

This script is for 1st person 3D player and camera movement wherein the camera can only rotate on the Y axis and the player can only control the movement on the Z axis

Step 1:

Right click the heirarchy and select 3D Object>Capsule and place the Camera as it's child.

Step 2:

In the Capsule GameObject create a script component named '**Playermovement**'. Set the following variables in place:

```
public float movespeed; // will determine movement speed
public float rotspeed; // will determine speed of rotation
public float rotX; // will show you rotation on the X axis
public float rotY; // will show you rotation on the Y axis (the main component)
public float rotZ; // will show you rotation on the Z axis
```

Step 3:

in void update, write out:

```
transform.Translate(0f , 0f, Input.GetAxis("Vertical") * Time.deltaTime *
movespeed); // this line allows for movement on the Z-axis
    rotY += Input.GetAxis("Horizontal") * Time.deltaTime * rotspeed; // this line
allows for rotation on the Y-axis, allowing the player to move on the X-axis and
Z-axis at the same time

    transform.rotation = Quaternion.Euler(rotX, rotY, rotZ);
```

Step 4:

save the script and return to unity. in the script component set numbers in the **movespeed** and **rotspeed** floats via trial and error until you get a desired movement speed and speed of rotation.