

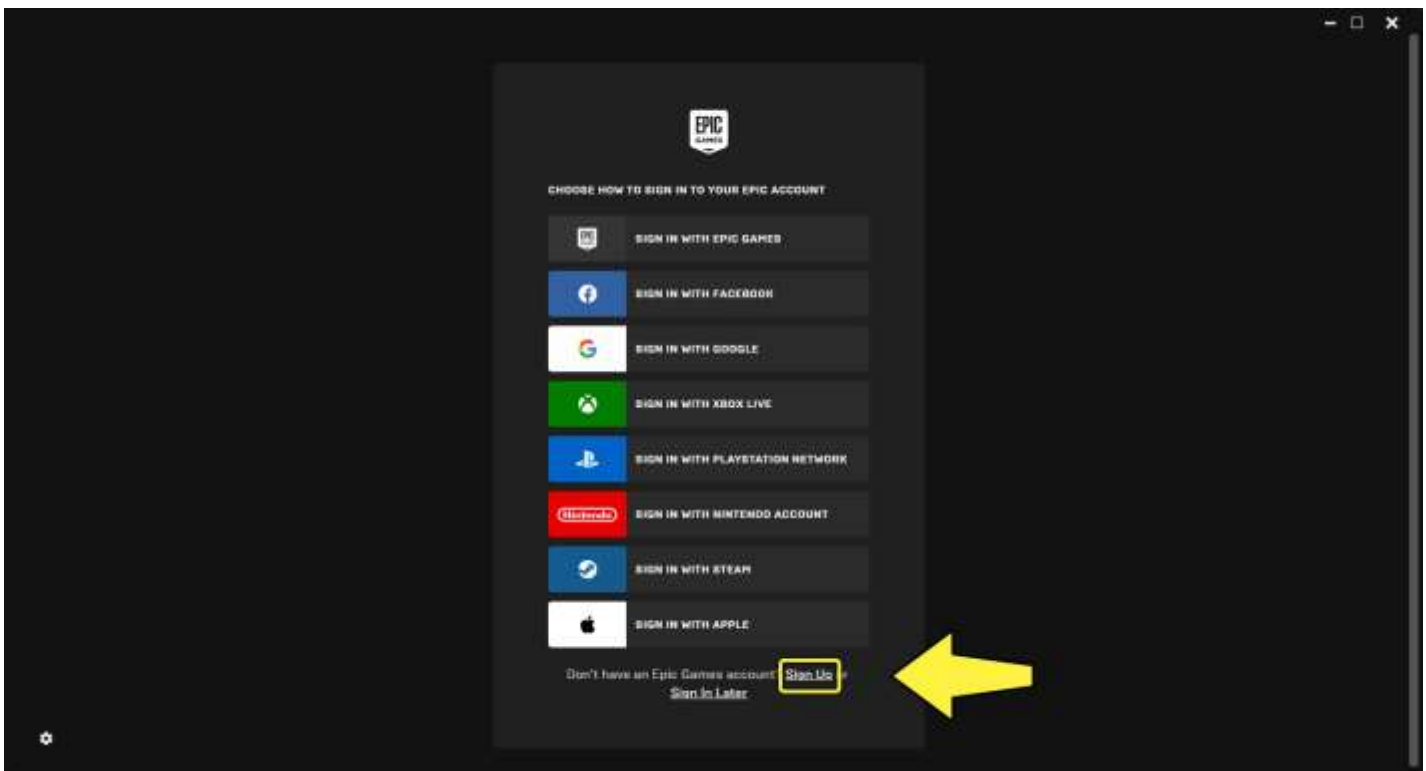
## Design Challenge

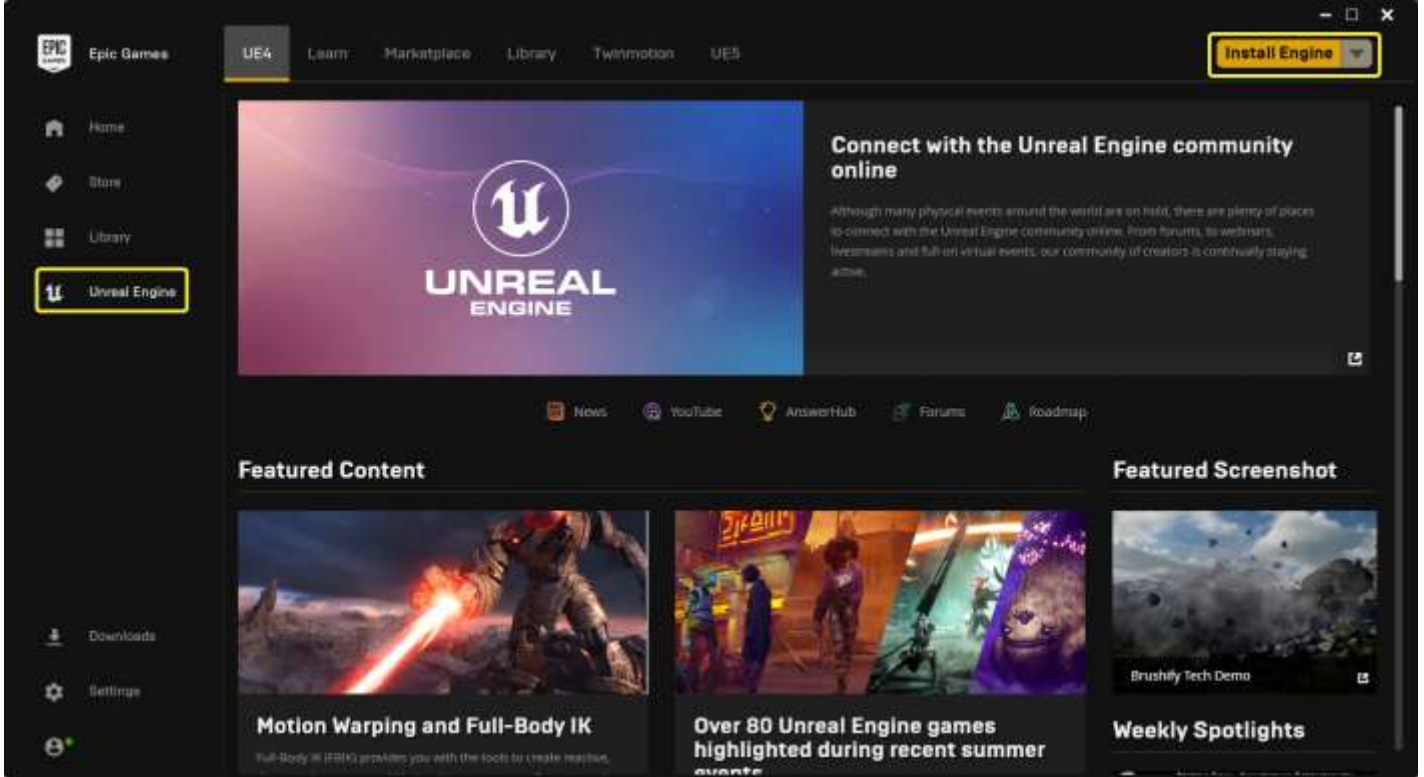
Environmental Designers are the designers that create the in-game world for dynamic gameplay. They also create the maps, ecosystems, and other elements that surround the in-game environment. In this tutorial, I will be focusing on tree and ground placements for an environmental aspect of my in-game design challenge.

Creating a landscape environment with the unreal engine!

### Step 1: Download the software and create an account

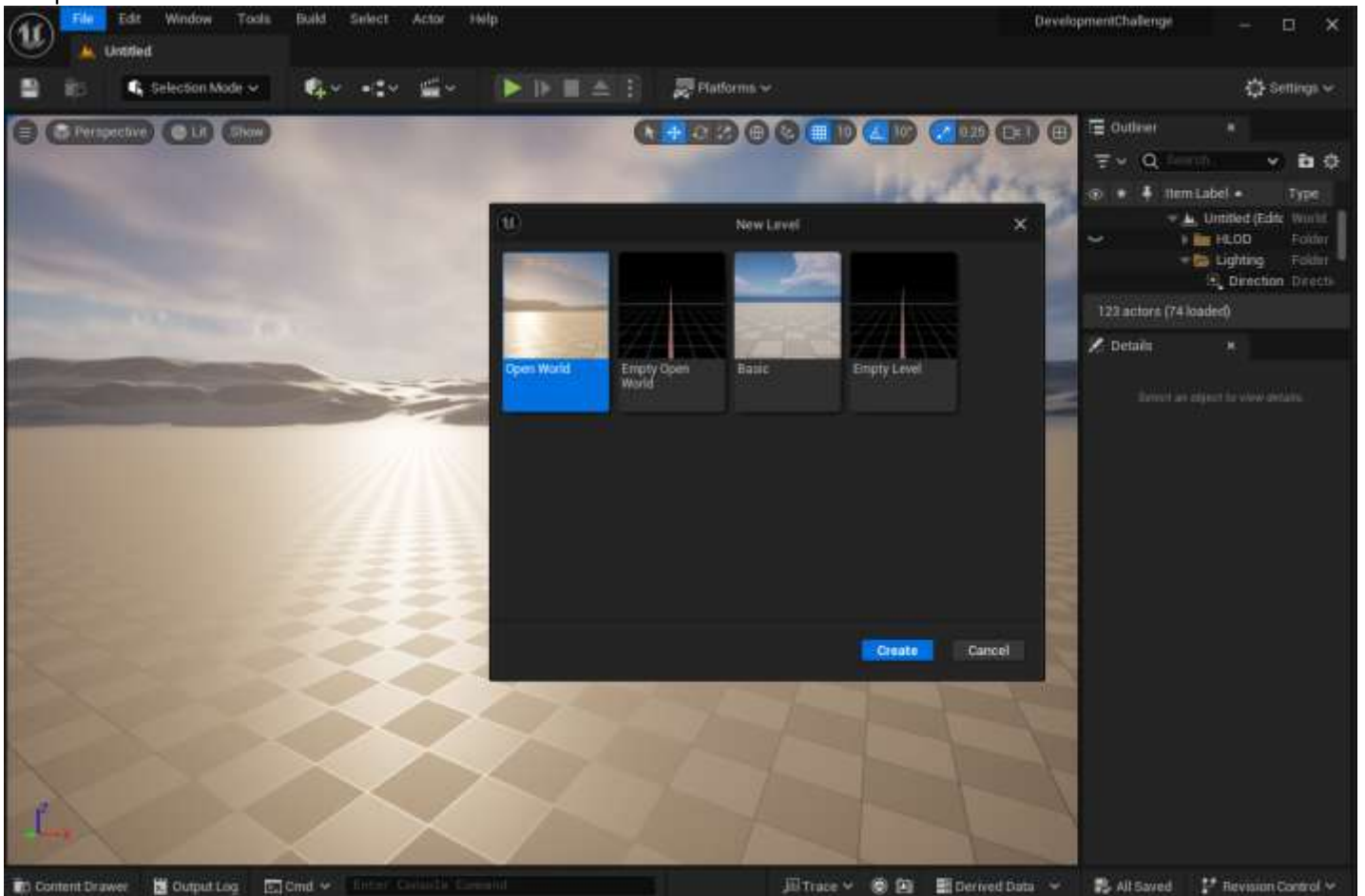
Download the software from <https://www.unrealengine.com/en-US/unreal-engine-5>, click on the download icon located in the top right corner of the page. Download the launcher. When the download has finished, create a free account. The launcher should appear and download the unreal engine software.





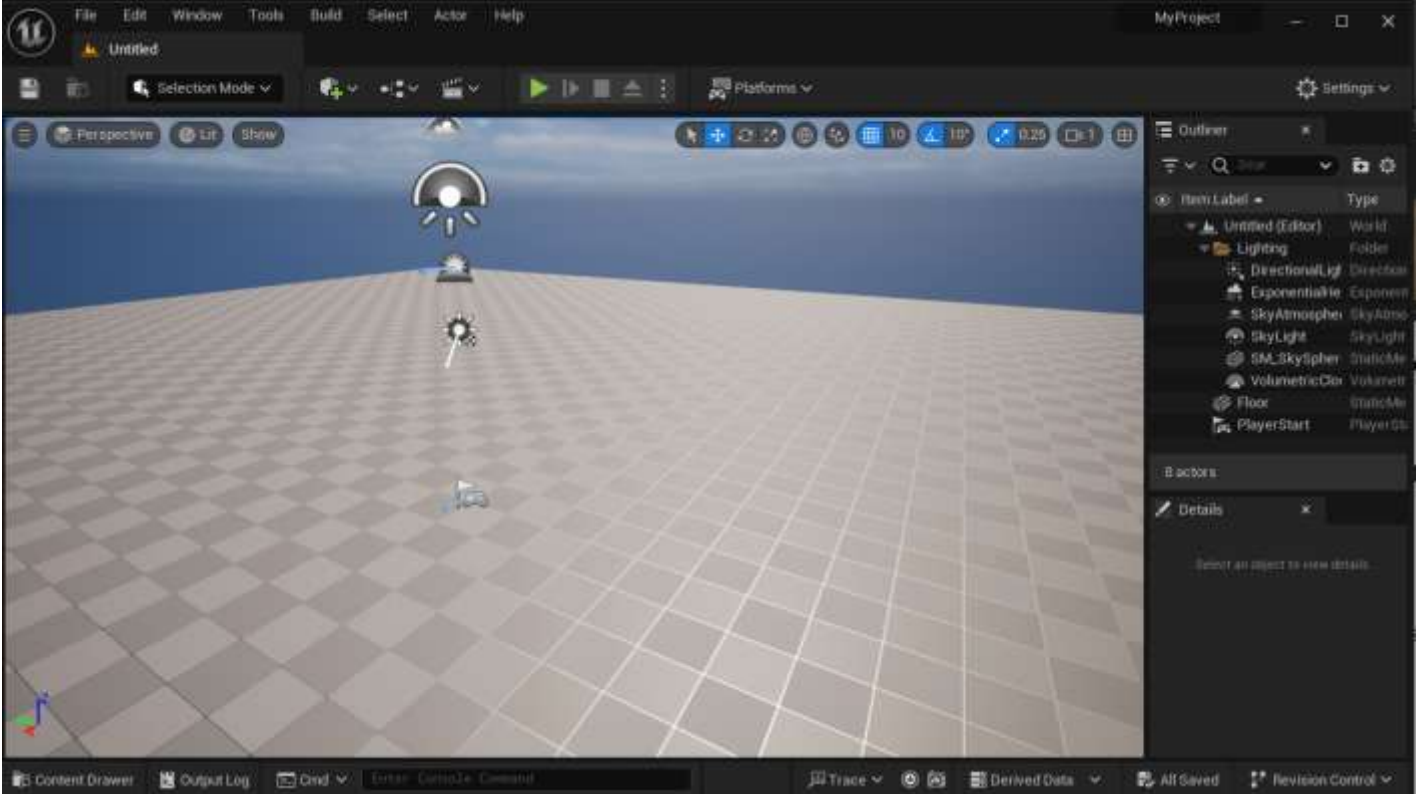
## Step 2: Getting Started

After the download click on the icon to launch software. A screen should appear. Go to the file, click new level, and click on open world or basic world to start.



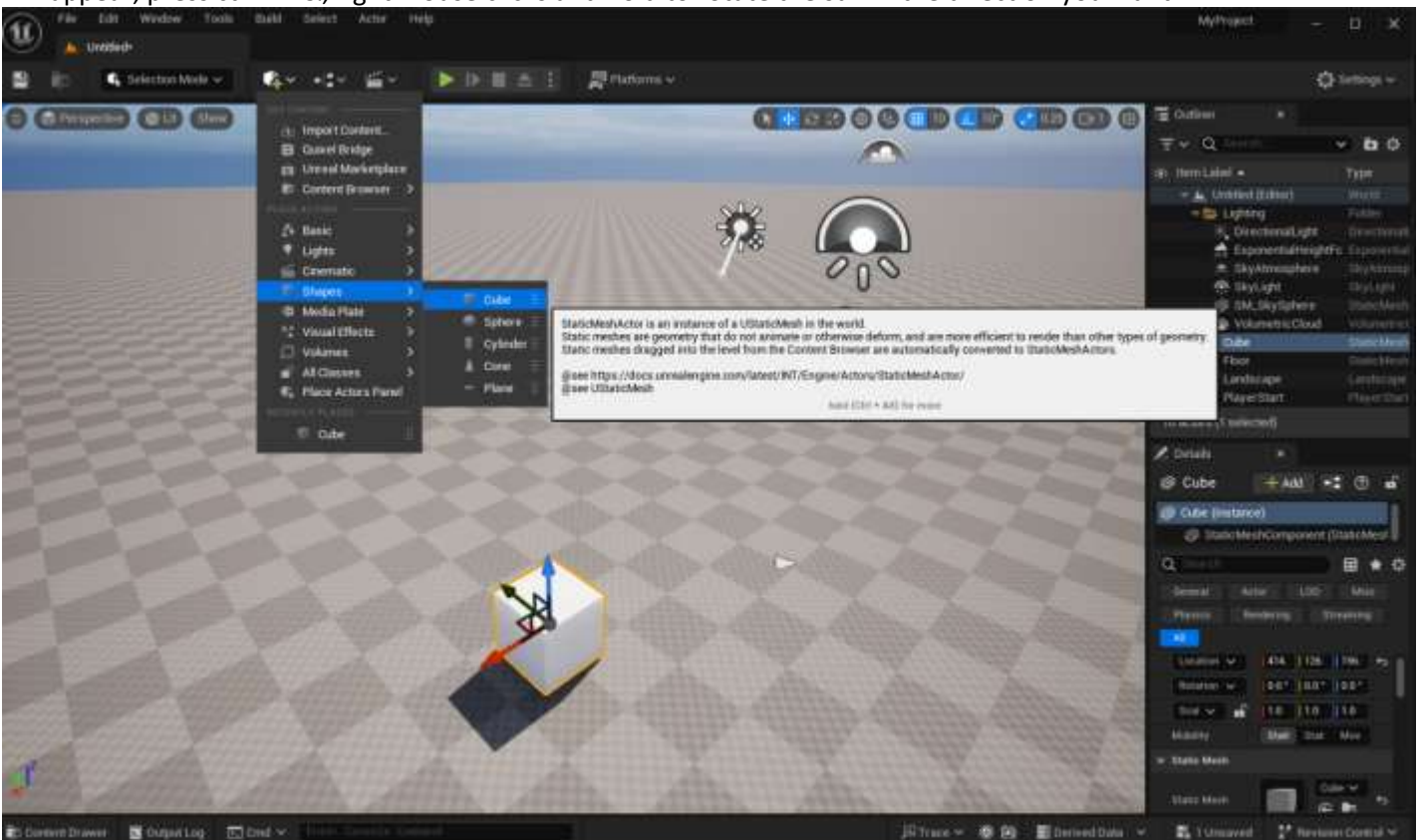
## Step 3: Creating a landscape play area.

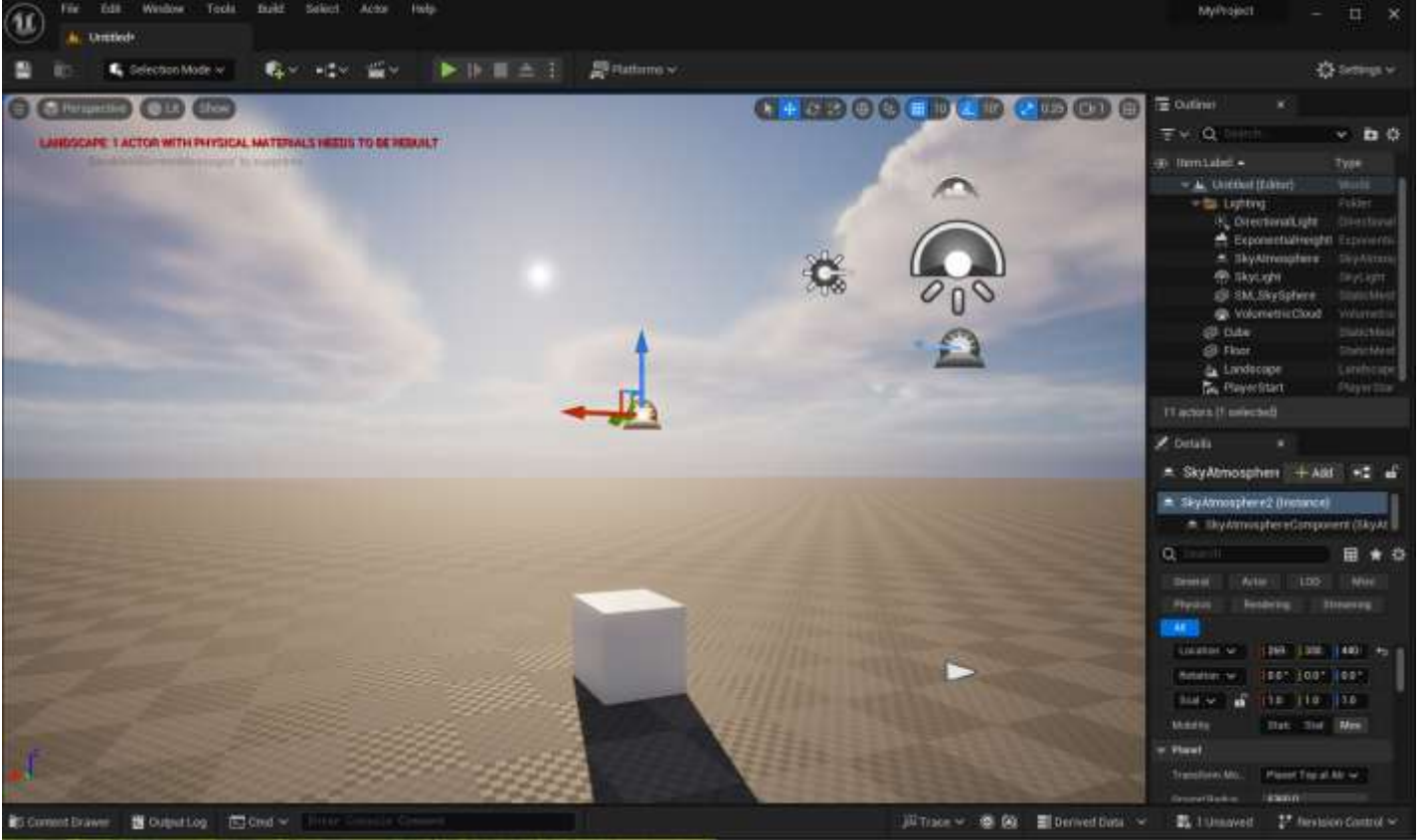
I choose basic. Under the Untitled tab, Click on the drop box for Landscape Mode. The left side panel will appear, click Create. Then click on the selection Mode again in the drop-down menu for mouse selection.



#### Step 4: Creating lighting.

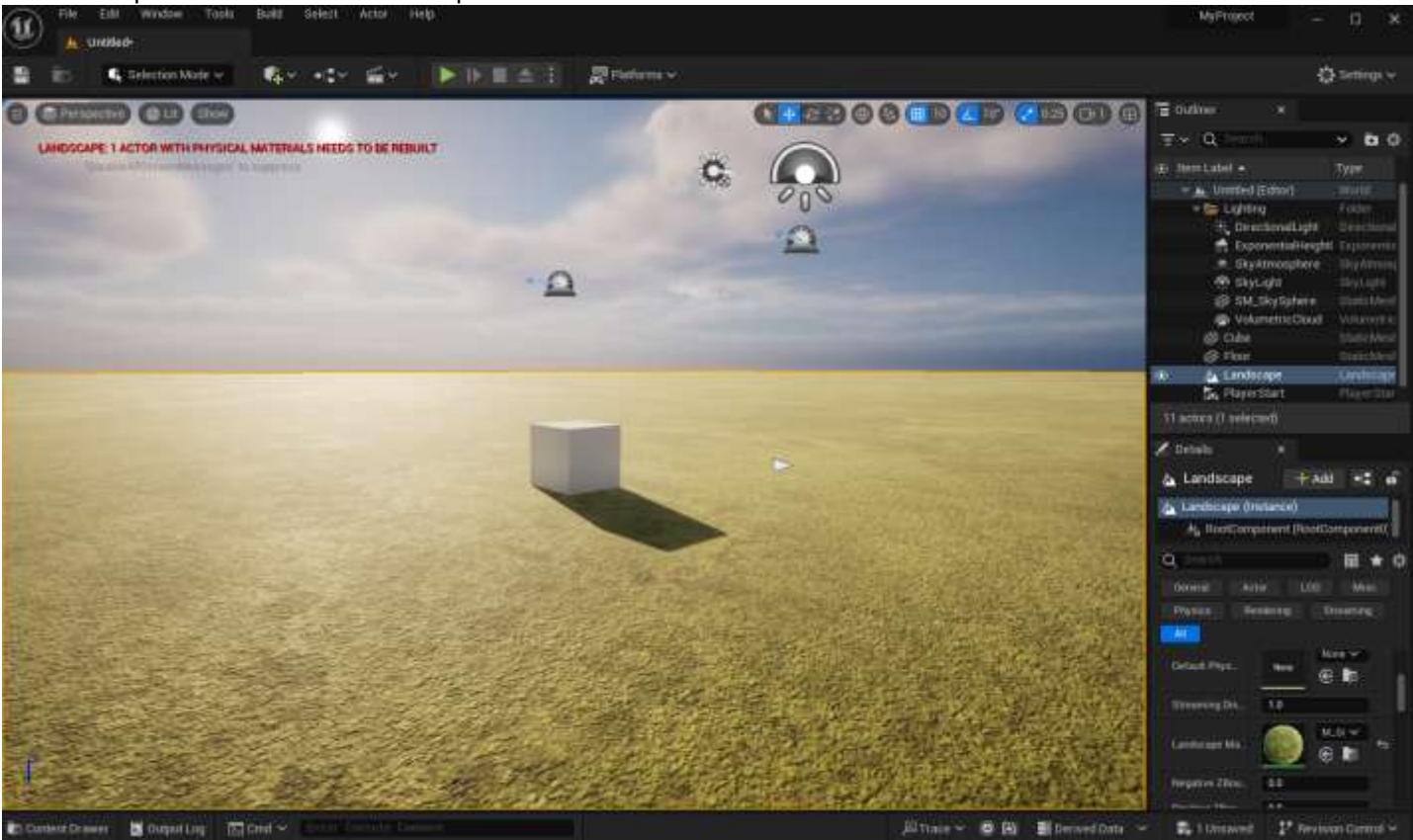
Click on the shield+ button and place a cube for lighting direction. After placing the cube click sky atmosphere, and a sunbeam will appear, press ctrl + L &, right mouse clicks and hold to rotate the sun in the direction you want.





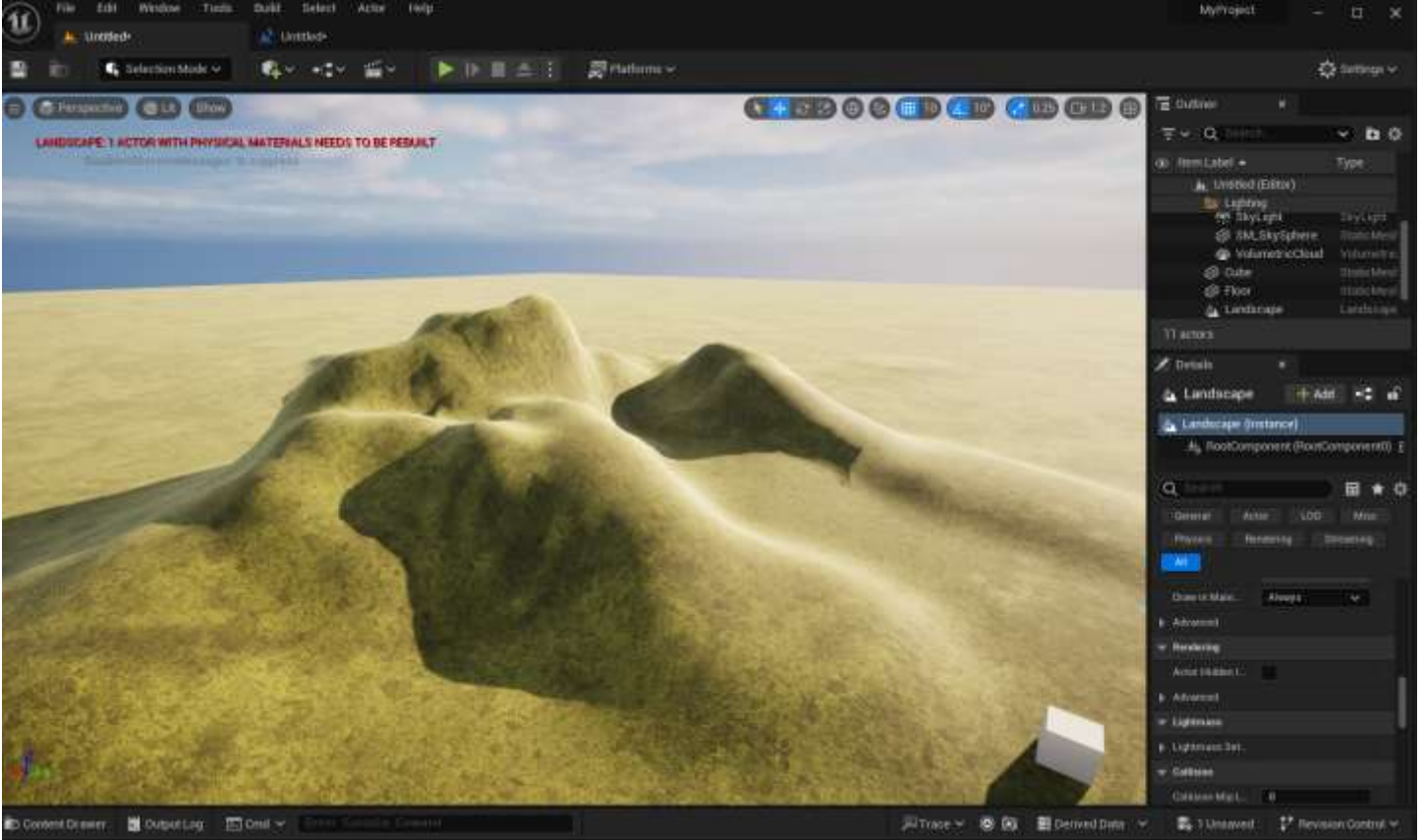
### Step 5: Placing the Grass.

Click on the Content Drawer to open the bottom panel, click on the starter content folder, click, and drag a grass content to the side panel under details landscape material.



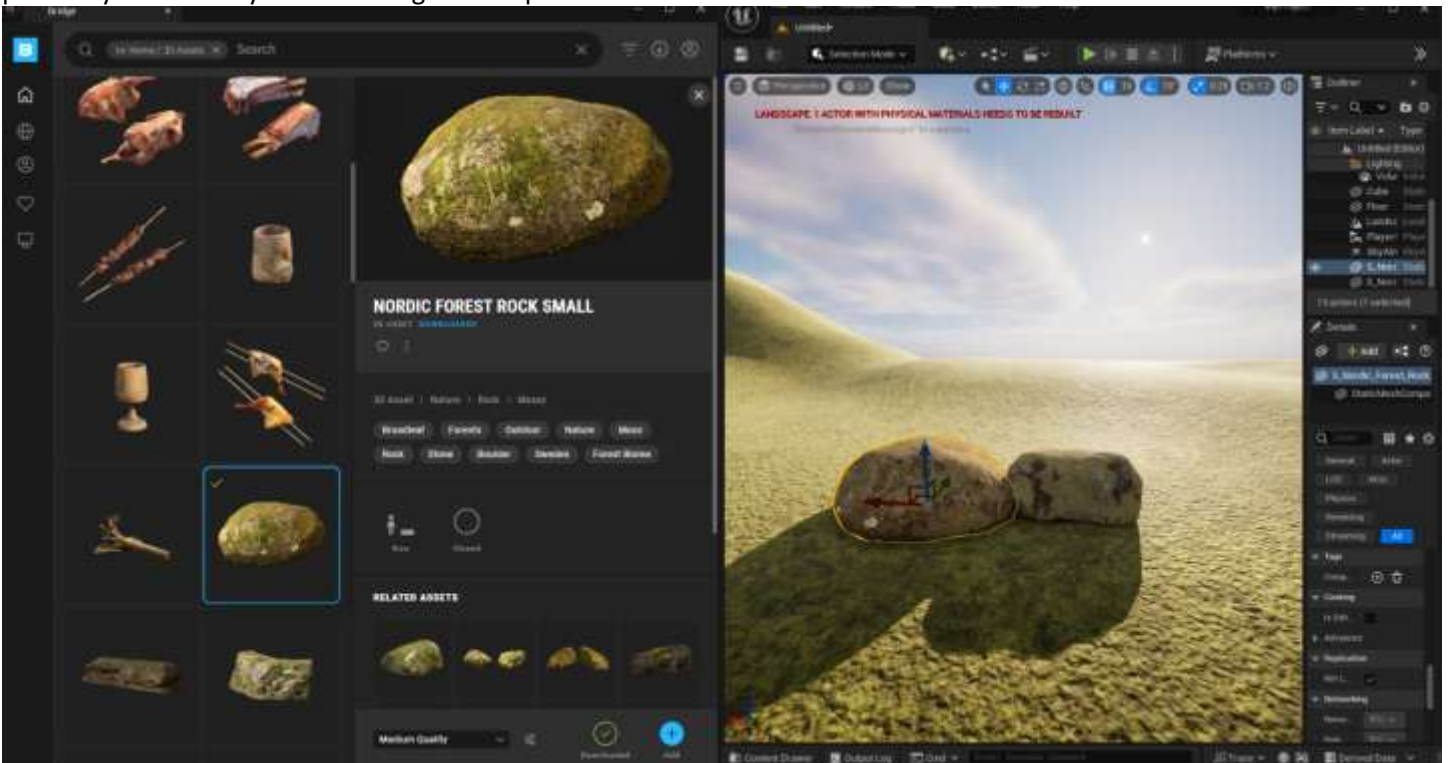
### Step 6: Creating Mountains

Click on landscape Mode again. Left-click mouse click and drag a place cursor where you want the mountains to exist. Or can go to the Quixel Bridge and drag-drop a mountain into your play area



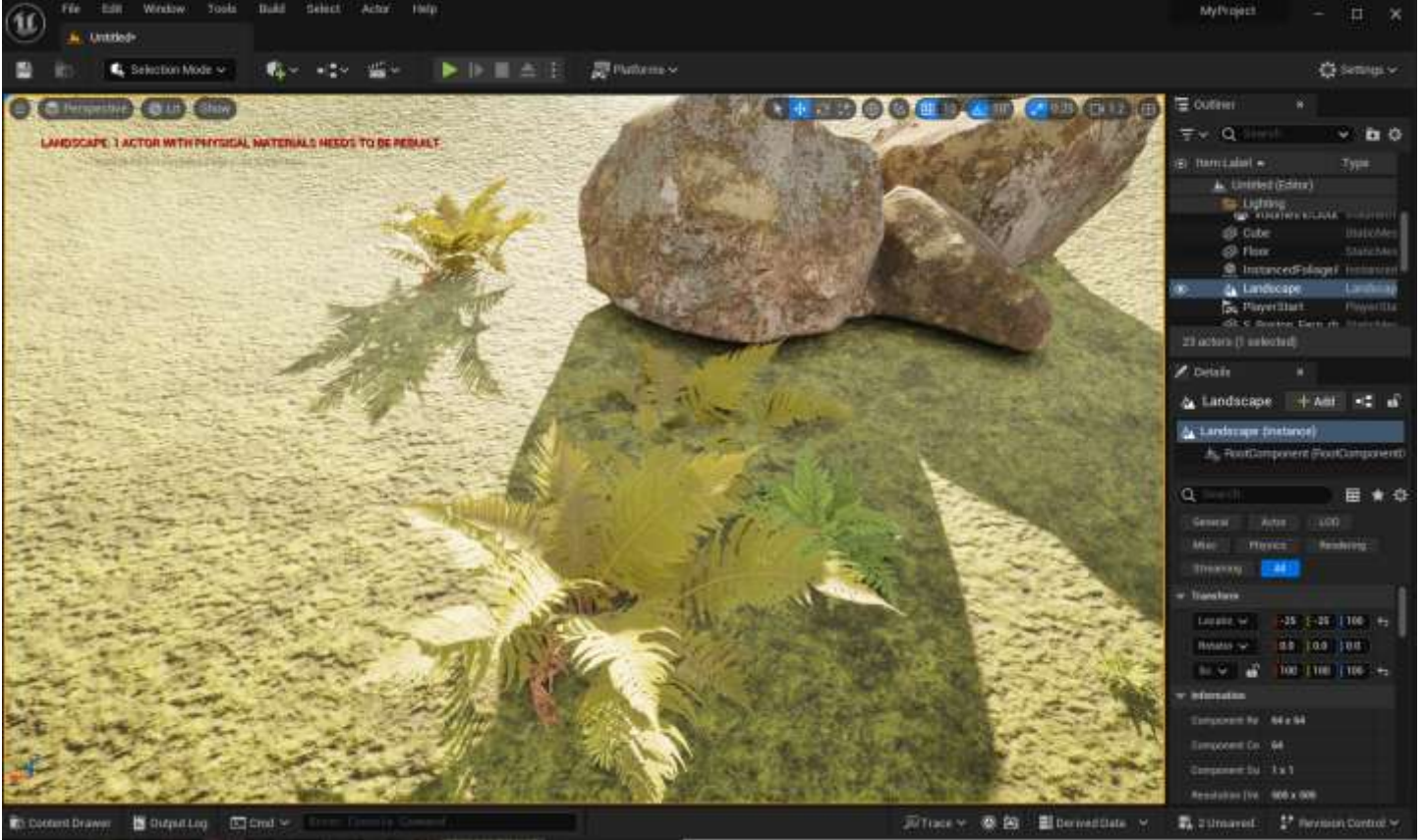
### Step 7: Inserting 3D objects.

Go to the shield+ button again and click on Quixel bridge to add content. Once you have signed in find objects you like to place in you would by left click drag and drop.

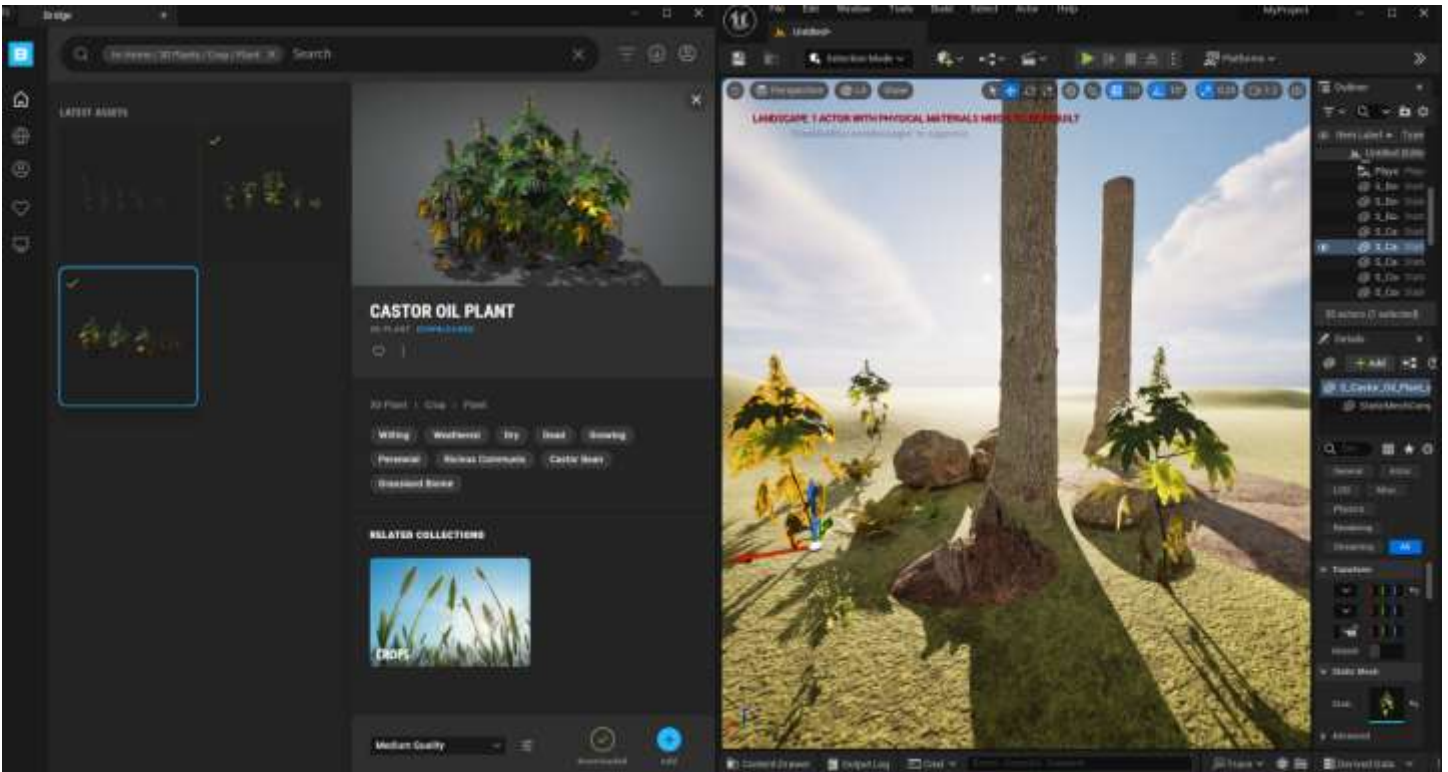


### Step 8: Inserting Plants

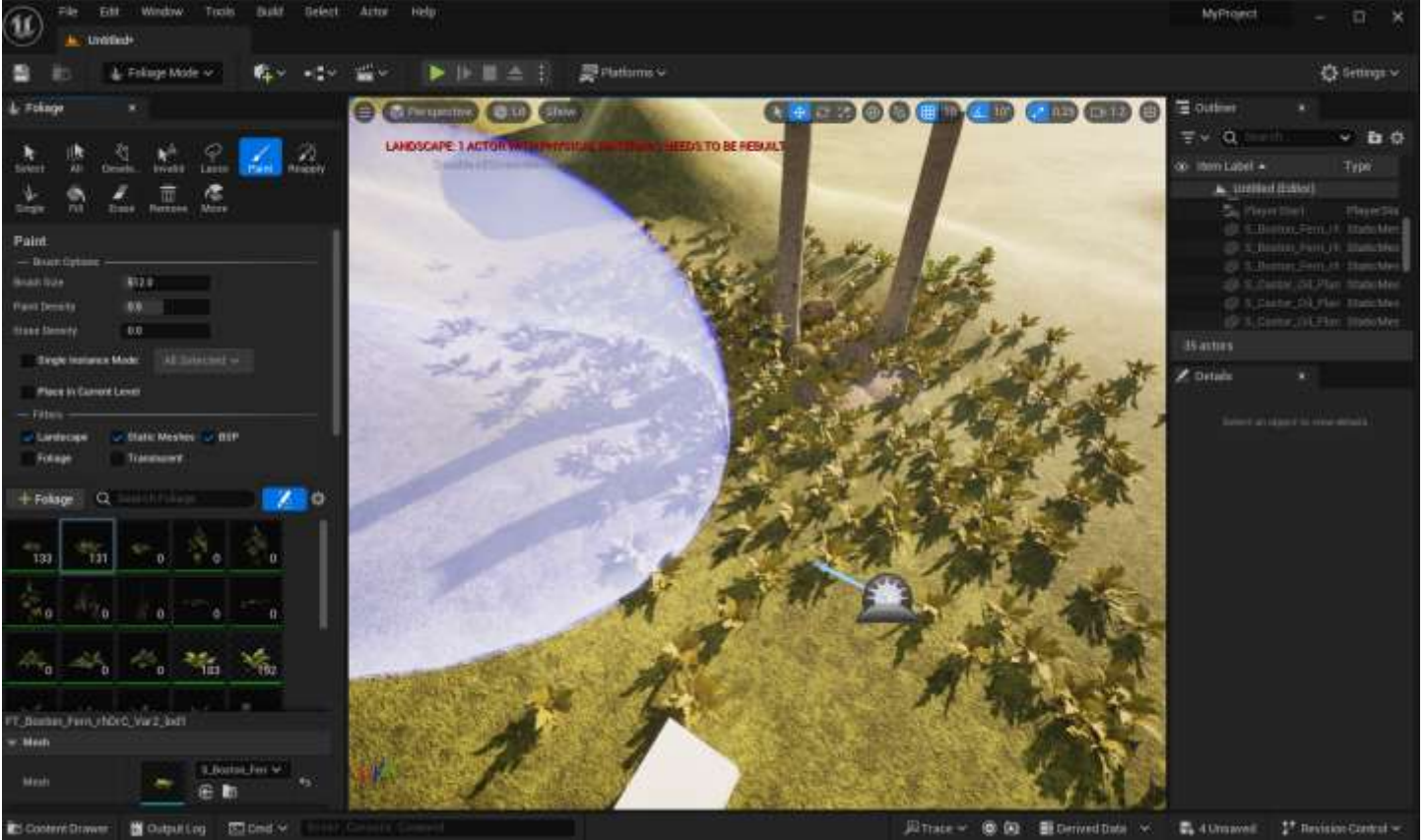
Go to the shield+ button again and click on Quixel bridge to add content. Click on any plant variation you like and left click and drag to the play area.



You can add any object to your play area just by clicking and dragging. Below are more items I have placed following step 8.

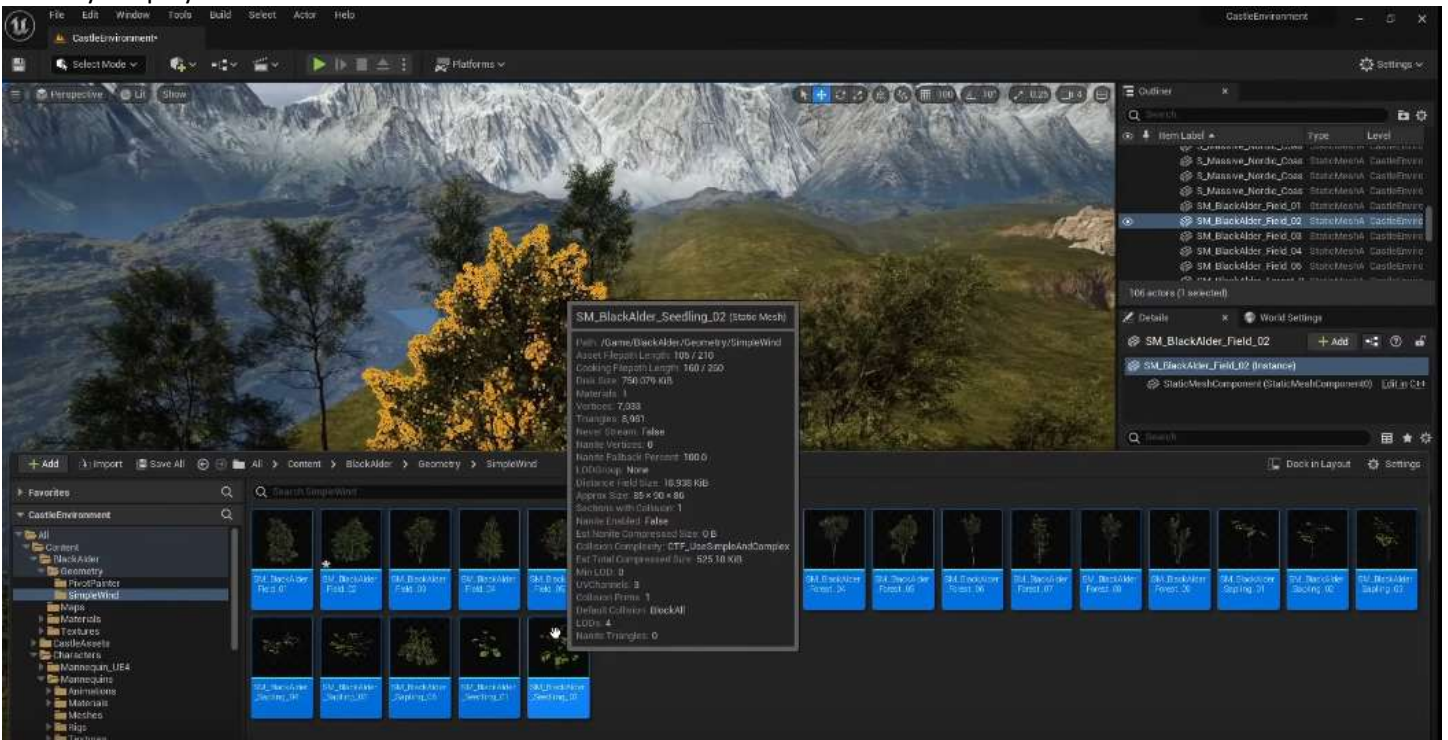


If you want to add more objects or plants, go to Foliage Mode under the Untitled tab. Click on paint, then select the plant or object you would like to multiply in your play area. A blue box should appear in your play area. Click & drag the area you want to multiply the plants or objects.



### Step 9: Adding trees.

Go to the unreal engine marketplace and search Megascans Trees or any tree content and download your project. Click on the add to project. Go back to your play area, click on the content drawer, click on the new folder common hazel or the content you just downloaded, click geometry, click on simple wind or the tree content folder, and highlight all the trees listed in your folder, left click drag-drop to play area for all trees to be placed in your world. Wait for all the trees to add to your play area.



### Step 10: Finished Product

The result should look like a semi-finished forest environment for this tutorial, with trees, grass, rocks, a mountain in the background, and flowers.



If you continue to drag and drop and use the foliage tools to add the contents to your environment, your result could look like the below image.

