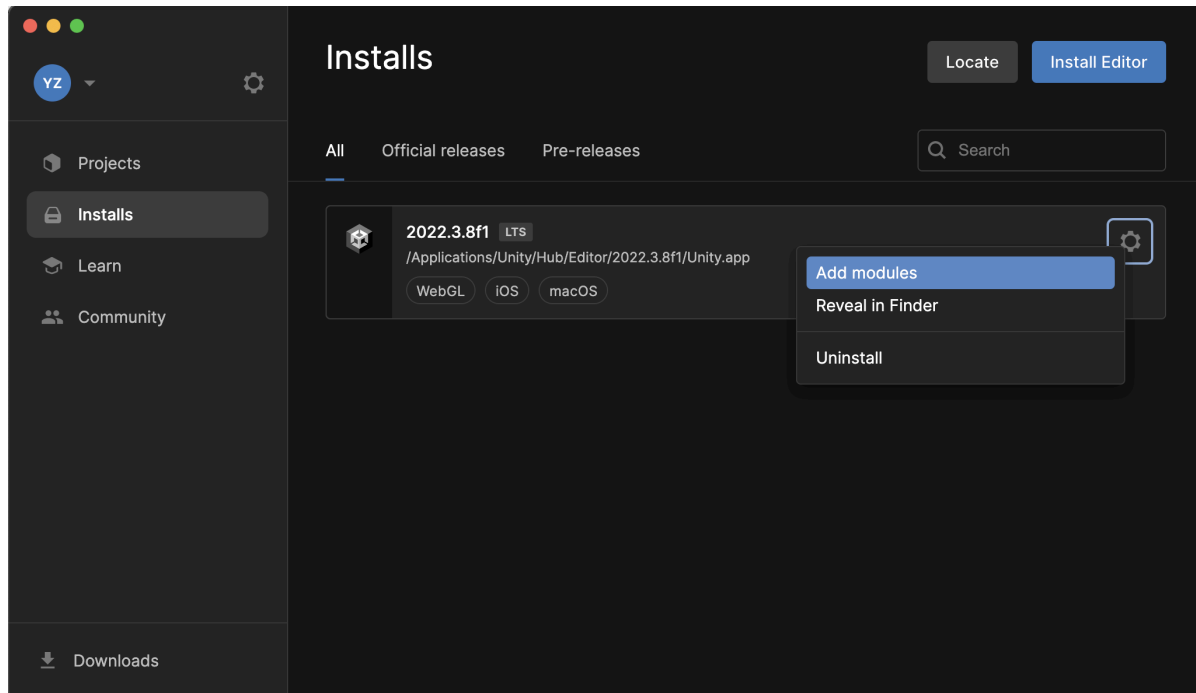
I recommend using the App Store to install Xcode, because it will get the right version for you

Install Unity iOS module

This module allows Unity to convert your code into an iOS app.

In Unity hub, go to **Installs** on the left, select the Unity version we are working on (aka 2022.3.8f1), click setting and click **Add modules**

Select **iOS Build Support** and hit continue.

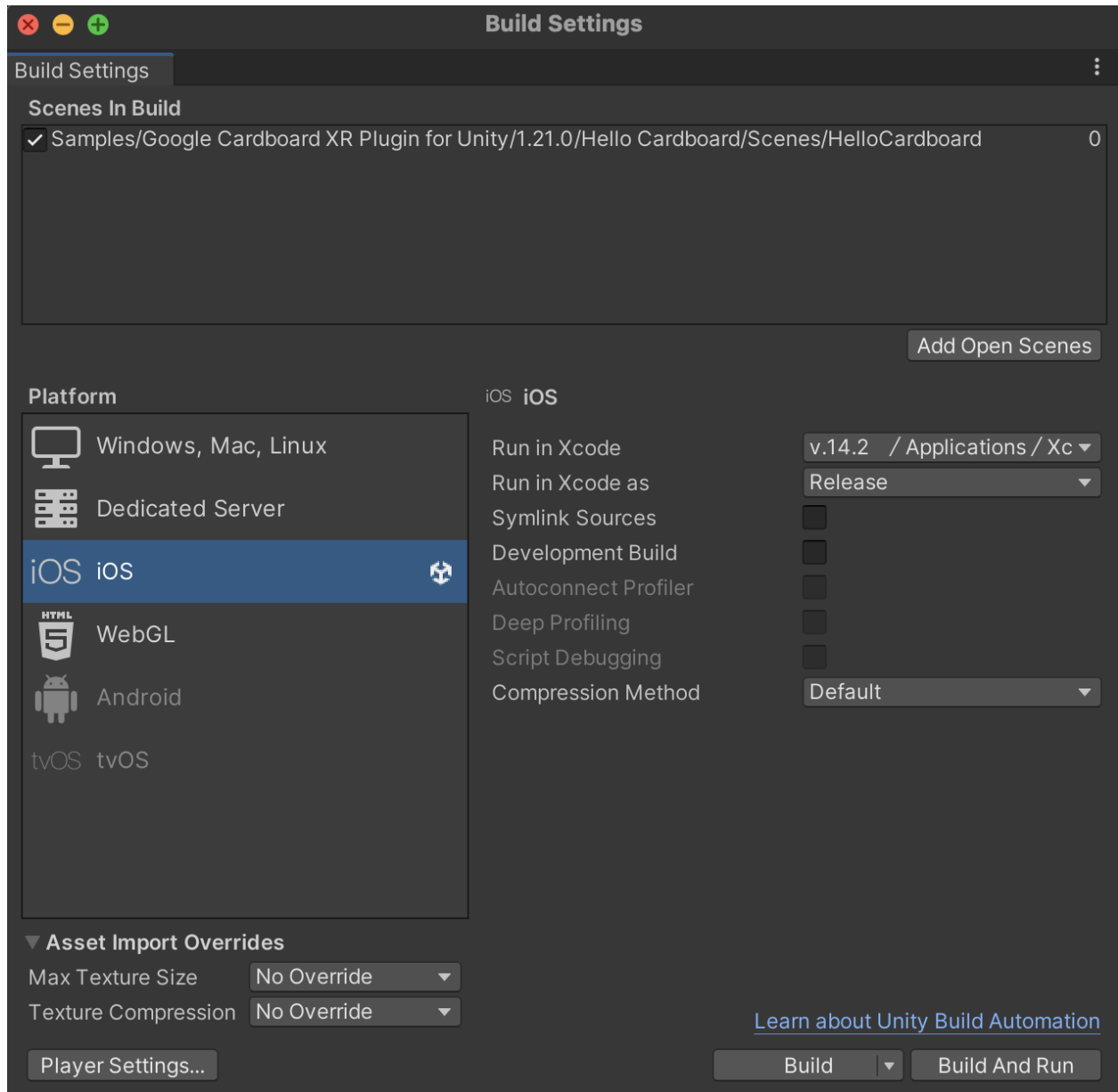


Build

Build Setting (Unity)

In Unity, go to File -> Build Settings

On the top, make sure you have your scene added. Otherwise, nothing will show up
The **Add Open Scenes** button can add what is currently opened in the Unity Inspector



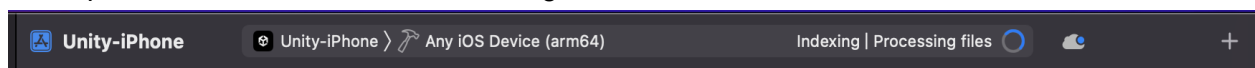
Select iOS as Platform.

On the right bottom, click **Switch Platform** and give it a few seconds to convert.

Then, click **Build and Run**. Unity builds an Xcode project and automatically opens Xcode and asks it to run the program on your phone if it's connected to your laptop

Signing (Xcode)

The top bar in Xcode indicates the building status.



If it says Build Failed, click on the red cross sign to see what's going on

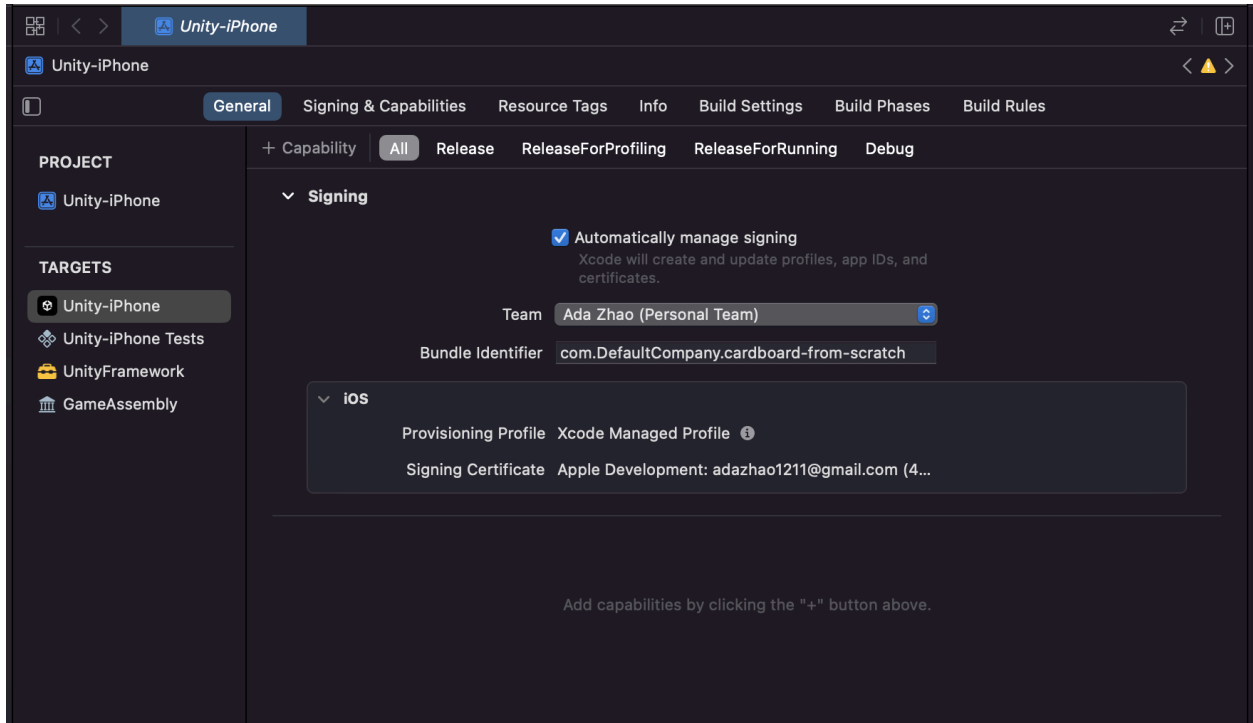


Usually, on your first build, Xcode requires a provisioning profile.

The easiest way is to enable **automatically manage signing**

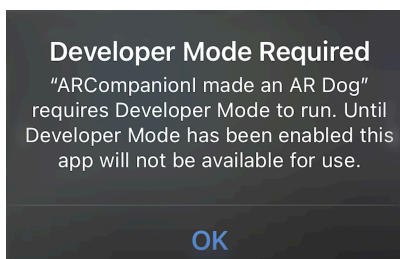
To provide Xcode the information about yourself, you need to log in using your Apple ID in Xcode -> Preferences -> Accounts

Afterwards, you can enable auto signing and choose yourself as the developer



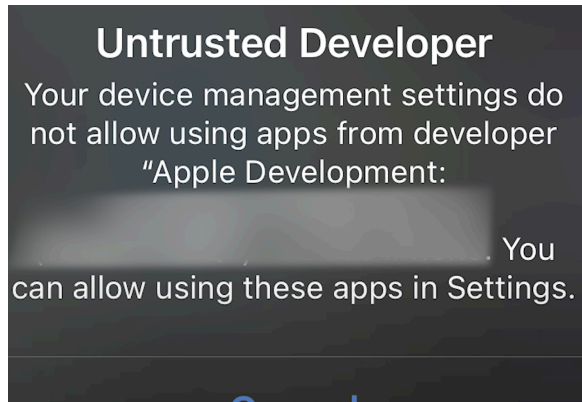
After this, click the Play button on the top with your phone connected to your laptop to run again

Enable Developer Mode (iPhone)



If you see this on your phone, navigate to **Settings -> Privacy & Security** to enable Developer Mode

Trust Developer App (iPhone)

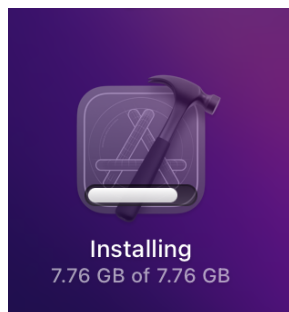


This alert may also occur, just go to **Settings -> General -> VPN & Device Management** to trust your account

Up to now you should have everything ready and your app is supposed to show up on your phone. Congratulations!

Troubleshooting

Xcode install stuck



If you installed it from the App Store, give it an extra half an hour or so. Time fixes everything
Or, it may be because the Xcode can't run on your MacOS:

<https://www.macobserver.com/tips/how-to/install-xcode-stuck/>

Check what xcode version is compatible with your MacOS here

<https://developer.apple.com/support/xcode/>

And download the corresponding xcode here by searching the exact version

<https://developer.apple.com/download/all/>