Building a Scene – Part II

Hi everyone! Great to see you back again.

Welcome back to the advanced course on game development with Unity. In this video, we are going to learn how to use a product of Unity called the Asset Store which is one of the most important aspects of game development. In our last tutorial we were able to learn scene navigation and the basic controls of scene view. Also, we learned about moving objects around in our scene and about prefabs or pre-fabricated objects and its reuse to create our scenes in Unity.

I am sure each one of us has played games at some point in life and we are all aware that most of the games have multiple worlds and levels. You too can create multiple levels in your game using Unity. Do you remember what we call a single level or world in Unity? Yes, it is called a scene. Now let us start working on our project by first creating a new scene. Before going ahead, we must always remember to follow a good practice to save our work. To save the progress, go to the file menu on top and select save scene option. Having done this, you should again go back to the file menu and click on the new scene option to create a new scene. It feels great, doesn't it?

It is now time for us to know more about the Asset Store. As you learned before, video games are made with 3D models, animations and several other assets. The Asset store is a huge collection of ready-made assets that are made by video game developers from all over the world. Some assets are paid, while some assets are absolutely free of cost. Potential game developers can use these professional quality assets in their own video game. To visit the Asset store, go to the top menu and from the menu select Windows option and click on Asset Store. A window would appear beside the Scene view. The Asset store window is like a web browser. It has a search bar which you can use with the available search filters. Assets are downloaded in the form of compressed folders from the Asset store called Asset packages.

We can start by searching for 'House' in the Asset store search bar. You will notice a category named Pricing on the right side of search results. Check 'Free Assets' to filter assets available for free to use. Left click on the thumbnail after

the result appears. You will be able to see the title and pricing of the asset below the thumbnail. After the asset page loads, we proceed by clicking on the download button. The download button would change to "import" once the download finishes. Click on the import button, Unity will take some time to uncompress the asset package and you will get to see the dialog box. We have successfully downloaded our first asset which we will be using in the game.

We will now focus on building the Earth layout, for which we would be requiring land, plants and many other resources. Hence, it is time for us to visit the Asset store again. On the search bar, search for "Realistic Terrain". If your window is too small to see all the assets properly, you can always zoom the window by holding the window border and dragging it. You will notice a column named pricing. Check for "free assets". Scroll down if necessary and locate "Realistic Terrain Collection". Download the asset from the Asset store, like we did in the previous step. A new folder named "Realistic Terrain Collection" would now be available. Select the folder and double click on the terrain folder. Next, Open 'Terrain1' folder and locate 'Medium Resolution Terrain'. Drag and drop the asset on top of the hierarchy window. Double click the terrain gameobject to focus on the selected gameobject on our scene view. As we learned in the previous tutorial, let's rename the Terrain gameobject to 'Earth'. Use your mouse scroll wheel to zoom in and use the move keys to take a trip around this terrain.

As we are rebuilding our earth, we also need to have mountains and land in our scene. So next, we would search for trees in our asset store. In the same way, we downloaded Terrain, let us search for free 'Tree assets' from the Unity asset store. You can follow my steps and download the same asset I am downloading from the asset store or you are always free to make your own choices. So, download a tree asset from the asset store of your choice.

So next, we would start painting or placing trees on top of our terrain. While the terrain gameobject is selected, locate the component labelled Terrain. Select the third Option called 'Paint Trees'. Locate and click on the 'Edit Trees' button. Select add tree from the menu that appears. A dialogue box will appear asking you to assign a tree. On the dialogue box interface, click on the little circle beside the field labelled 'Tree Prefab'. This will open a prefab explorer from your Project assets. Browse and search for the 3D model of the tree you want to paint. We

will be selecting a tree that looks good to me. The trees you can see in the explorer are a part of 'Tree packages' that you have downloaded from the asset store. Click on Add to add the tree. You can add more trees to your Tree palette as well.

Before painting trees on your terrain, remember to set the brush size i.e. the size of the circle inside which trees would be painted. You can hover your cursor over the terrain to see the change in brush size. Changing the tree density would determine how closely your trees would be painted. A lower density means trees would be painted far away from each other. Use your mouse and arrow keys on your keyboard to find a location to paint trees. As you hover your mouse on top of the terrain, you will see a blue circular brush. Left click on the location for planting trees along the brush. You can also change the Tree height. We can continue to add one more type of trees to our pallette to add diversity in our vegetation. We will follow the previous steps to add a new tree. Click on "Edit Trees" again, and select Add tree. Browse and scroll all the way down to locate a different tree this time. Click on add to add the selected tree. A new tree would get added on the Trees palette. Select the newly added tree and find a proper region on your terrain. Left Click on the region and paint the trees.

Let's now create the desired landscape.

I am sure you are finding the mission of reconstructing the earth very enjoyable?

Let us quickly recap what we learned today. In this video, we got to know how to use Unity's terrain system and we learned to browse and find relevant assets from the asset store. In the next video, we will learn about enhancing the landscape.

So much for today then. Look forward to see you in the next video! Bye bye!