



YEL SCRYPT FIRE STUDIO



SPACE SHOOTER PROJECTILE 2D + 2.5D PART 1

SCRIPTS AND CUSTOM SHADERS DOCUMENTATION

Version 1.1

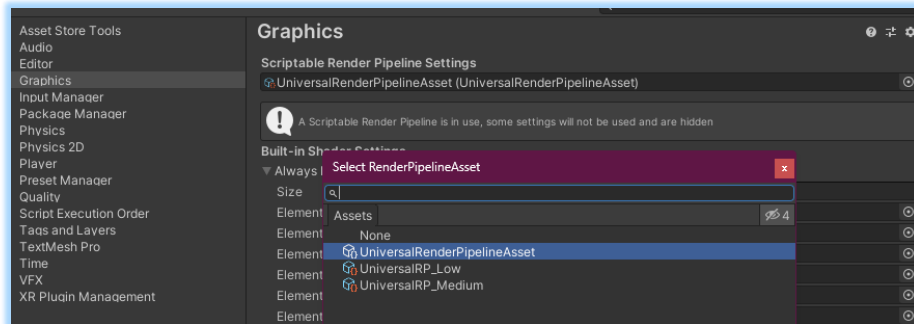
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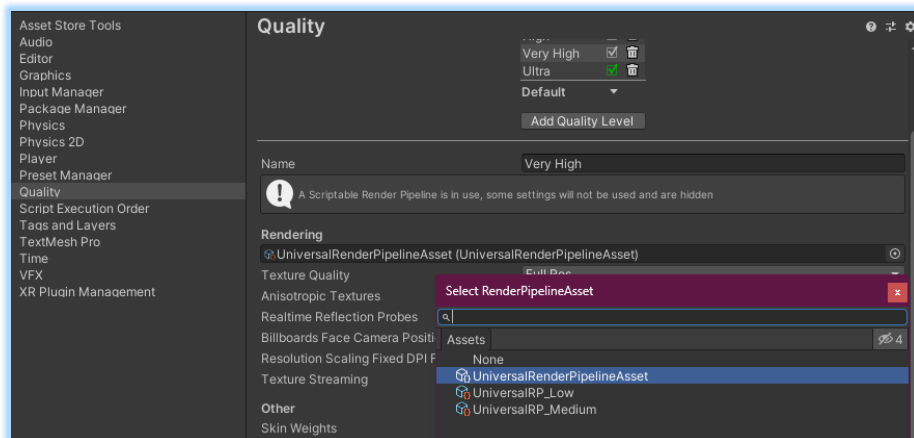
HOW TO ACTIVATE UNIVERSALRP

*This step is not needed if your project is configured in URP by default. *

- ❖ Go to **Edit > Project Settings**
- ❖ In the configuration windows, go to **Graphics** and set the URP asset, clicking on the circle and selecting the asset.



- ❖ Go to **Quality** and set the same URP asset.

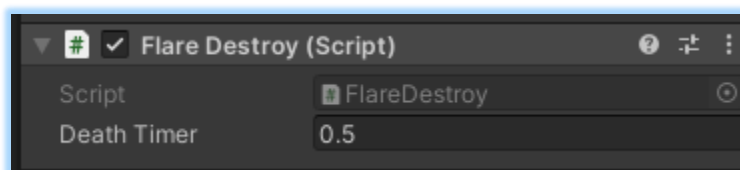


- ❖ If files are not recognized, please reimport the URP assets.
- ❖ To change from URP to Built-in, just select **None** instead of the URP asset.

FLARE DESTROY SCRIPT

It's installed in the "Flare" and "Hit" prefabs.

It calls for the destruction of the object by a timer. Timer can be set by the variable "Death Time" in seconds.



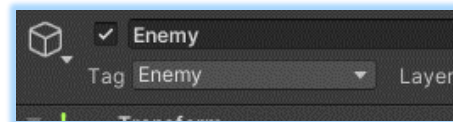
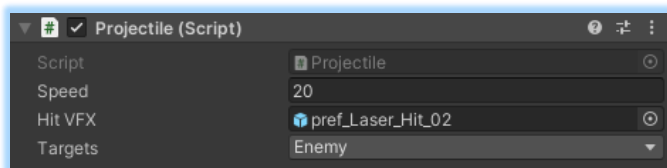
PROJECTILE SCRIPT

It's installed in the **Projectile** prefabs.

Gives the forward motion of the instantiated projectile. The speed can be changed by the variable **Speed**.

It instantiates the "Hit" prefab when projectile hits an **enemy**. The **Hit** prefab must be referenced here.

The **Hit** target can be changed to **Enemy** or **Player**. For hit detection, the target object needs to be tagged as **Enemy** or **Player**.



SORTING LAYER ORDERS

Sprites are used instead of textures to be able to use **Sorting Layers** and make sure objects are rendered in the correct order.

General order for **Flares** and **Hits**: **Sparks** < **Flares** < **Waves** < **Flashes** < Other **VFX**

General order for **Projectiles**: **Projectile** < **Trail** < **Sparks**

FLAREVFX SHADER GRAPH

Shader for **Flares**, **Flashes**, **Sparks** and **Waves** materials.

ON INSPECTOR

Opacity: the opacity of the entire shader.

(0 <-> 1)

Color01 (HDR): outer color (Low end of the gradient).

Color02 (HDR): inner color (high end of the gradient).

_MainTex: texture/sprite input. Sprites are preferred.

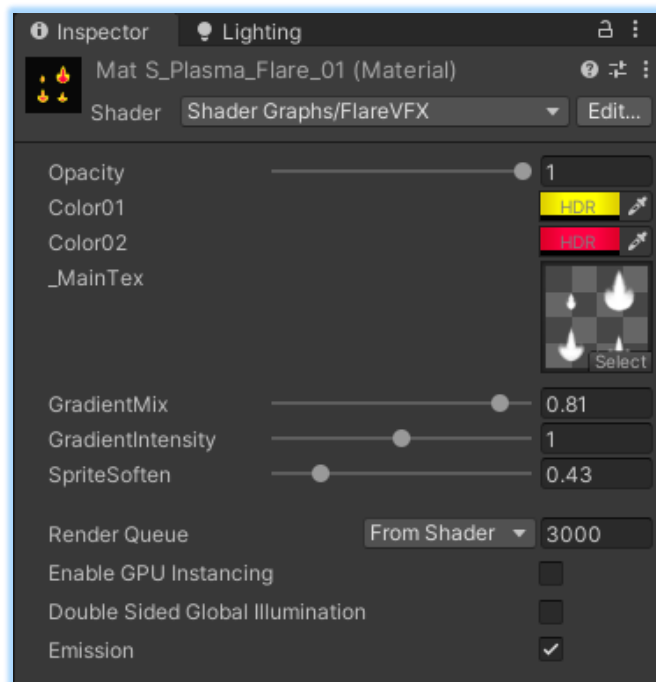
GradientMix: the amount of mixing between both colors by rising the low end of the gradient. (-1 <-> 1)

GradientIntensity: the amount of intensity of the inner color by lowering the high end of the gradient. (0 <-> 2)

SpriteSoften: the smoothing and opacity of the edges of the sprites.

(0.3 <-> 2.5)

Note: "Emission" must be activated to prevent receiving shadows from other objects.



PROJECTILE SHADER GRAPH

Shader for **Projectile** sprites.

Combines a sprite with a noise effect, coloring with two colors using the **Alpha** channel as the parameter for the color gradient.

ON INSPECTOR:

Opacity: the opacity of the entire shader.

(0 <-> 1)

Color01 (HDR): outer color (Low end of the gradient).

Color02 (HDR): inner color (high end of the gradient).

_MainTex: texture/sprite input. Sprites are preferred.

GradientMix: the amount of mixing between both colors by rising the low end of the gradient. *(-1 <-> 1)*

GradientIntensity: the amount of intensity of the inner color by lowering the high end of the gradient. *(0 <-> 2)*

NoiseSpeed: speed/direction of the noise effect. There are two noise effects combined. Speed/direction parameters are independent between the two noises.

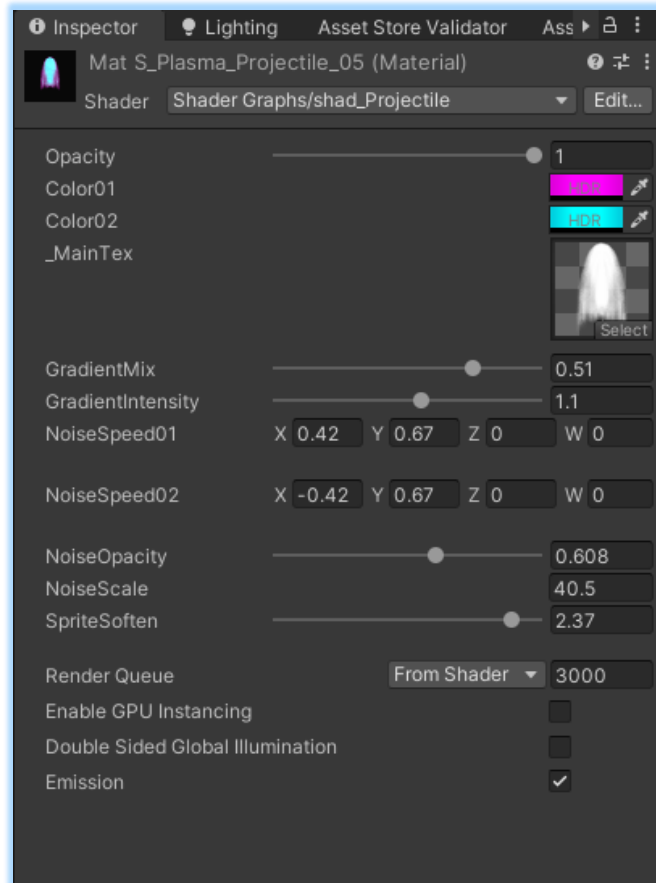
NoiseOpacity: the amount of noise that is added to the sprite. *(0 <-> 1)*

NoiseScale: the scale of the **Noise** node.

SpriteSoften: the smoothing and opacity of the edges of the sprites.

(1 <-> 2.5)

Note: Emission must be activated to prevent receiving shadows from other objects.



TRAILS SHADER GRAPH

Shader for **Trails** VFX

ON INSPECTOR

Opacity: the opacity of the entire shader.
(0 <-> 1)

Color01 (HDR): outer color (Low end of the gradient).

Color02 (HDR): inner color (high end of the gradient).

GradientAspect: aspect ratio of the procedural shape. Greater values make shape thinner.

X > width.

Y > Height.

GradientSize: the size of the shape.

GradientPosition: position of the shape. Its position depends of the GradientAspect, so it must be adjusted if the aspect changes.

DistortionScale: the scale of the **Noise** node used for the distortion effect.

DistortionSpeed: it controls the speed and direction of the noise.

DistortionBalance: it controls the amount of gradient modifying the noise. (-1 <-> 1)

DistortionOpacity: the amount of distortion that is applied over the trail.

Note: Emission must be activated to prevent receiving shadows from other objects.

