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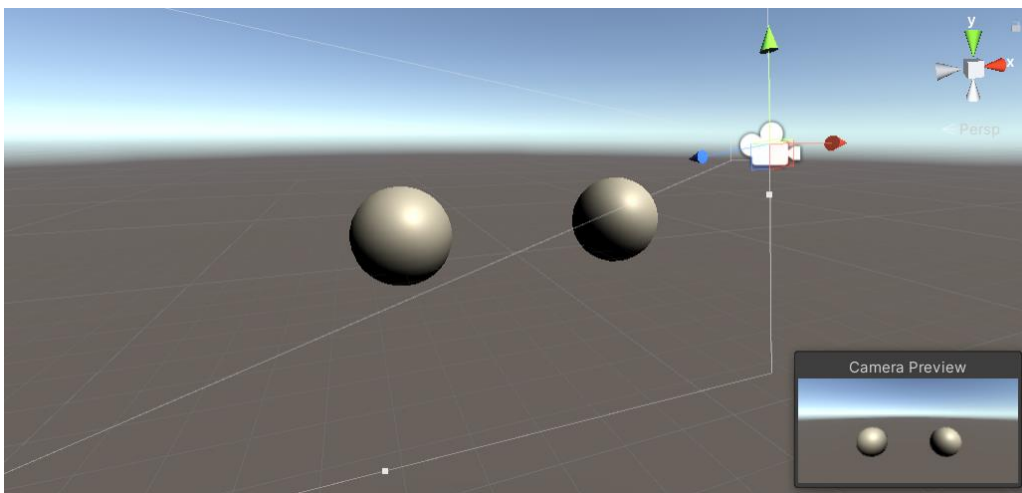
Pointing and clicking tutorial

In this tutorial I will explain to you how to implement point and click script in your 3D game

STEP 1

Create a simple scene with a couple of 3D objects, positioned in front of the camera, we will create new tags for these two spheres by opening the “Tag” curtain menu when looking at an object through the Inspector and pressing “new tag”. We will create a “sphere1” and “sphere2” tag and attach it to the corresponding.

Then create an empty GameObject to which we will attach a new script, that we will name “GameController”

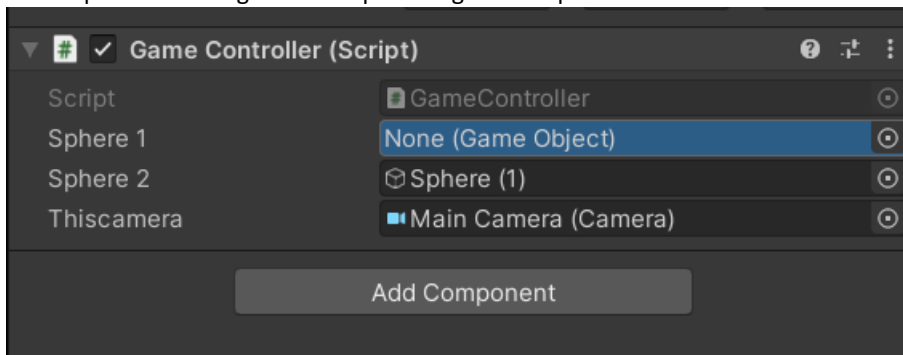


STEP 2

In the GameController script we will declare a few public variables, two that will reference the two spheres and another that will reference the main camera

```
public GameObject Sphere1;  
public GameObject Sphere2;  
public Camera thiscamera;
```

We then get a reference to the objects in the scene by dragging them from the hierarchy onto the apposite slots that show up when looking at the script through the inspector



Then we declare a few more variables for future usage

```
public Transform hit;  
public Transform target;
```

STEP 3

Inside the GameController script we create and use a Raycast to target one of the two spheres. Raycasts are basically rays that we can aim in different directions and register if they hit anything.

In the update we write:

```
if (Input.GetMouseButtonDown(0))  
{  
    RaycastHit hit;  
    Ray ray = thiscamera.ScreenPointToRay(Input.mousePosition);  
}
```

This script, upon receiving a left mouse button input, will create a raycast named ray that starts from the camera and goes in the direction where the mouse is clicking

STEP 4

Underneath the ray declaration and always inside the input if clause we write:

```
if (Physics.Raycast(ray, out hit, 100.0f))  
{  
    if (hit.transform.CompareTag("sphere1"))  
        Debug.Log("Sphere 1 hit");  
    if (hit.transform.CompareTag("sphere2"))  
        Debug.Log("Sphere 2 hit");  
}
```

This if clause will first check if we hit anything in 100 units with the ray Raycast, then it will check the hit object's tag.

If the tag corresponds to one of the two that we are looking for then the Console window will show the corresponding message