

AR Quick start tutorial

How to get started with Augmented Reality with Unity + Vuforia
No programming skills required!

Hank

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About this tutorial

For students attending the AR Workshop, please follow through this PowerPoint to install the required software as it can take hours to work!

We will be using these software for the workshop

Unity + Vuforia



Unity with Vuforia built-in.

Your IDE for your AR development platform.

Android Studio or XCode

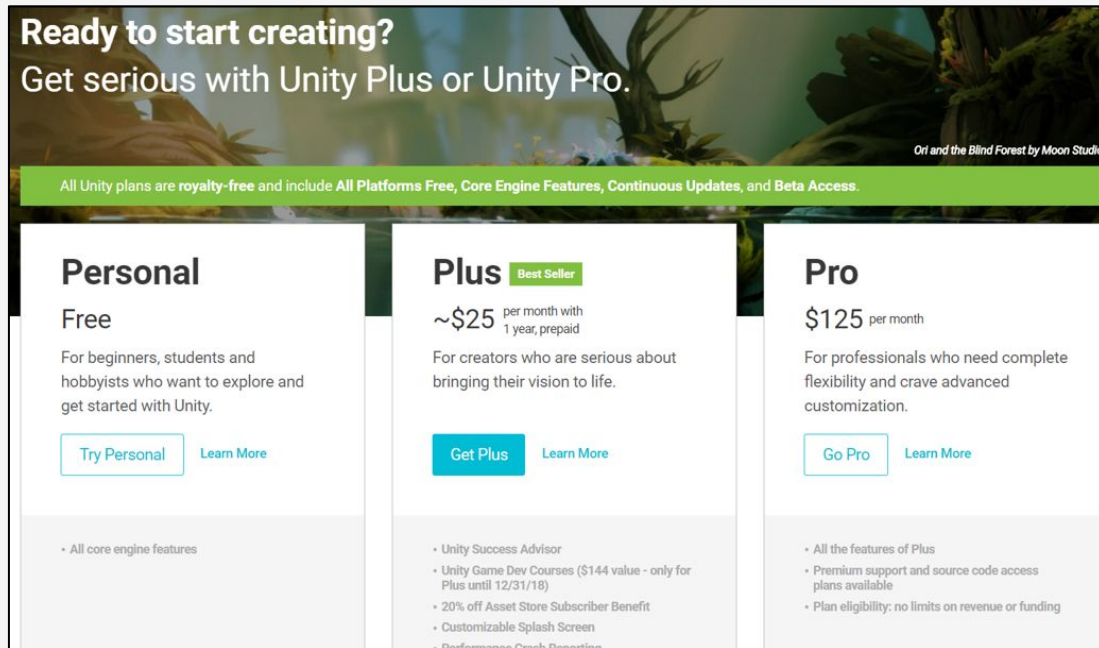


Will not be using these software developing, android phone users need to download Android Studio while iPhone Users will use XCode. **NOT BOTH.**

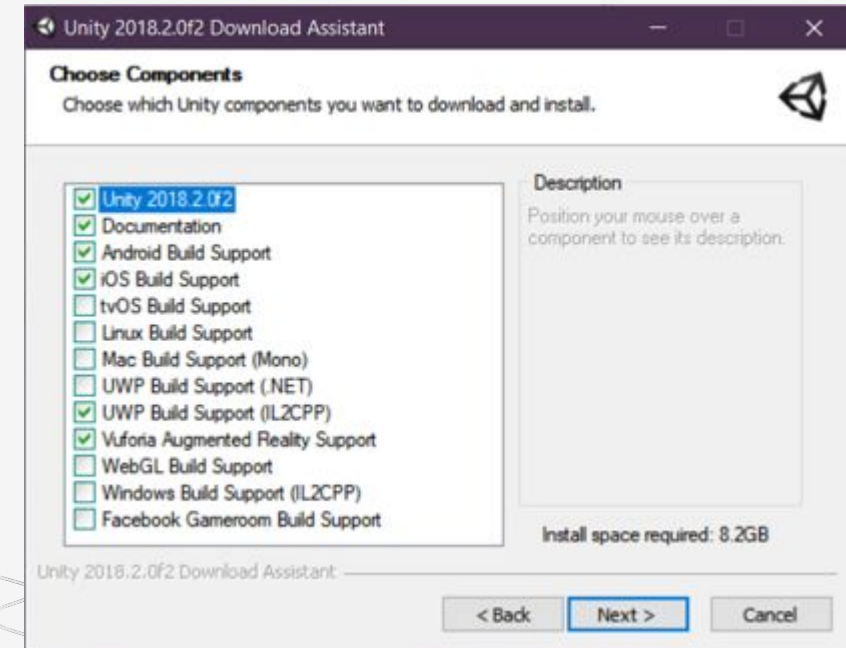
Your app building will rely on these software.

Vuforia Account Setup and Testing

1 Go to <https://store.unity.com/> and download the personal package you find on the link above.



2 Run the .exe file, click Next twice, and you should arrive at this page and select all the boxes below.

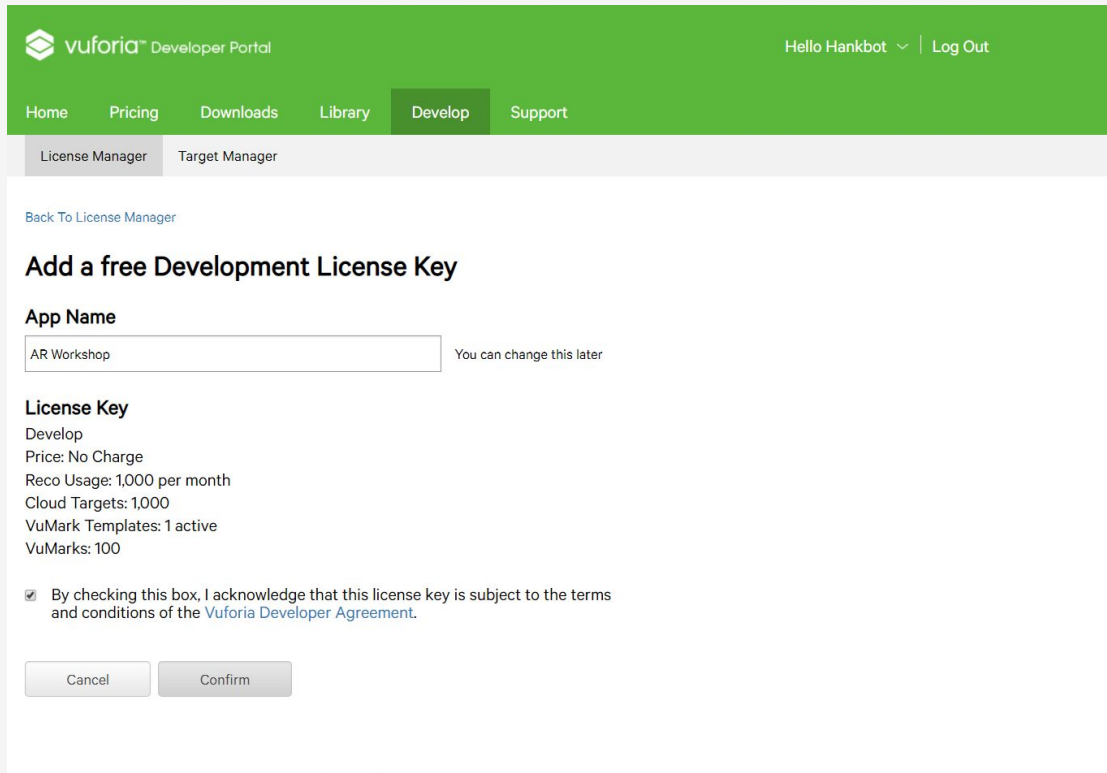


Once you're done, click Next until the program starts to download and install the package. (It should take a while, so proceed to next slide. Approx. 2 hours max.)

Vuforia Account Setup and Testing

3

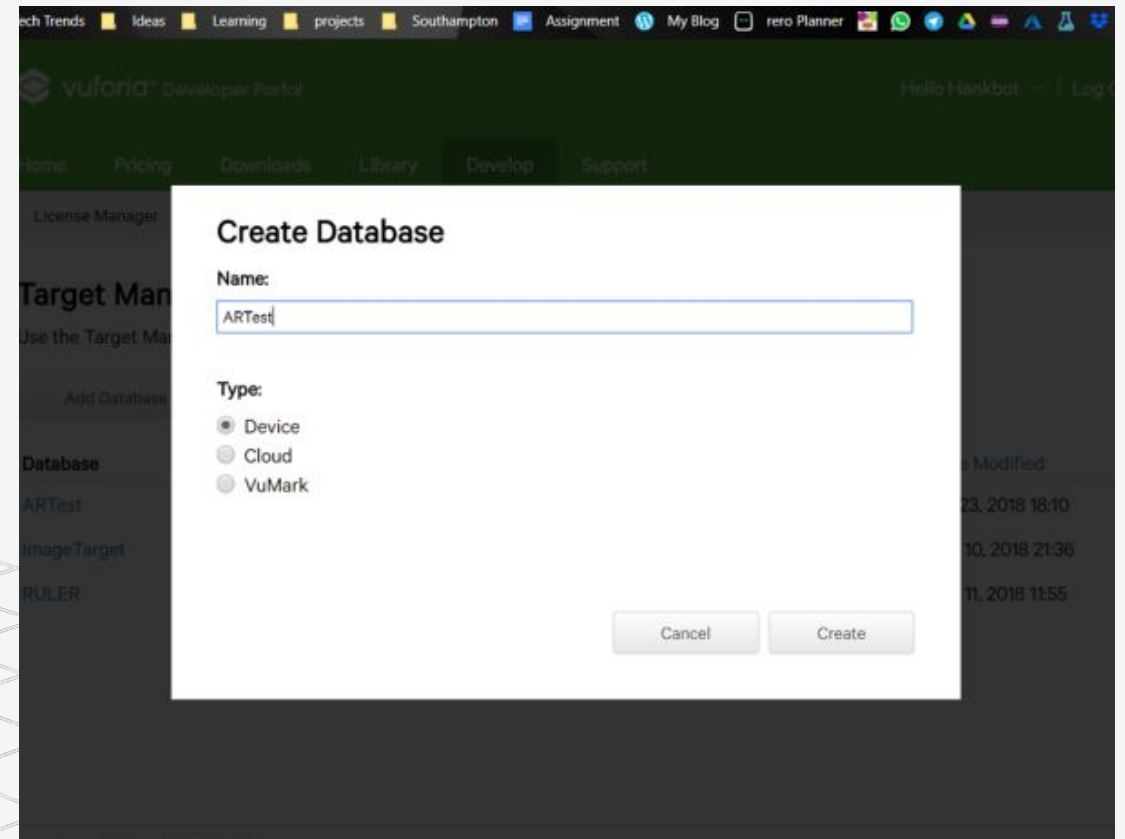
Head on to Vuforia License Manager, create an account with Gmail and go to License Manager, get development key (it's a free API key which allows you to track images).



The screenshot shows the Vuforia Developer Portal interface. The top navigation bar is green with the Vuforia logo and 'Developer Portal' text. Below it, a secondary navigation bar contains links for Home, Pricing, Downloads, Library, Develop, and Support. The 'Develop' tab is active. Underneath, there are tabs for 'License Manager' and 'Target Manager'. The 'License Manager' tab is selected, showing a page titled 'Add a free Development License Key'. This page includes a form for 'App Name' (with 'AR Workshop' entered), a 'License Key' section detailing usage limits (1,000 per month for Reco, 1,000 for Cloud Targets, 1 active VuMark Template, and 100 VuMarks), and a checkbox for the Vuforia Developer Agreement. At the bottom are 'Cancel' and 'Confirm' buttons.

4

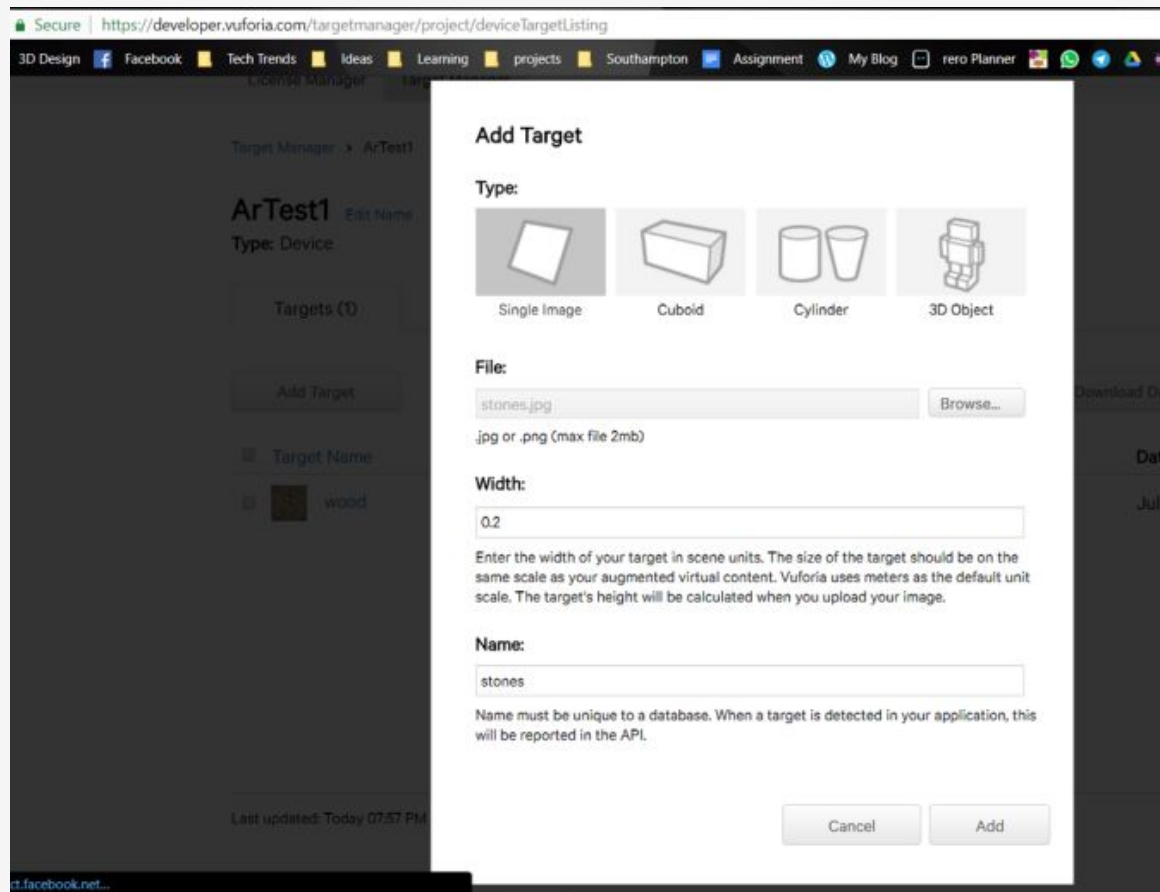
Now we got our API key, create a Database at Target Manager. Click add Database.



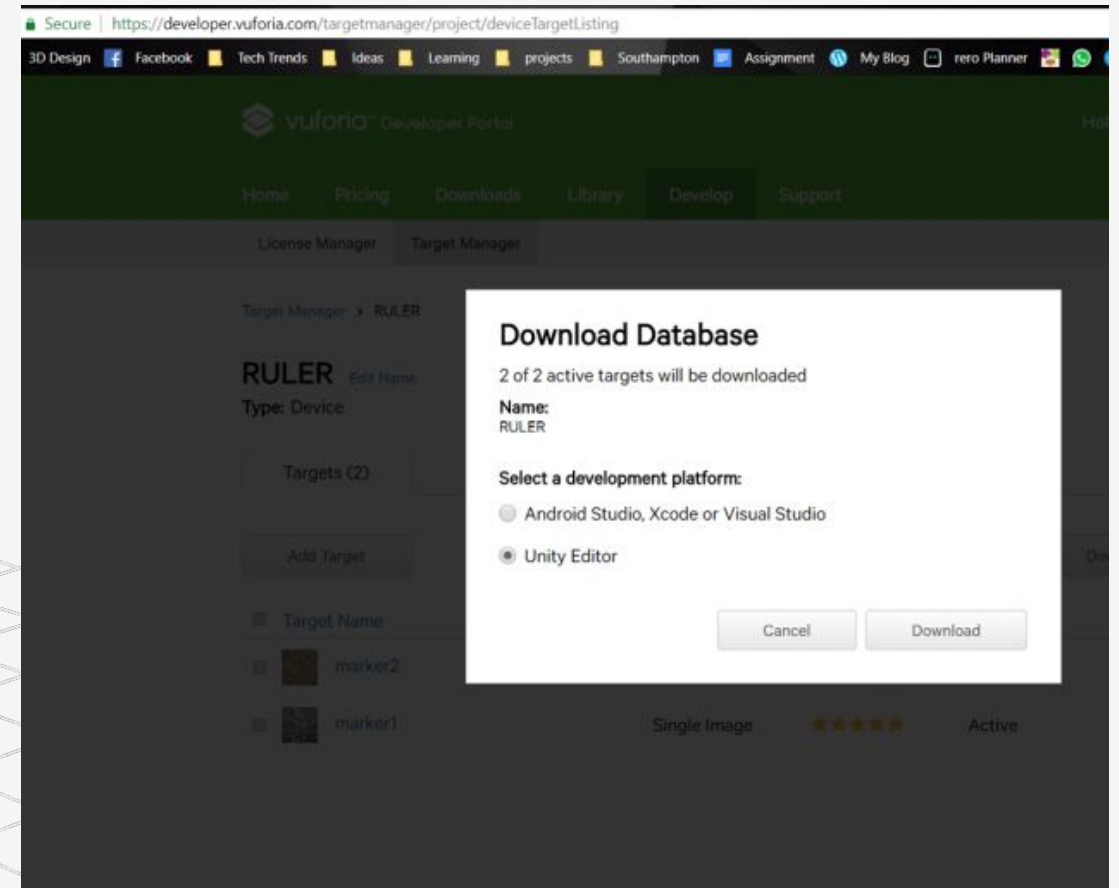
The screenshot shows the Vuforia Developer Portal interface with the 'Target Manager' tab selected. A 'Create Database' modal dialog is open in the foreground. The modal has a title 'Create Database' and two input fields: 'Name' (containing 'ARTest') and 'Type'. The 'Type' section has three radio button options: 'Device' (selected), 'Cloud', and 'VuMark'. At the bottom of the modal are 'Cancel' and 'Create' buttons. The background shows the 'Target Manager' page with a list of databases, including 'ARTest'.

Vuforia Account Setup and Testing

- 5 Upload the images with the specifications below, you should have stone.jpg and wood.jpg in your zip folder.



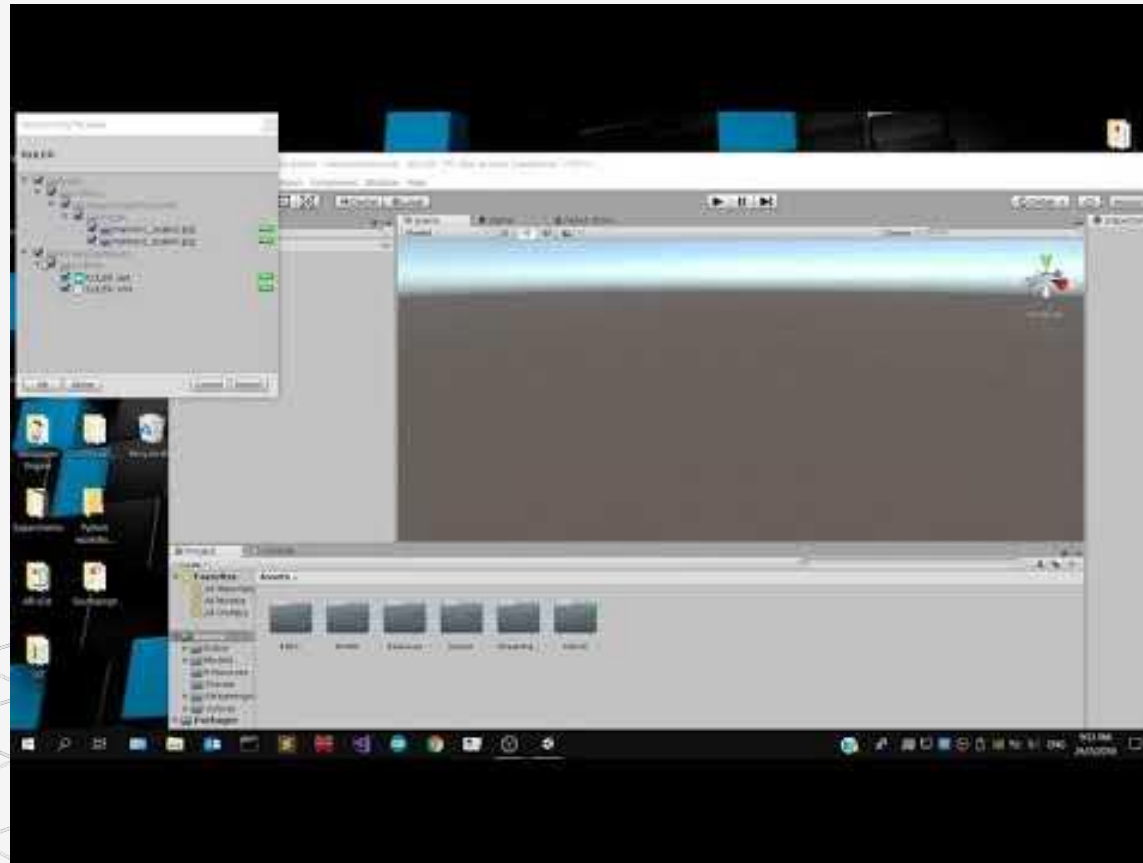
- 6 Download the database, it should download as an xxx.unitypackage.



Vuforia Account Setup and Testing

7

Finally, follow the tutorial video below! You need a webcam or built-in camera for this. Only proceed to Android / XCode section if this part works! This part isn't mandatory, as long as your setups are done correctly, your Augmented Reality Environment is good to go! Please refer to next slide even if you can't do this part. <https://youtu.be/Oav5VILLNGU>

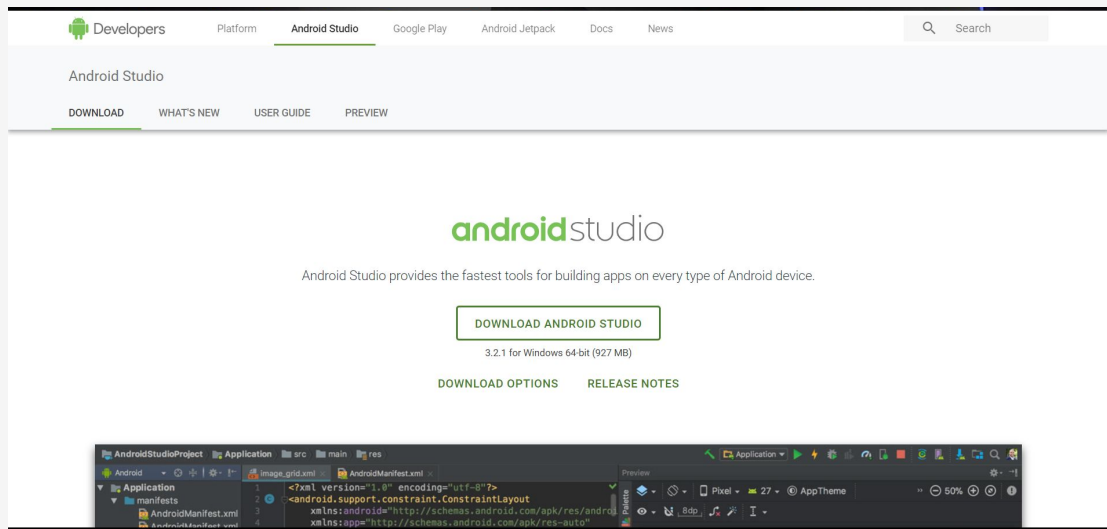


Getting Started (Android)

8

Once you have tested your Unity + Vuforia Software, let's download android studio as well.

<https://developer.android.com/studio/>



You are all set!

You will learn to build your Augmented Reality Apps during the workshop, we are urging you to download all the software beforehand because it takes up a lot of Internet traffic!



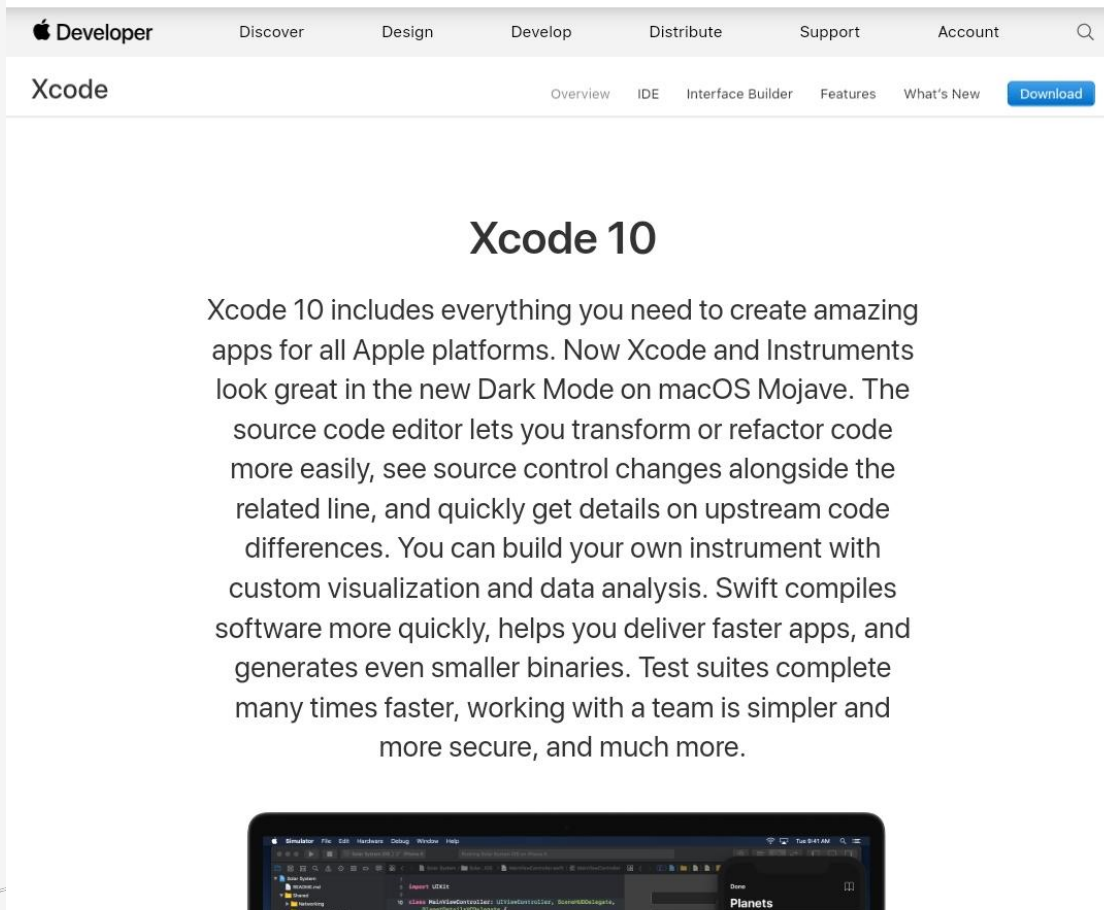
Note that android studio is supported on Mac as well, so if you have a Mac but is an Android User, please download Android Studio.

Getting Started (IOS)

8

Once you have tested your Unity + Vuforia Software, let's download Xcode as well.

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



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