

How to Install Unity and Compiling for Android

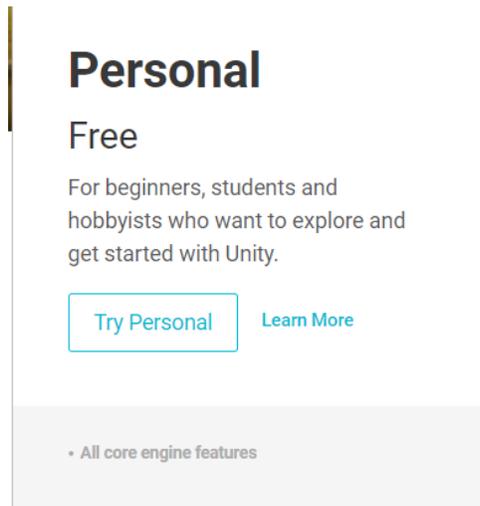
DISCLAIMER:

I personally believe it will be easier and show the game better by playing the game from the APK file I have sent with my submission. This will be 10x easier than trying to set up Unity to play from the project editor. I have shown all steps to accomplish this, but the above is just my opinion.

However, you can still compile the project as much as you want after you set up Unity and everything should be okay. You may see some warnings or maybe some Object Not Allocated errors depending on what scene you start at, as that object gets passed from each scene. That is a very rare error, which I think I got rid of, but just wanted to give you a heads up.

Step One – Download Unity Personal from the Unity Store. Click the following link to be redirected there: <https://store.unity.com/>

Now Click personal.



Personal is the engine that I used because it is 100% free and is made for people who want to start and/or students. It gives all that is necessary to build games without costing a dime.

Step Two – Accept the Terms on the next page and download the installer for windows.

Accept terms

By clicking, I confirm that I am eligible to use Unity Personal per the [Terms of Service](#), as I or my company meet the following criteria:

- Do not make more than \$100k in annual gross revenues, regardless of whether Unity Personal is being used for commercial purposes, or for an internal project or prototyping.
- Have not raised funds in excess of \$100K.
- Not currently using Unity Plus or Pro.

If you are not eligible to use Unity Personal, please [click here](#) to chat with our team about what product is right for you.

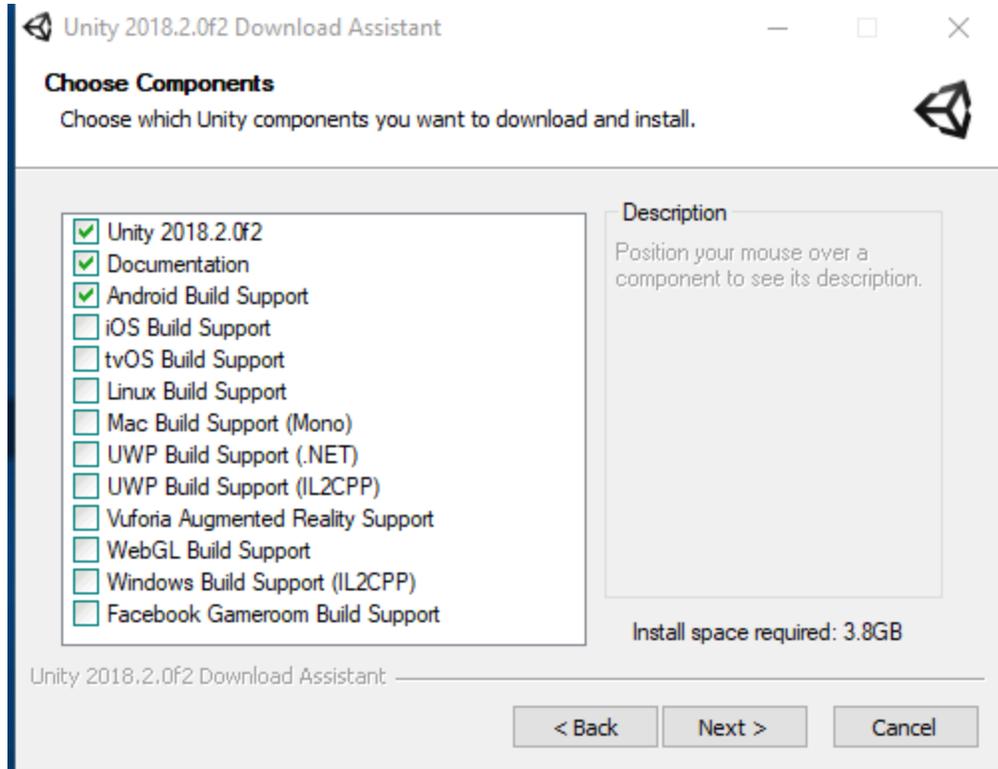
Download Installer for Windows

Download Unity Hub (Preview)

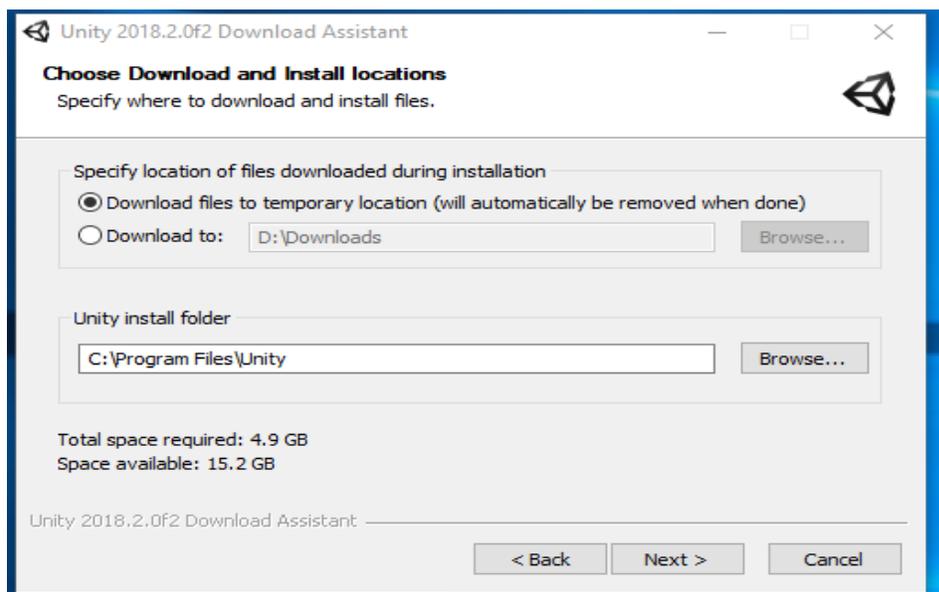
Looking to download the installer for Mac OS X?

Do not download the Unity Hub. I didn't download this and I have no idea what it is, so if you opt to download the Unity Hub, it could cause issues.

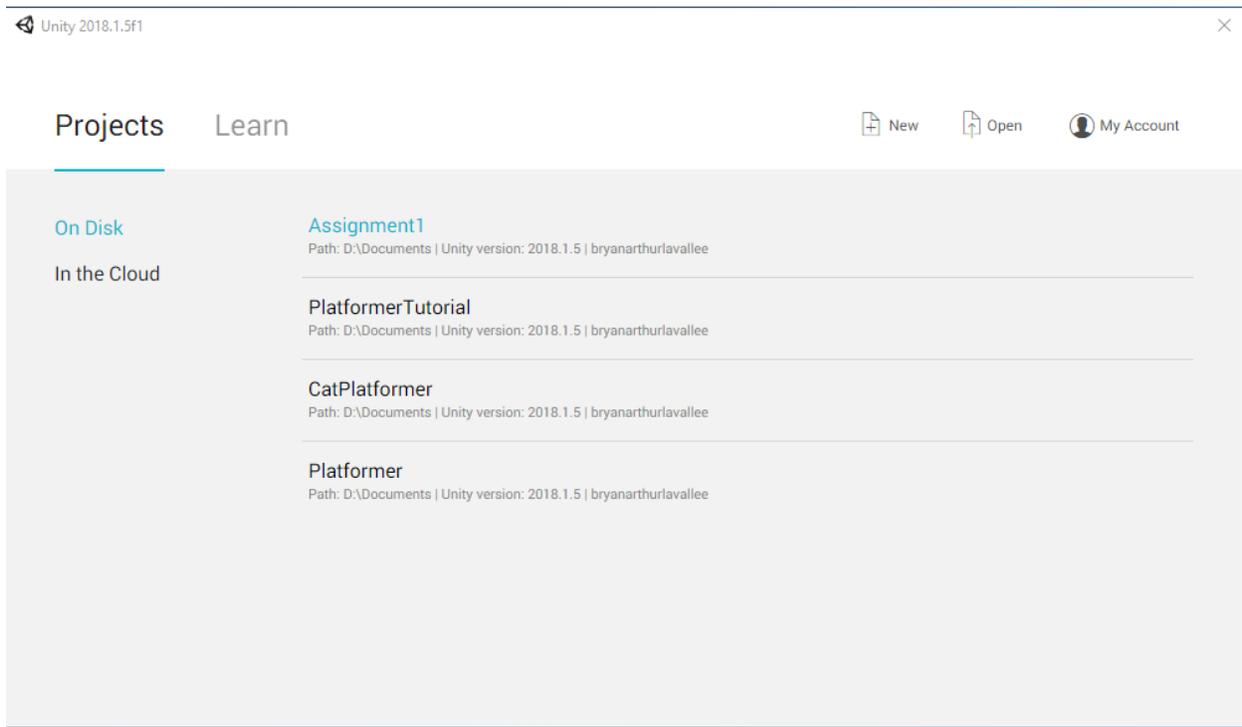
Step Three – Run the Unity Installer and Follow the Directions. **YOU NEED TO CLICK ANDROID BUILD SUPPORT.** This was not auto checked off when I first installed Unity which caused some issues.



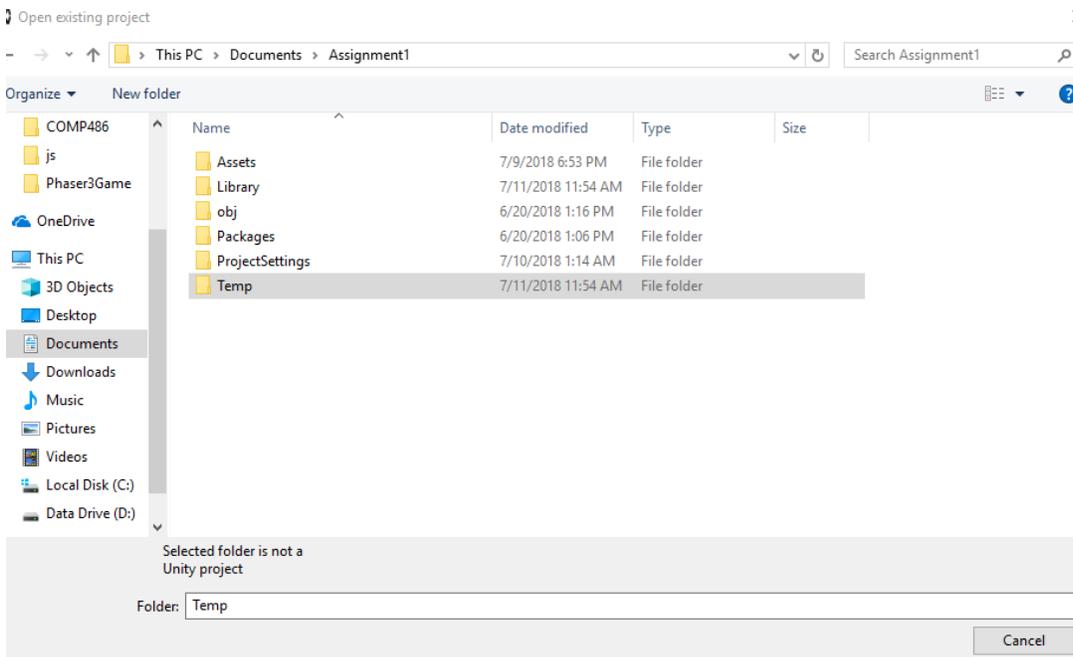
Step Four – Decide where you want Unity to install to. I have an SSD which made Unity run extremely fast. If you have a somewhat old HDD it could run slower.



Step Five – Run Unity and you will see this screen (Without all the projects):

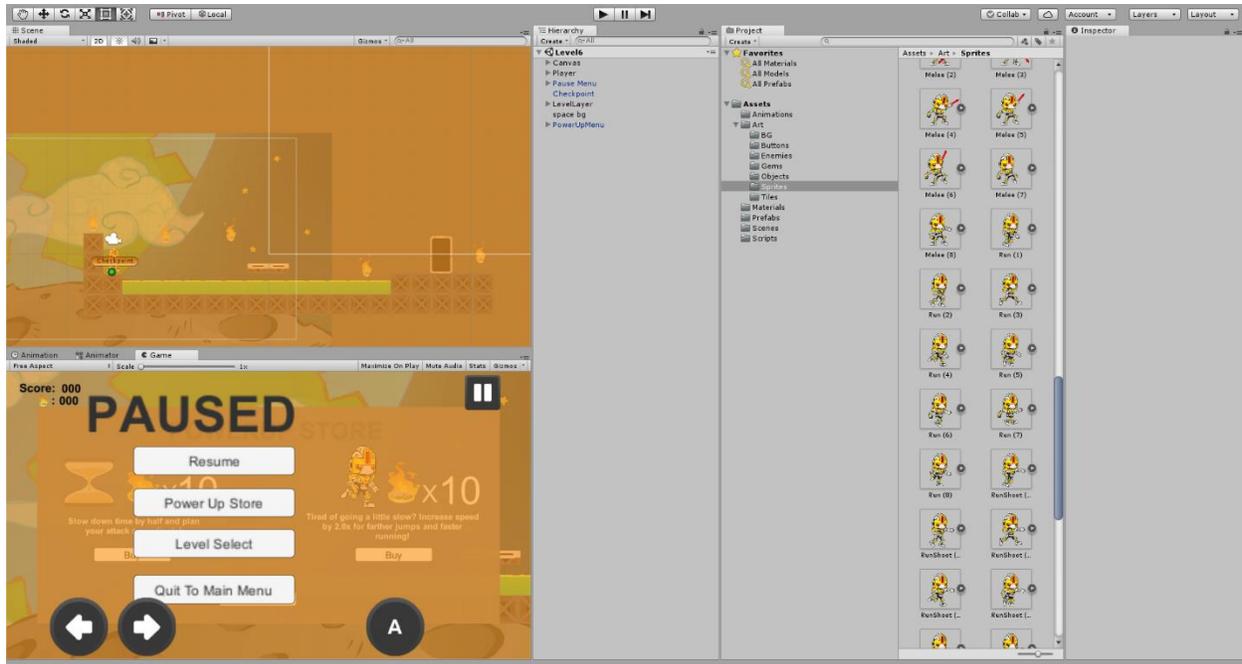


I have set up my Unity account with my gmail so all my projects show up when opening Unity. To open the downloaded folder from my assignment submission, you need to select open. Then use the file browser to find where you downloaded my assignment submission too. Unity is not like Visual Studio where there is a specific project file – instead the folder that holds all the project files is considered the project. So, if you click into my assignment submission and see the below:



You have gone too deep. You can also tell because Unity tells you that the selected folder is not a Unity project. When clicking the Assignment1 folder this goes away and opens the Assignment properly.

This is what my project opens as:



It will most likely be different for you as I have set it up the views in a specific way.

Step 6 – For it to be able compile for Android, you need to tell Unity where the android SDK on your machine is. Unity has a comprehensive guide that goes far more in depth than I ever could. Here is a link to that guide: <https://docs.unity3d.com/540/Documentation/Manual/android-sdksetup.html>

Step 7 – Since my game is for mobile, the controls on the project editor will drive you insane. It is not a viable option to play it outside of a mobile device since I converted my earlier testing desktop controls to a mobile one. You can test directly to a mobile device, but you need to install Unity Remote 4 on your android device. For a guide on how to accomplish this see:

<https://docs.unity3d.com/540/Documentation/Manual/UnityRemote4Android.html>

Please note I had some issues with Unity Remote, half the time if you do not start the Unity Remote application before you open the Unity Project it will not run on your phone. This is a weird bug which I believe Unity is trying to fix.

Step 8 – Compile, Run and Have Fun! Now all you need to do is press the play button that looks like:

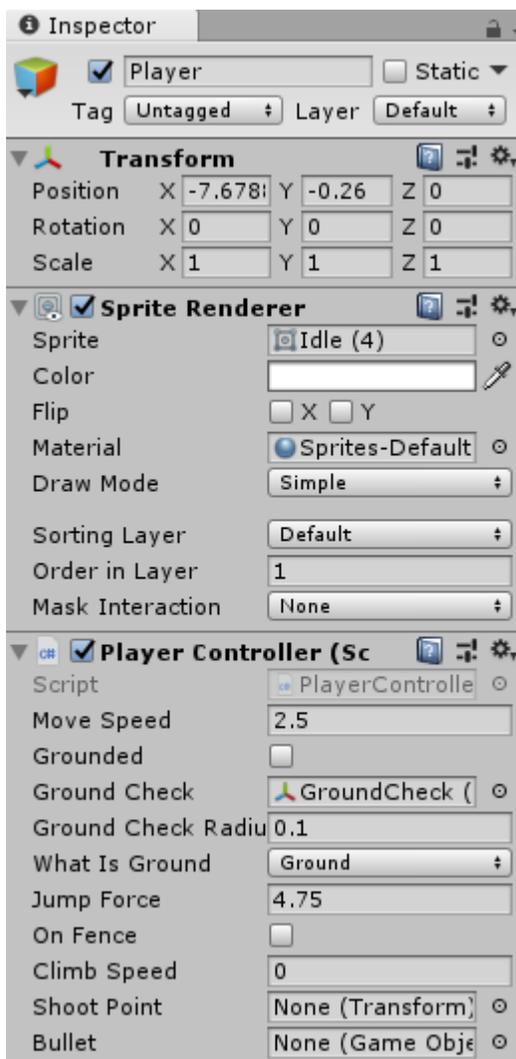


And it will run in the Unity Editor. From here you can see how the game operates, but you will not find the controls nice as they are made for mobile. I hope this guide helped, and you can mark my Assignment One with ease.

IF THERE ARE ANY QUESTIONS, PLEASE DO NOT HESITATE TO ASK.

ABOUT MY FILES:

All C# scripts are written to Unity coding standards and utilize the best logic in order to accomplish my goals. I learned how to do this through tutorials and reading the Unity docs. You will see a lot of {Object}Manager, or {Object}Controller. These naming conventions are used in C# and if you jumped into a tutorial you will most likely see the same naming conventions. All my files are commented and you should be able to follow along quite easily with the comments.



In the Unity Editor you can see how the variables are assigned. Here is an example of how that looks. This is for the Player object.

I hope this clears up any confusion on how variables are assigned.

WELL THAT'S ALL. PLEASE ASK IF YOU HAVE ANY QUESTIONS, AND I HOPE YOU LIKE MY VERY FIRST GAME. HOPEFULLY IT IS AS HARD AS I INTENDED.