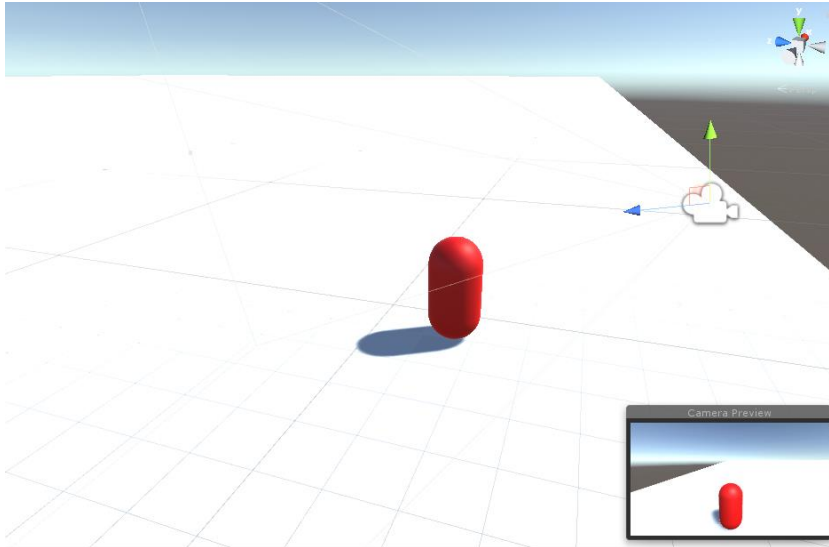


3D Look tutorial Unity

Firstly, we will start off by putting a capsule on to a plane in unity. And then putting a camera as a child to the capsule in the hierarchy. Drag the camera to the desired angle for the game.



Now, Create a blank script and open it.

Firstly we will want to add a public float for mouseSensitivity and set that to 100. And then add a public transform for playerBody. Like this:

```
public class RotateCamera : MonoBehaviour
{
    public float mouseSensitivity = 100f;
    public Transform playerBody;
    // Start is called before the first frame update
    void Start()
    {
    }
}
```

Now we will set the cursor state to locked so when we look around our mouse cursor doesn't stay on the screen. We will put this code in the "void Start" part of the script.

```
void Start()
{
    Cursor.lockState = CursorLockMode.Locked;
}
```

Now we will work in the "void Update" section. Firstly we will set a float for the mouse X and Y. The code should look like this:

```
float mouseX = Input.GetAxis("Mouse X") * mouseSensitivity * Time.deltaTime;
float mouseY = Input.GetAxis("Mouse Y") * mouseSensitivity * Time.deltaTime;
```

We time this by "Time.deltaTime" because we want our script to work the same no matter how good or bad the PC running the game is.

Now we want to set our xRotation to be connected to the mouseY input and clamp the mouse Y axis to 90 degrees so we cant flip our camera around and it feels more real to control.

```
xRotation -= mouseY;  
xRotation = Mathf.Clamp(xRotation, -90f, 90f);
```

Finally, we will add 2 lines of code to finish off. The first will be a transform.localRotation and to this we will add some euler angles so that the clamp function will work. And lastly we will add playerBody.Rotate(Vector3.up * mouseX);, This will make our player move with the look function. The code should look like this:

```
transform.localRotation = Quaternion.Euler(xRotation, 0f, 0f);  
playerBody.Rotate(Vector3.up * mouseX);
```