VGDA Workshop - Unity Setup

v1.0
10/2/24

Please have this Unity setup before coming to a VGDA workshop that will use Unity. Given how long Unity will take to download and also open project files, please have this setup ready so we can teach you the most out of the time we have.

NOTE: Some screenshots are a reference to a slightly different version of Unity, but the installation process should still be very similar.

Index

- Create a Unity ID
- Download Unity Hub
- Install Unity
  - Windows
  - Mac OS
- Download Workshop Project **
- Open Workshop Project On Unity **
- Unity Interface
- Ready For Our Workshop!
- References to Other Tutorials

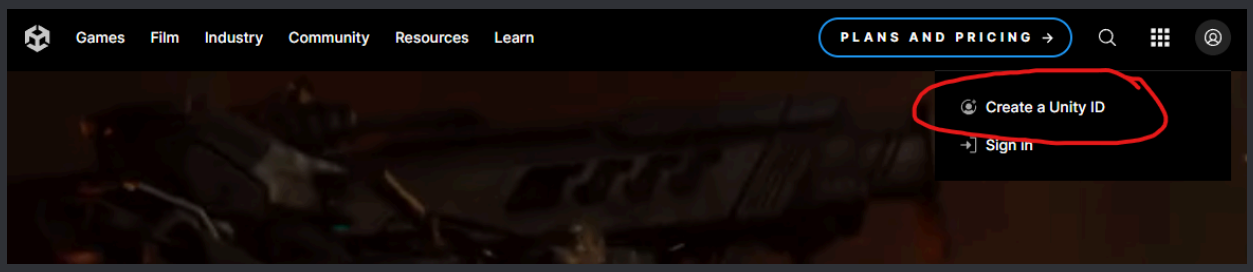
*** This section can apply to any VGDA workshop that will use Unity, as all workshop projects will be used under the same version so there isn't a need to reinstall a new version every time we host a workshop.*

Create a Unity ID

Let's start with creating a Unity ID. This will be your Unity account to keep track of licenses, projects, and even downloading assets from the Unity store.

Create your account through here: https://unity.com/

Click on the small icon in the upper right corner, and there is an option to either make a new Unity ID or sign in if you already have an account.



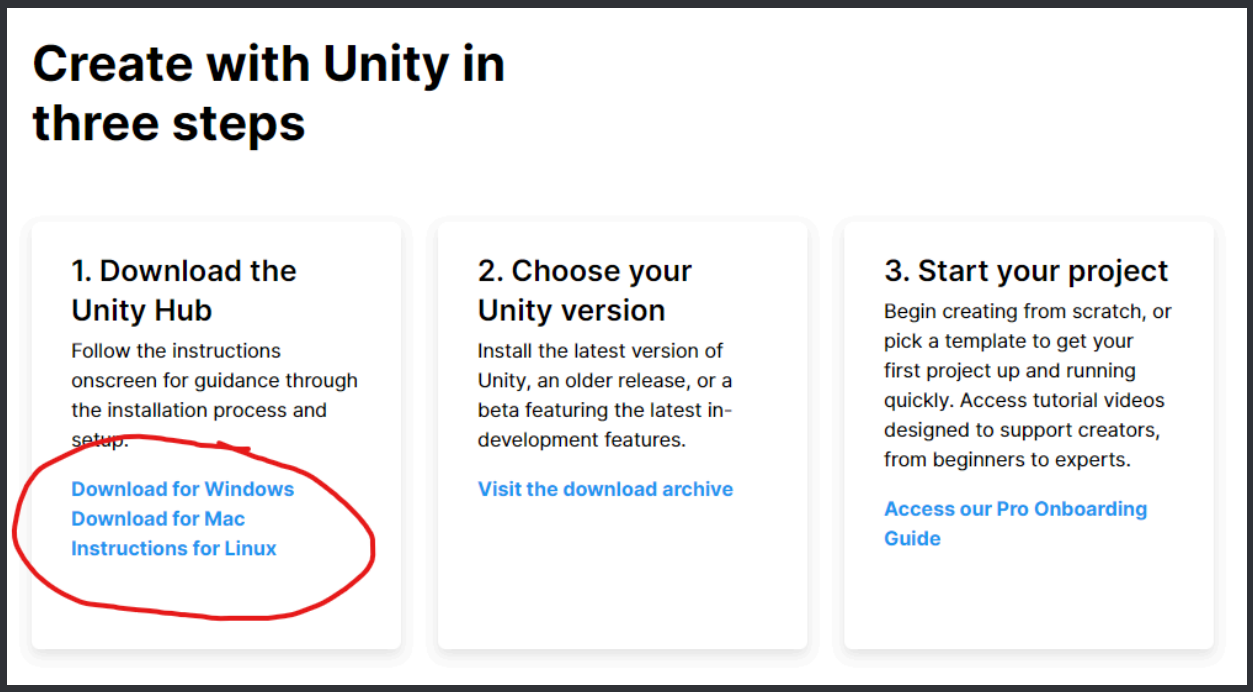
Once you make a Unity ID, we can move on to the next step!

Download Unity Hub

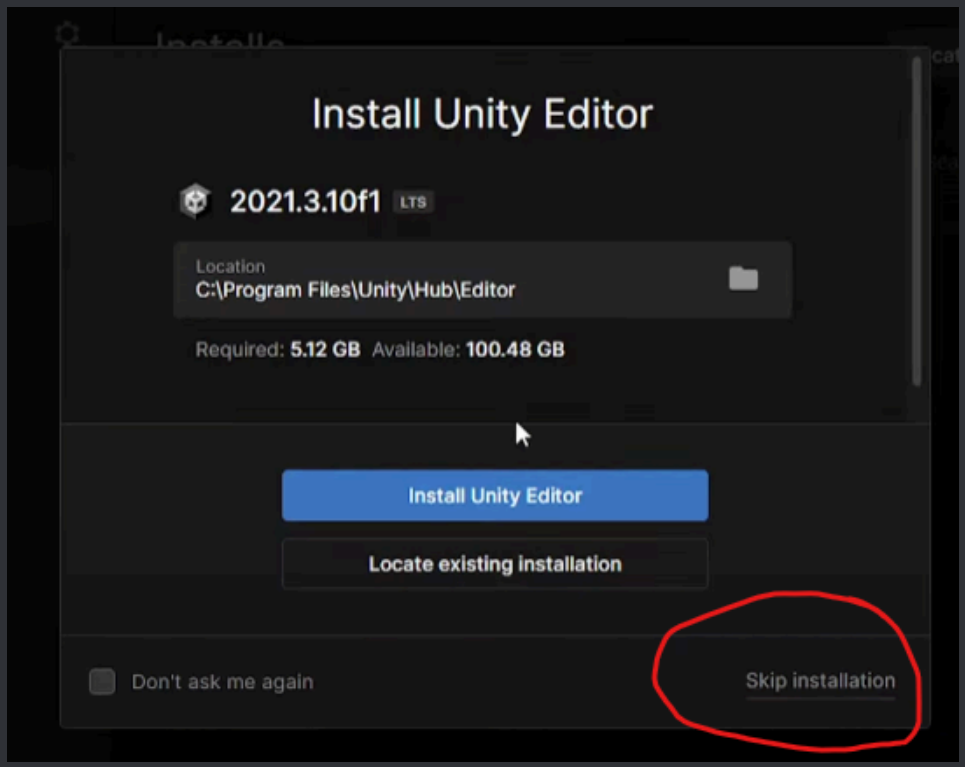
Next, we need to install Unity Hub. This is our launcher for Unity, and easily view different versions of Unity downloaded as well as keep track of our Unity projects.

Download Unity Hub through here: https://unity.com/download

Scroll down just a little and you'll find these three steps listed. Go to the first step, and download the Unity Hub. There are different options depending on what computer you'll be running this on.

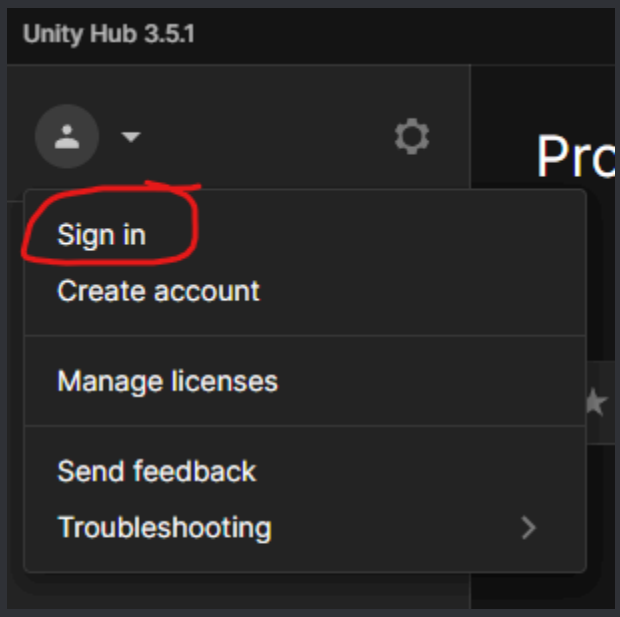


When you open up Unity Hub, it will first ask you to install a Unity Editor. To ensure you will have the right version, click on “Skip Installation” in the lower right corner.

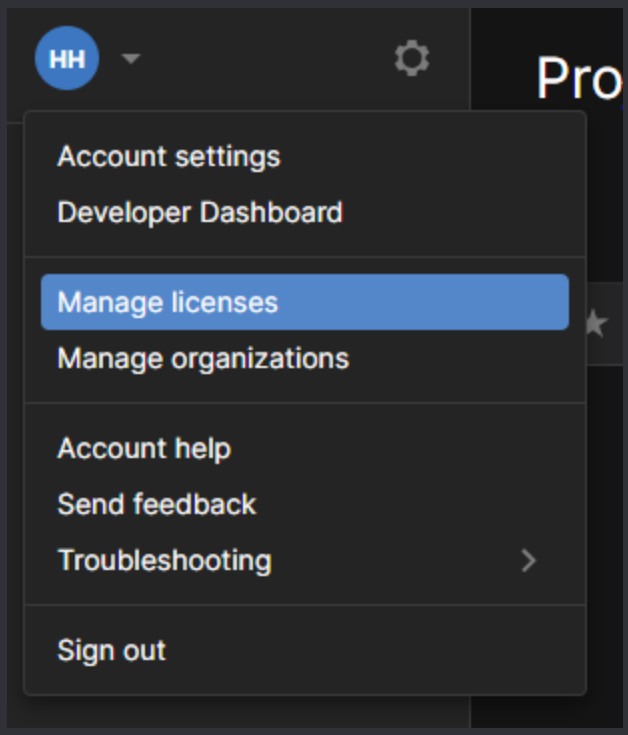


Sometimes Unity may ask you to download a different version than what our workshop is installed on. Skipping this installation for now will prevent you from accidentally downloading two versions of Unity.

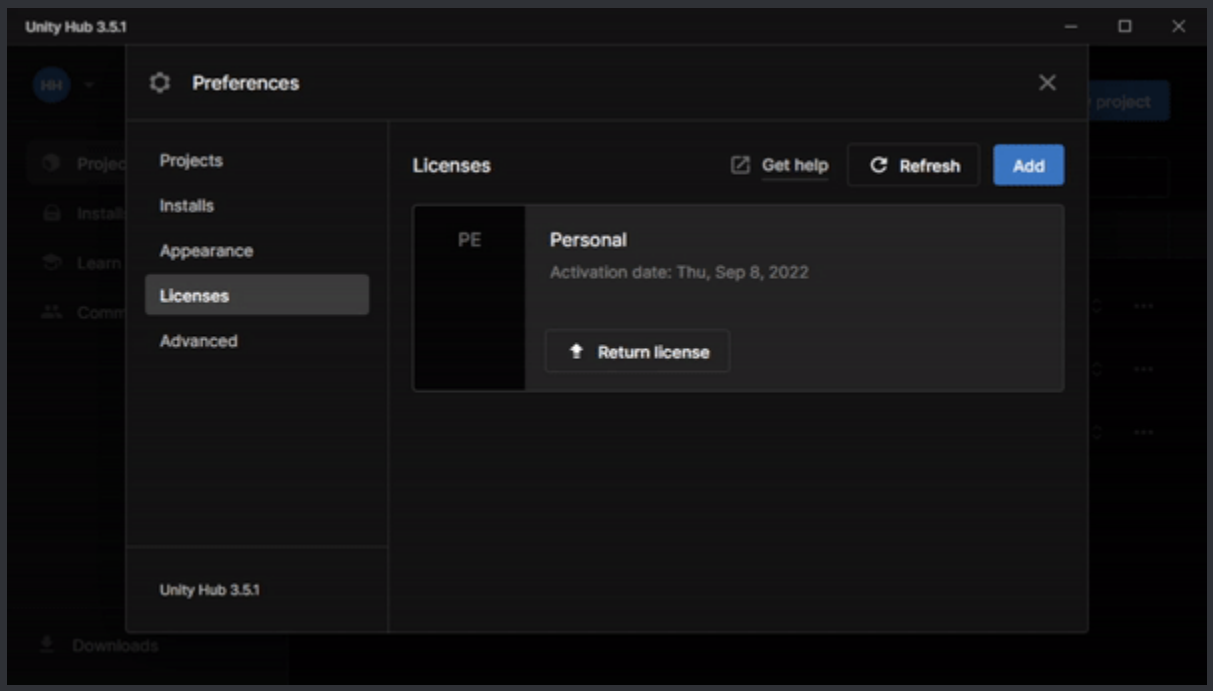
Before we do anything else, sign in using the Unity ID you created through the upper left icon in the launcher.



Once you sign in, click your icon and click on “Manage licenses”.



Add the personal edition license. This license is free and can be used for a variety of projects you can make in the future. You can read the terms before you agree to the license to see more details on this.



Now that we have our launcher and license set up, let's download Unity!

Install Unity

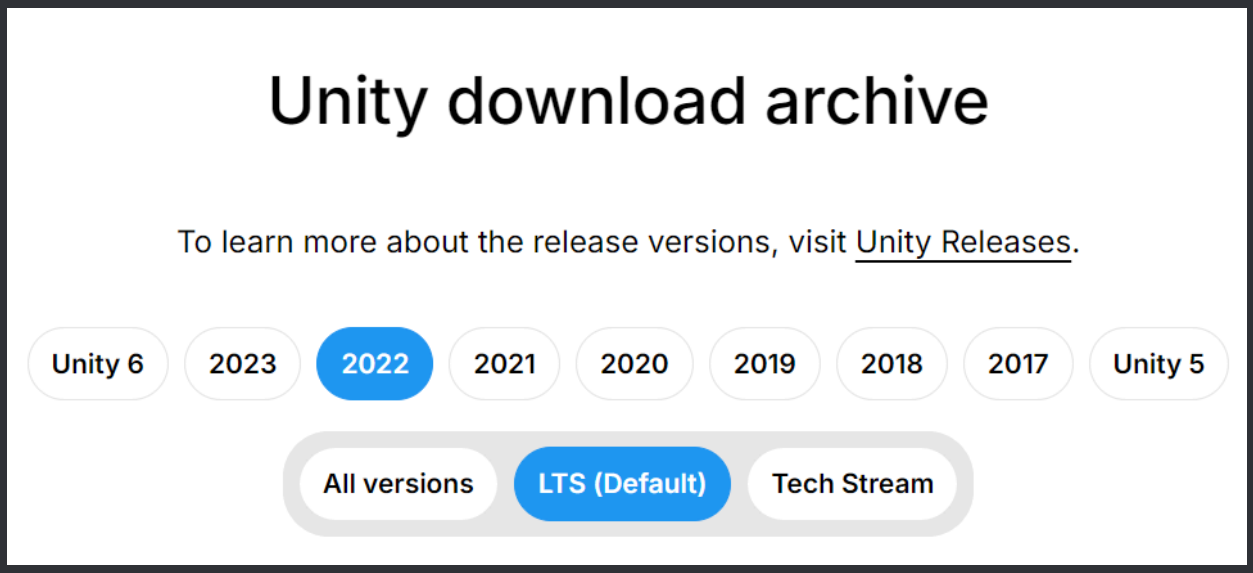
Downloading the Unity Editor will take a long time to download no matter what computer system you have, so be prepared to wait for some time.

You can find the Unity download archive here:
https://unity.com/releases/editor/archive

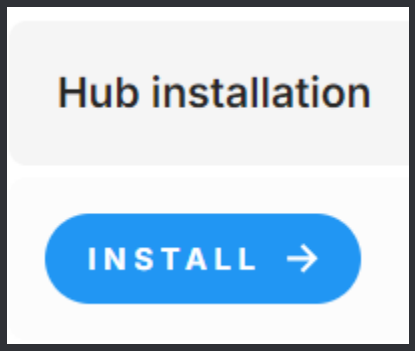
You'll notice Unity has many different versions of the engine. We will be using the following version for some our workshop projects:

Unity 2022.3.5f1

To install this, click on the "2022" tab and scroll down until you find the version we need to download.



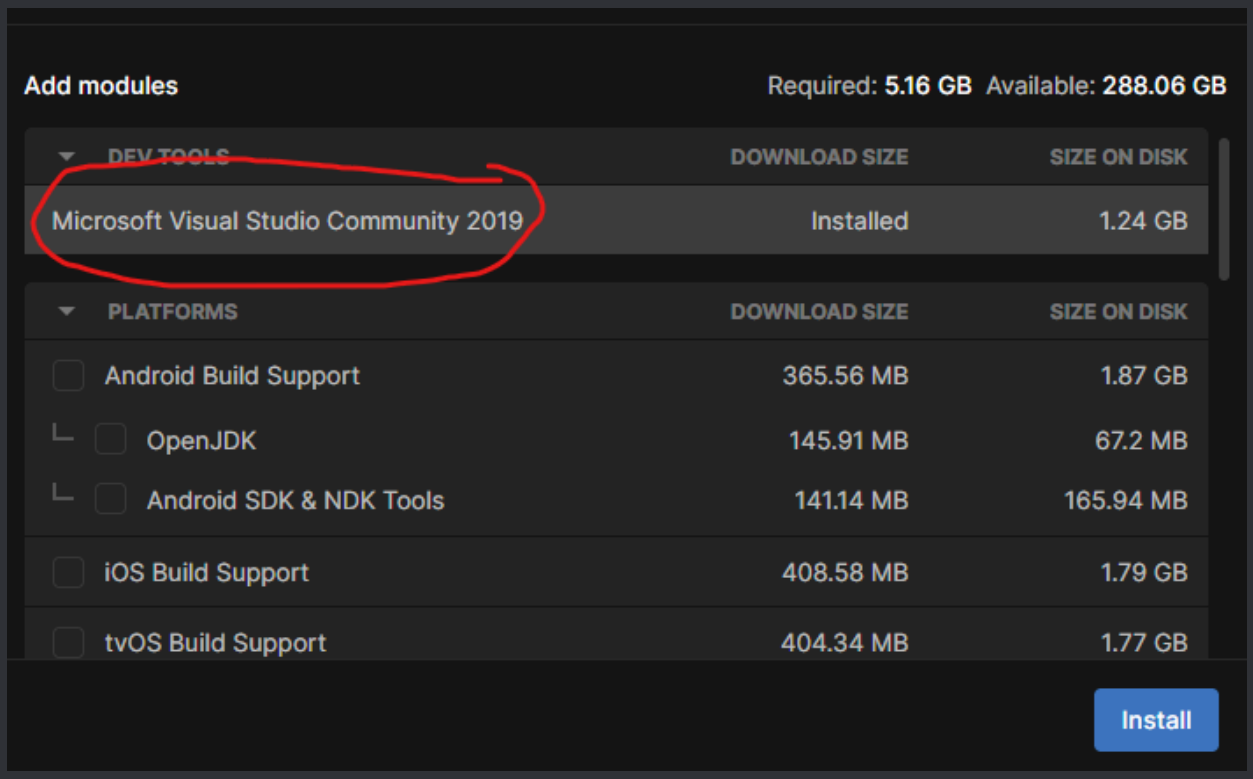
Under the version we need to download, click on the blue “Install” option towards the right. Although we can also download the Windows, Mac, or Linux versions separately, the Unity Hub version will connect to the launcher itself and download it through there to make it easier.



Windows

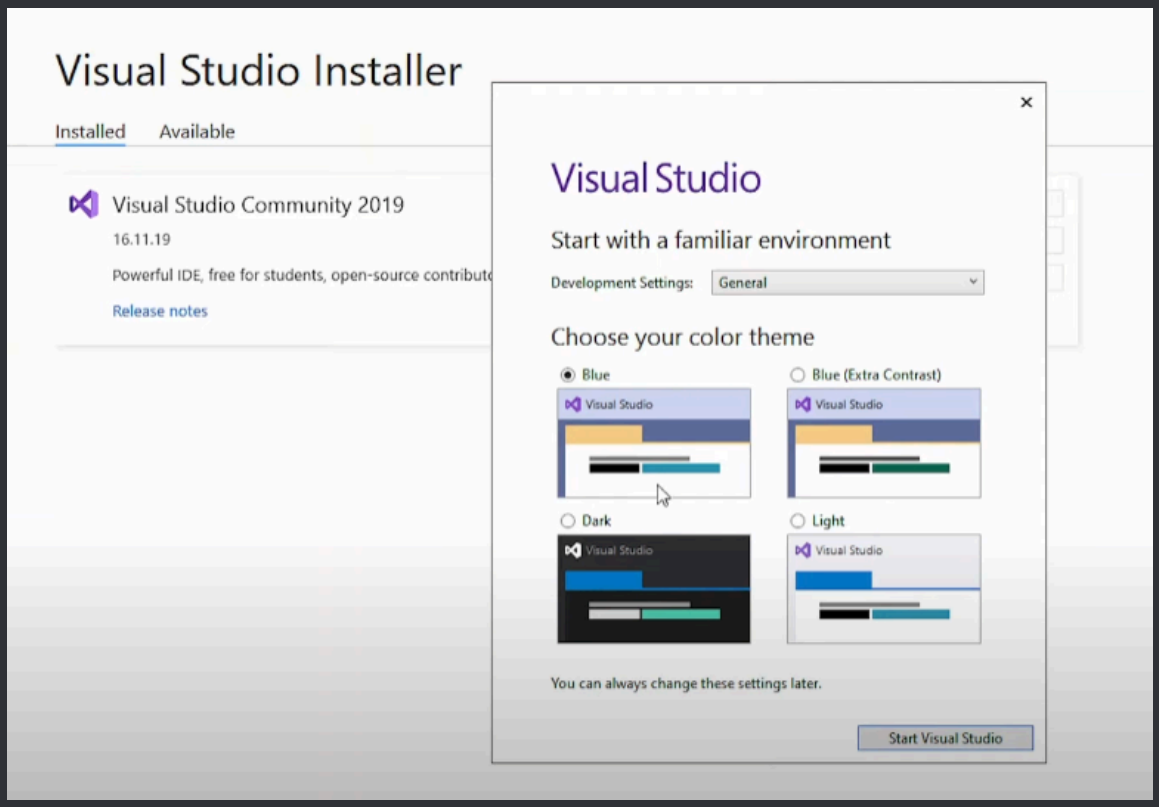
If you’re using a Windows computer, there will be modules Unity Hub will ask you to download. You only need one module, which is “*Microsoft Visual Studio Community 2019*”. ** This is what we use to edit any code in Unity. Even if you don’t plan on coding, it is still recommended so you have more control over your projects.

Make sure to check it and click Install. You don’t need to install any other modules (these modules are for different platform supports which can be installed later on if needed).



*** Please note that Visual Studio Community and Visual Studio Code are completely different IDEs, and Unity only uses Visual Studio Community to edit code within the engine. It can be easy to accidentally mix the two IDEs up if you have heard of Visual Studio or planned to install it separately.*

Once Visual Studio is finished installing, you will get a pop-up asking about the set-up you want in Visual Studio. You can select whichever theme you want, as this is how Visual Studio will show up when you edit Unity scripts and code.



Once you select your theme you can exit out of the Visual Studio launcher, as we don't need to install anything else.

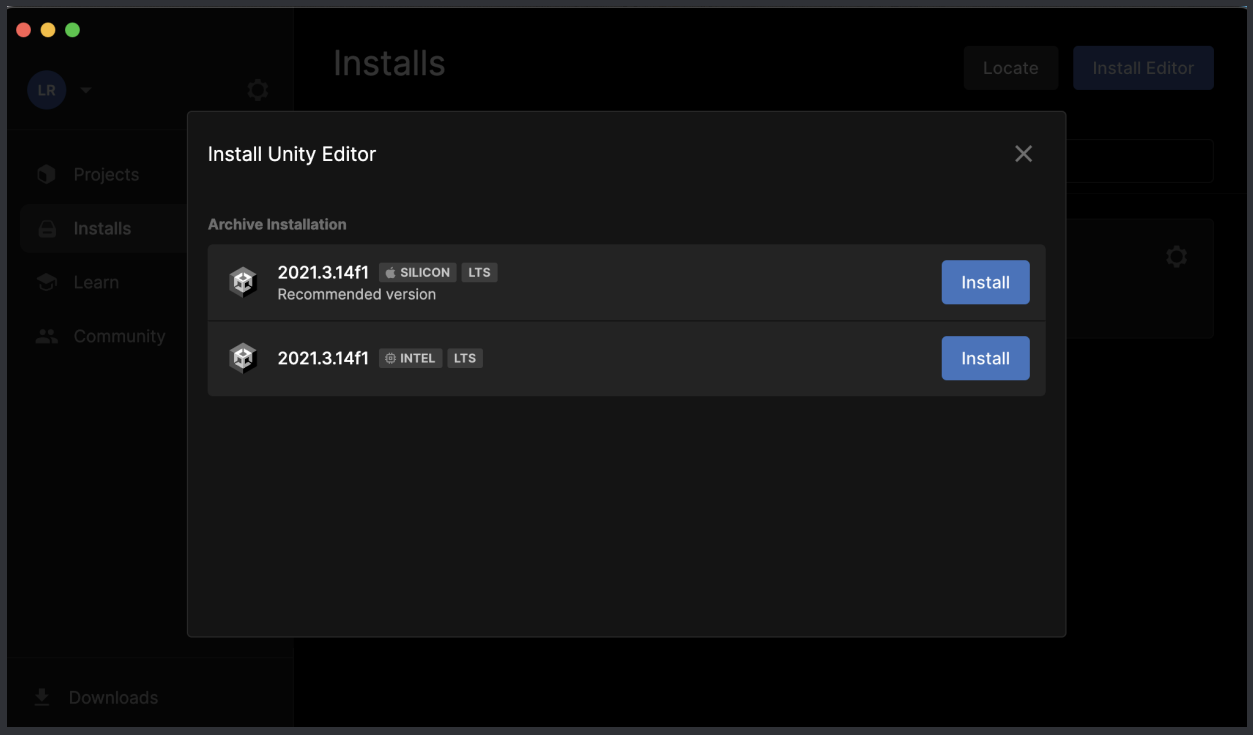
Mac OS

For Mac OS, Unity will ask you which chip version of Unity you want to install for the same version. The options listed are "Intel" and "Silicon".

Older Mac computers use the Intel version, while newer Mac computers use the Silicon version. To check which version is best for your computer, click on "About This Mac". If the chip mentions any of the M1 chips or above, then you can install the Silicon version. If not, download the Intel version.

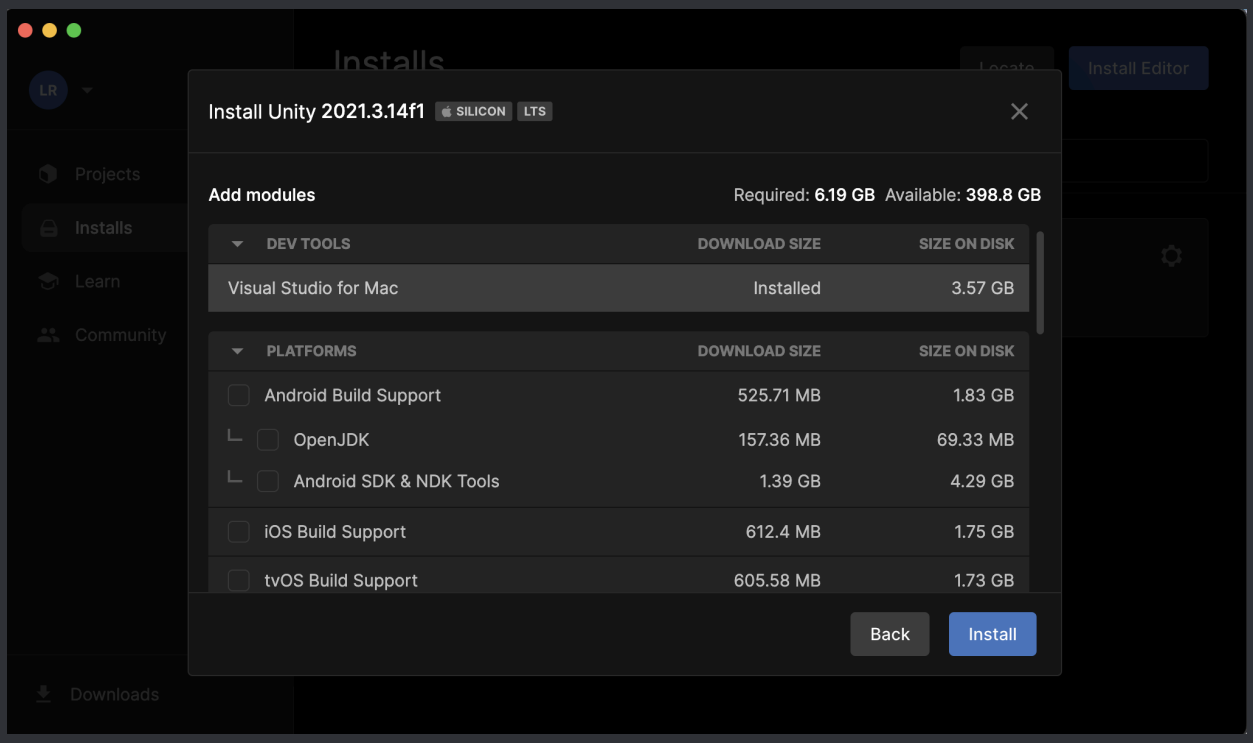
After clicking the "Unity Hub" option, Unity Hub will automatically open and give you the option to download the Silicon or Intel version. Select the Install button on the

version that is meant for your computer. (Unity Hub will recommend which version is meant for you in case you aren't sure).



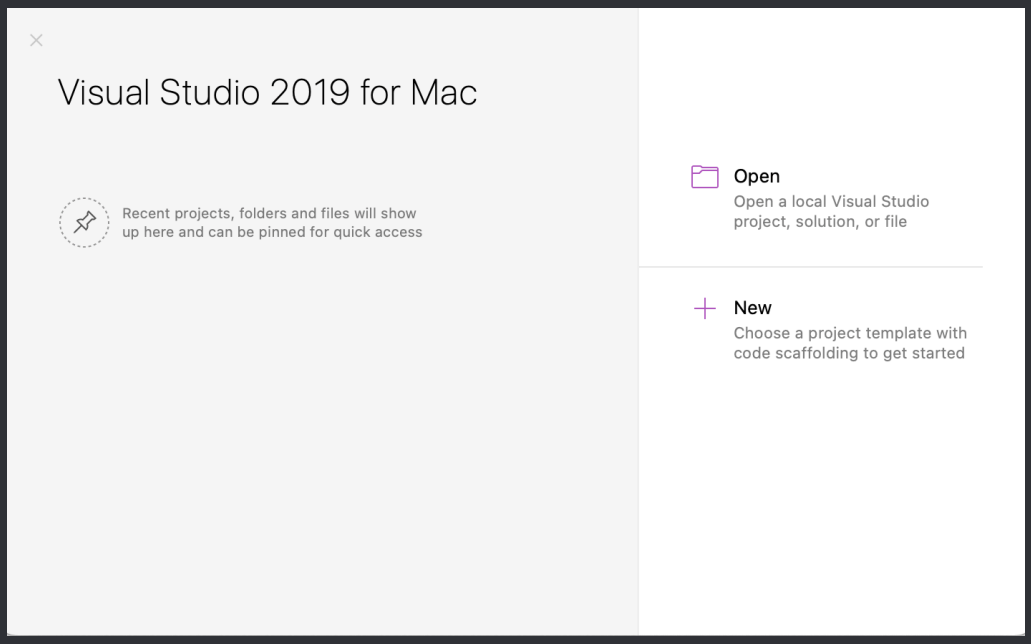
After selecting install, Unity will ask to install modules. You only need one module, which is "*Microsoft Visual Studio for Mac*". ** This is what we use to edit any code in Unity. Even if you don't plan on coding, it is still recommended so you have more control over your projects.

Make sure to check it and click Install. You don't need to install any other modules (these modules are for different platform supports which can be installed later on if needed).



*** Please note that Visual Studio Community and Visual Studio Code are completely different IDEs, and Unity only uses Visual Studio Community to edit code within the engine. It can be easy to accidentally mix the two IDEs up if you have heard of Visual Studio or planned to install it separately.*

Once Visual Studio is finished installing, you will get a pop-up asking to sign-in and about the set-up you want in Visual Studio. You can sign-in and select the key-blind setup you want.



Download Workshop Project

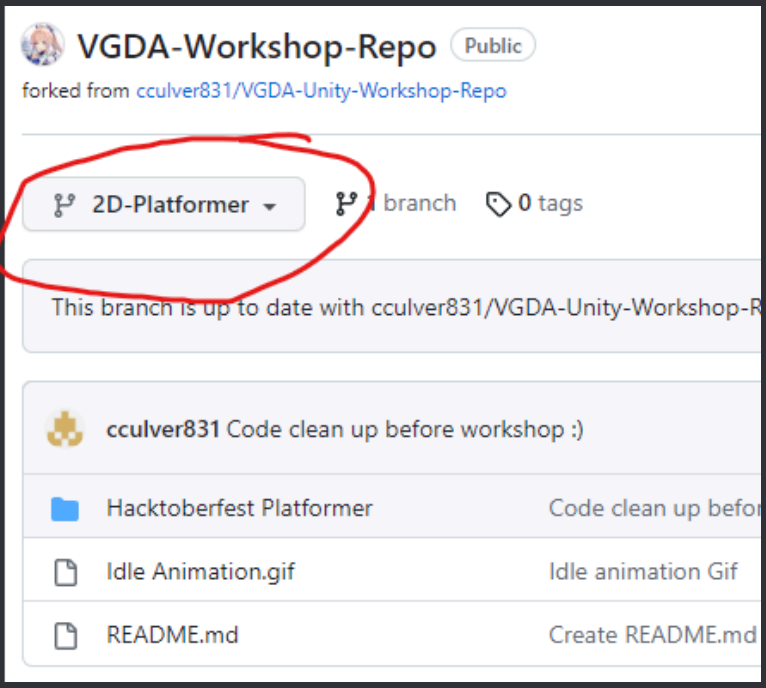
** *Need to recreate images since I need to make a new repo* **

Instead of making a new project, we have Unity projects dedicated to teach our specific workshops.

To access the Unity project files, check out our workshop repository here: https://github.com/queenaccila/VGDA-Unity-Workshop-Repo

This repository has all of the different workshops we have for VGDA, and can be downloaded locally. Make sure you are on the right workshop branch before downloading.

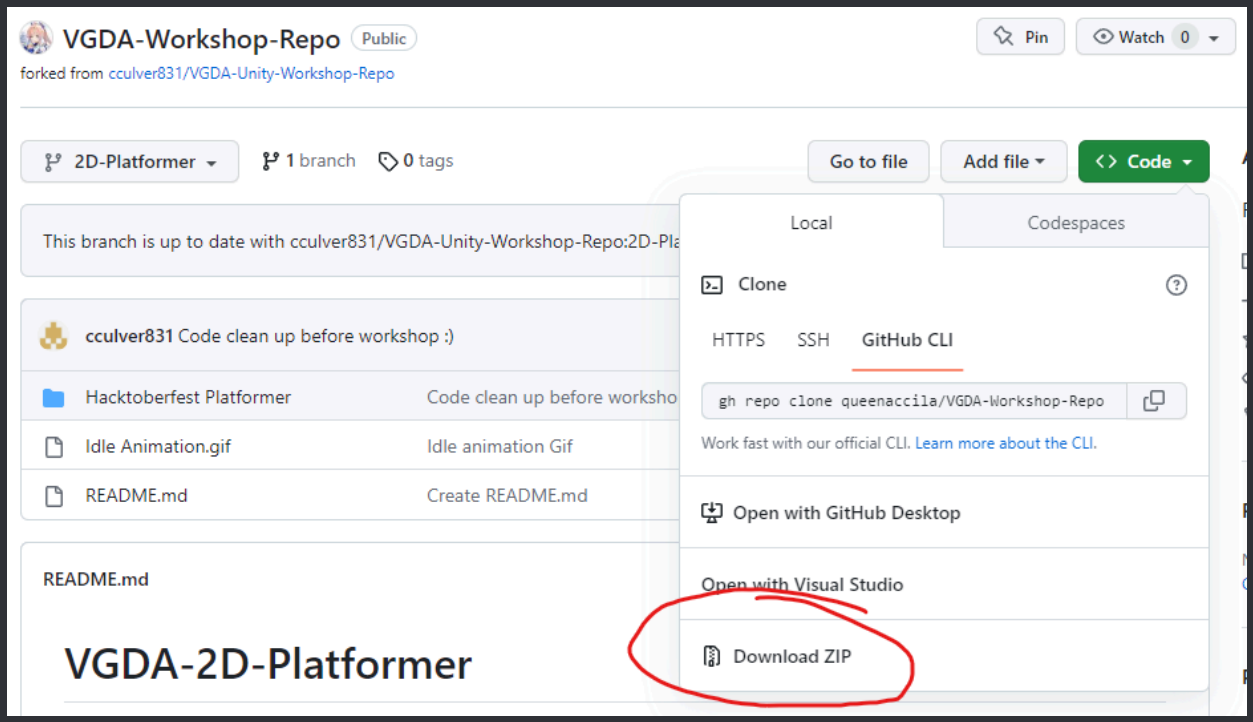
The different branches (AKA different workshops) can be accessed through here. You can click on this and click on other branches to switch to a different workshop. In this image, we are in the "*2D-Platformer*" workshop project.



*** Officers will make announcements ahead of time before workshops and list which branch we will be using for specific workshops. ****

Next, click on the green button "< > Code"

Once you click on that, there are different options to download or clone the files. Click on "Download ZIP" and the project files will start downloading.

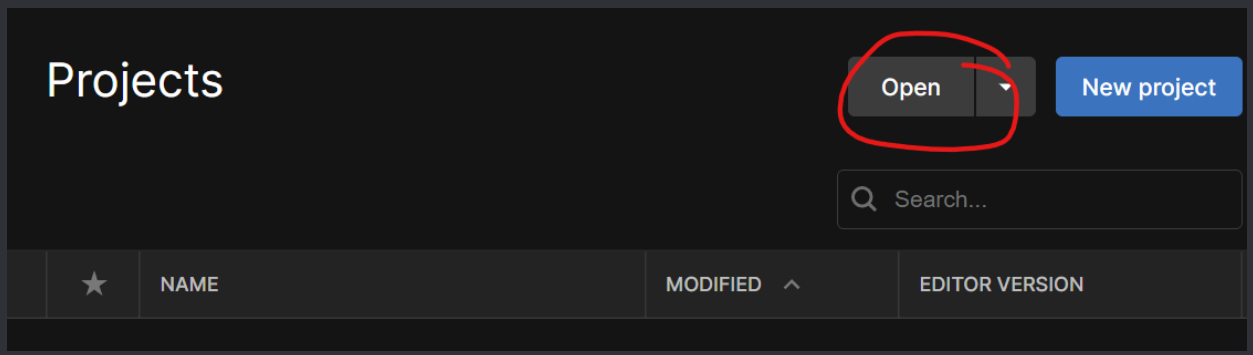


For Windows computers, open up the ZIP file you downloaded by right clicking on the file, and clicking “Extract All”.

***** Insert Mac version of unzipping files here *****

Open Workshop Project

To open up a Unity project, go to Unity Hub and click on “Open”



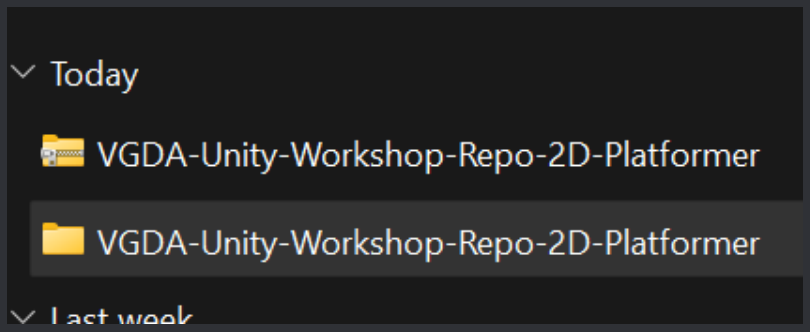
Click on the folder that you unzipped earlier, and Unity will open it. There will be a pop up asking which version you want to launch the project on, and it should be the editor we just finished downloading earlier. Once you confirm which version you want to launch it on, you're all ready to go!

It will also take quite some time for Unity to create everything onto the editor, so be prepared to wait for a while.

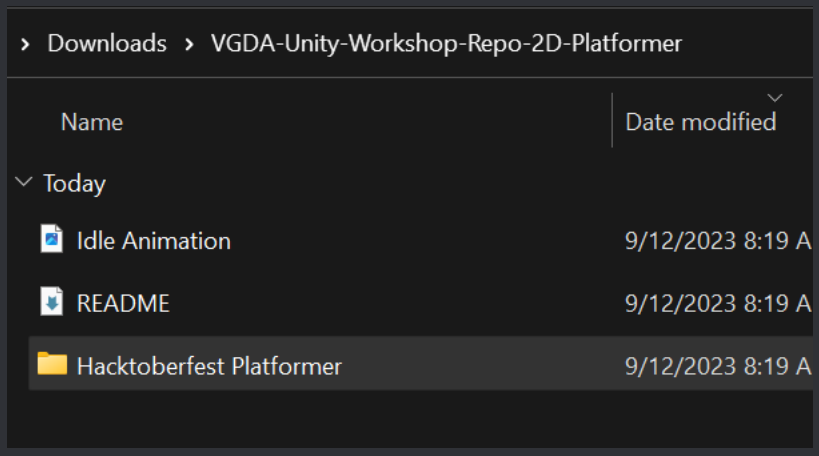
Why is Unity saying my project is not valid?

If Unity tells you that the project is not valid, make sure the folder you are opening up has direct access to all of the Unity files.

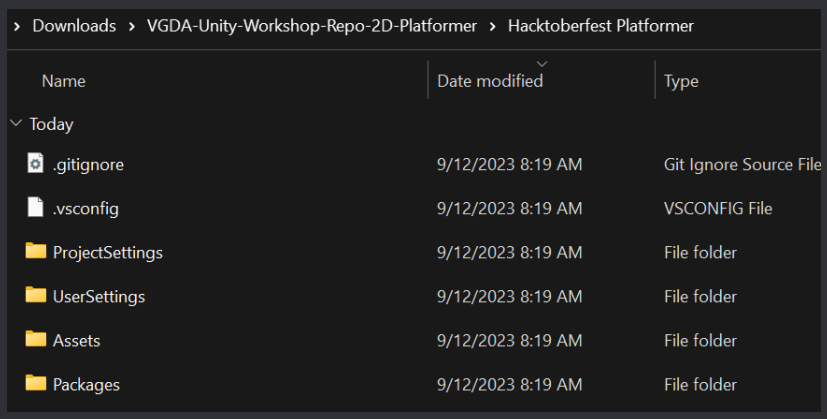
In this example, "*VGDA-Unity-Workshop-Repo-2D-Platformer*" is the folder I downloaded and extracted. But if I click on this for Unity to open up, it will tell me the project is invalid.



You need to directly go into the "*VGDA-Unity-Workshop-Repo-2D-Platformer*" folder, and "*Hacktoberfest Platformer*" will be the correct project folder to click on when opening up a Unity project.



The reason why Unity detects "*Hacktoberfest Platformer*" as a valid project is because when you open up this folder, it contains all of the Unity files such as .gitignore, ProjectSettings, UserSettings, Assets, and Packages.

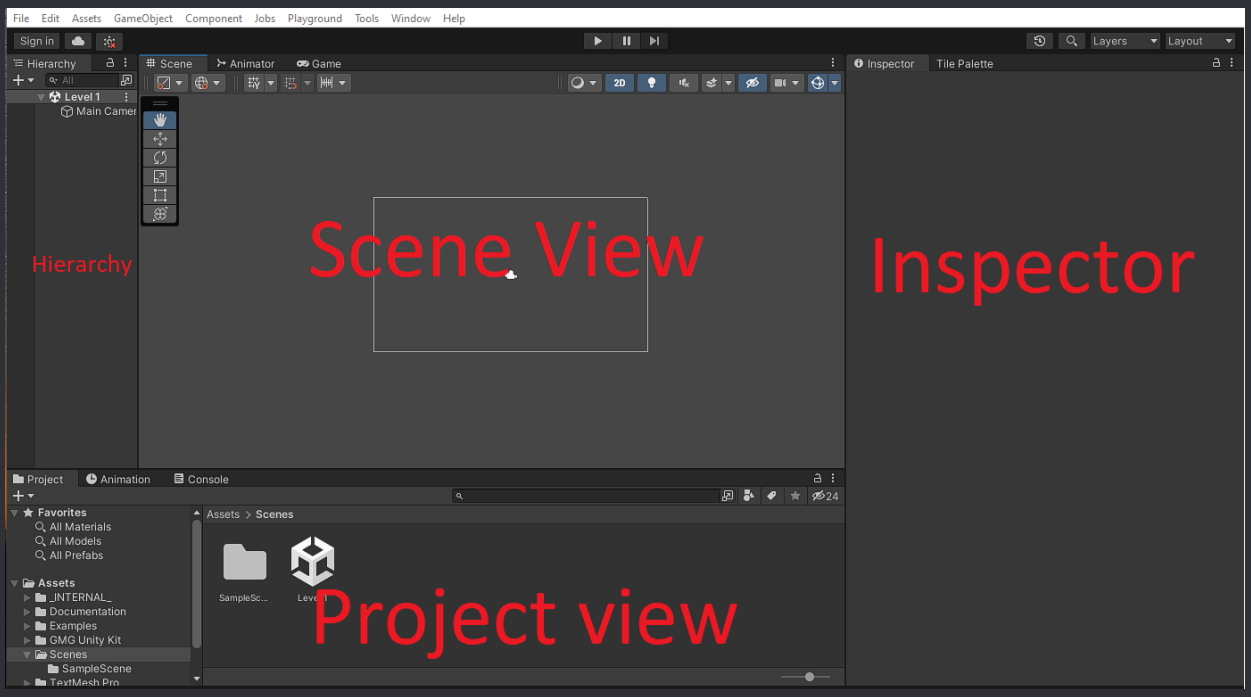


In conclusion, just remember to open the folder that can directly access Unity files and folders. Sometimes when extracting ZIP files, there is an extra folder added that can cause Unity to not detect it.

Unity Interface

Now that Unity is opened up, we can get started on our workshop! Here is a simple breakdown of Unity's interface so everything isn't too overwhelming to look at.

When you open up Unity, this is what will be shown. Because these components of the UI can be moved around and even put in separate tabs, it may look a little different, but knowing what these components are is the most important.



Hierarchy

This is used to hold everything in our current scene or level. These include cameras, objects, music, and much more! The hierarchy keeps track of all of our objects that we place into our current level or scene.

Scene View

This is where you will build your levels, edit/place game objects, and overall how you will visually build your game. We can place players, enemies, and make any changes for your game.

Inspector

When you click on a game object, the inspector will show the components of that object. For example, when you click on a player object, more than likely you will find

a sprite component that has the art of the player, and a script component that scripts out the movement.

Project View

Remember all those folders and files we downloaded earlier? They will all show up down in the project view window. The project view helps us organize and add in the art, code, music, and much more to build your game! In our workshop projects, we already have premade assets ready for you, usually located in the “Assets” folder.

There are many more things in Unity’s UI that you will use later down the line, but these UI components you should learn to know well. These will be the UI components you will be using the most when making a level in a game.

Ready For Our Workshop!

Now you’re all ready to come to our VGDA Studio Day! As you have seen already, Unity takes a long time to download as well as setting everything up. So, you are now able to make the most out of our upcoming workshop! We can’t wait to see you there!

References to Other Tutorials

If you felt like this walkthrough was hard to follow, here are some other tutorials you’re free to use or reference off of.

Just note, these tutorials may look a little different but it should still lead to the same result.

** *Make sure to download the correct version we will be using for our workshop, as these tutorials download a different version of the Unity Editor* **

*** Also note that we will NOT be opening up a new project like these tutorials have shown. We need to open up a previous project which is the workshop ***

Windows Setup
https://www.youtube.com/watch?v=gxX7euQ_2Qc&t=344s&ab_channel=GDTitans

Mac OS Setup
https://www.youtube.com/watch?v=xgRNdGuDRbw&t=3m38s&ab_channel=MammothInteractive