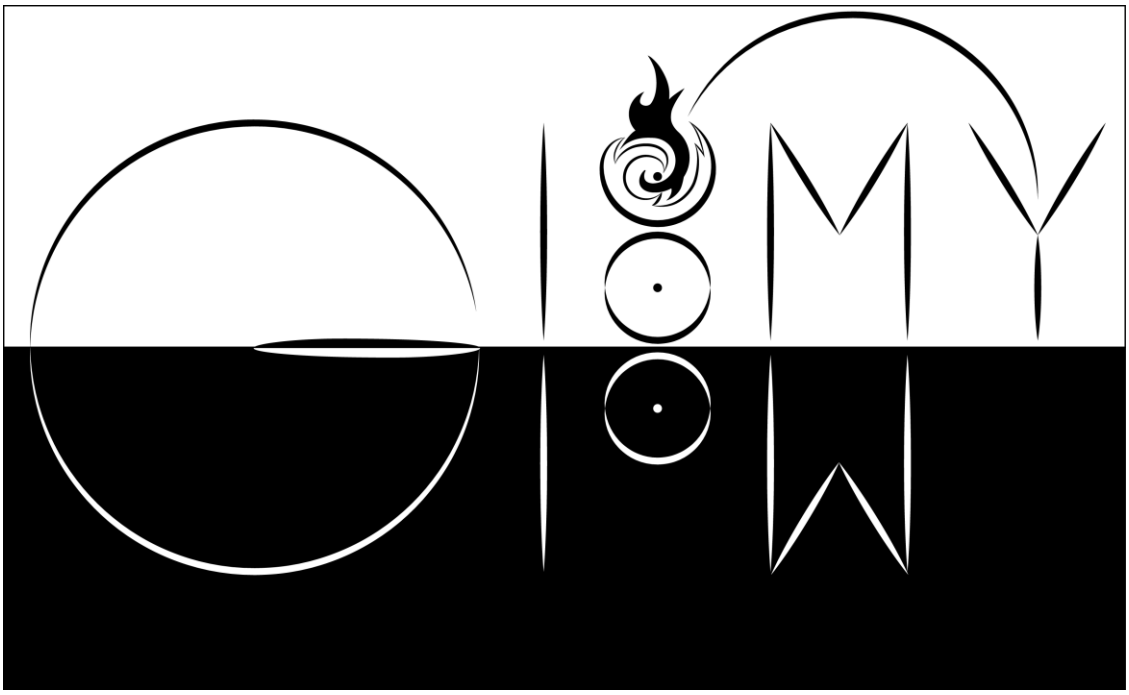


By Kayuzo

Gloomy Glow Studio

Contents

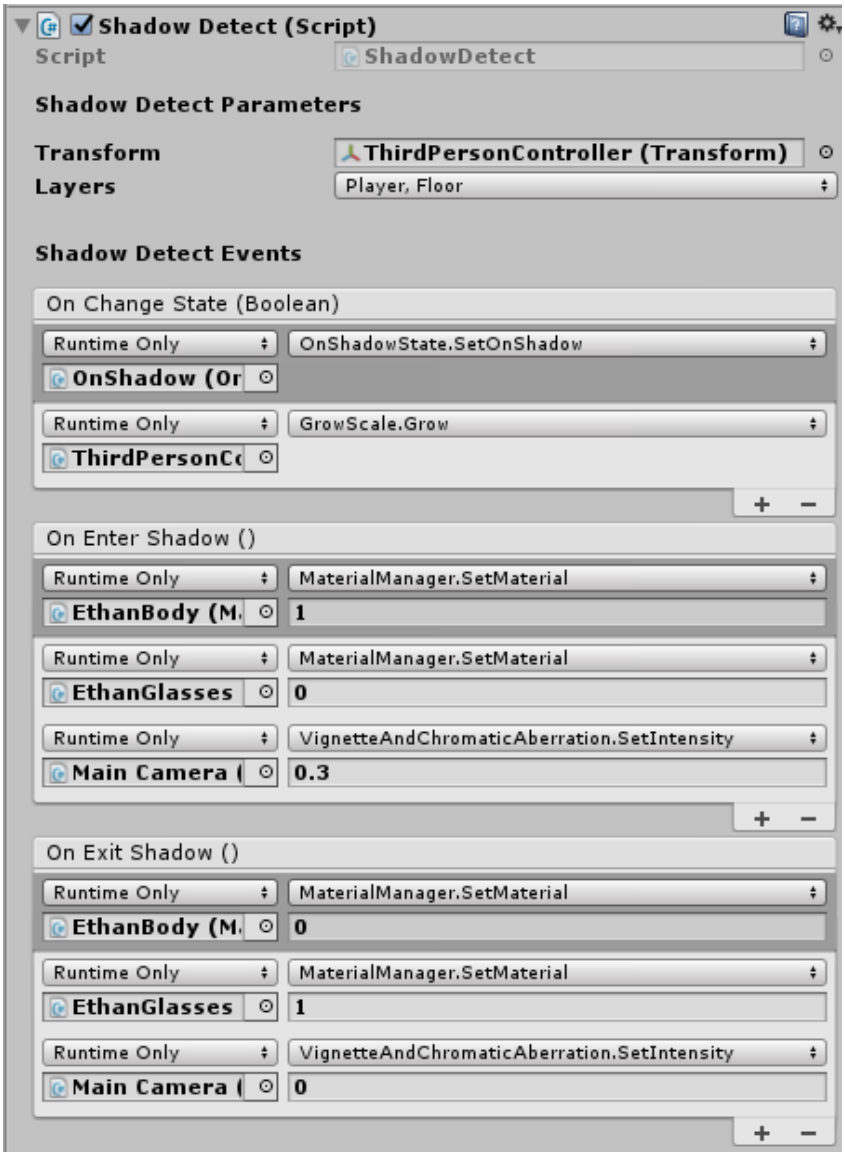
Introduction

Hi, I'm a young developer whose the pseudo is Kayuzo. I have been working with Unity for 4 years. I have worked on many projects, and I’m embarking on a personal project. For this purpose, and to share my passion, I will put at the disposal the tools, scripts and other asset that I would have created for my video game "**Gloomy Glow**".

This first tools is “**Shadow Detect**”. This is a easy way to detect that your character enters on a shadow. This script use the raycasting system of Unity. This script is used to call event when a character enters (or exit) in a shadow, or detect the object which makes this shadow.

You can modify the “**Shadow Detect**” easily to evolve it. I’ll try to improve this script according to your comment. Do not hesitate if you have some questions or to give me some advices.

Description



Transform : This is the “Transform” of object which is detected in the shadow. It’s better to use the transform of the bottom side of your character, like the foots of a humanoid character.

Description

Layers : Choose the layers of GameObject which won’t hit by Raycast. It’s better to choose the layer of your character and the floor.

On Change Event : All function call when the GameObject enters or exits the shadow.

On Enter Shadow : All function call when the GameObject enters in the shadow.

On Exit Shadow : All function call when the GameObject exits the shadow.

Script

```
void Awake()
{
    //If you won't to call a "Find" function on Awake,
    //You can comment this awake function, serialize Lights Members and drag/drop lights on inspector
    Lights = new List<Light>();
    Lights = FindObjectsOfType<Light>().ToList();
    if (_transform == null)
        _transform = gameObject.transform;
}
```

On awake, the script finds all light. You can also “comment” this part and set the member “Lights” public to set value of different light in inspector of Unity.

```
        bool IsOnDirectionalLight(Light light)
        {
            if (light.intensity == 0)
                return false;

            RaycastHit hit;
            Ray ray = new Ray(_transform.position, -light.transform.forward);
#if UNITY_EDITOR
            Debug.DrawRay(ray.origin, ray.direction, Color.red);
#endif
            if (Physics.Raycast(ray, out hit, Mathf.Infinity, ~_layers))
            {
                // Do Stuff if you want
                return false;
            }

            return true;
        }
```

This function detects if a directional light hits your GameObject. You can modifiy this function on “if(Physics.Raycast…)” to know the object which makes the shadow.