Highlighter

Highlighter is a post processing effect. It has some predefined effects to highlight game objects directly in your game view.

Getting Started:

You have to follow only three major steps listed below to complete the setup process of "Highlighter" in your project.

Step 1: Setup Highlighter with Render Pipeline.

Step 2: Add Highlighter Manager Prefab in the Scene.

Step 3: Add Highlight effect Component on gameobject.

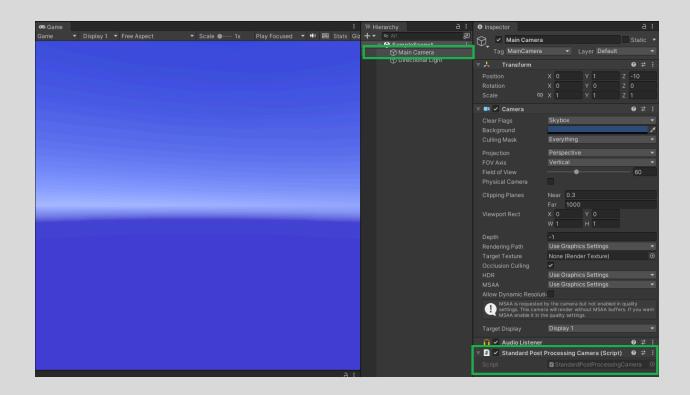
First step setup the "**Highlighter**" depends on your projects render pipeline and second step is add the **Highlighter Manager** prefab in the scene to change the background fill color from the inspector and third step is add the Highlight effect component with the game object.

Step 1: Setup Highlighter with Render Pipeline

Step 1.1: Built-in Render Pipeline Setup

Select the **Main Camera** from the scene and add "**StandardPostProcessingCamera**" Component then you will be able to see some background color automatically applied in your game view.

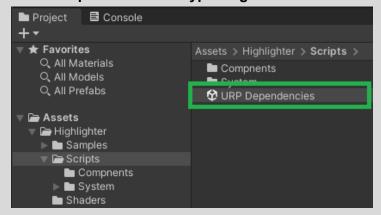
Note: The "StandardPostProcessingCamera" Component works only with the <u>Built-in render pipeline</u>. If you are using only the <u>Built-in Render Pipeline</u> in your project please move to **Step 2** otherwise if you are using <u>Universal Render Pipeline</u> please follow **step 1.2**.



Step 1.2: Universal Render Pipeline Setup

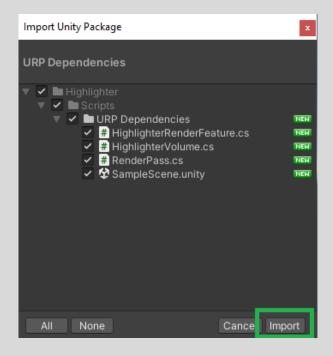
If you are using <u>Universal Render Pipeline</u> Please make sure the Unity **Universal Render Pipeline** package is already imported in your project.

Import the "URP Dependencies.unitypackage" file from the following directory. Highlighter>Scripts>URP Dependencies.unitypackage

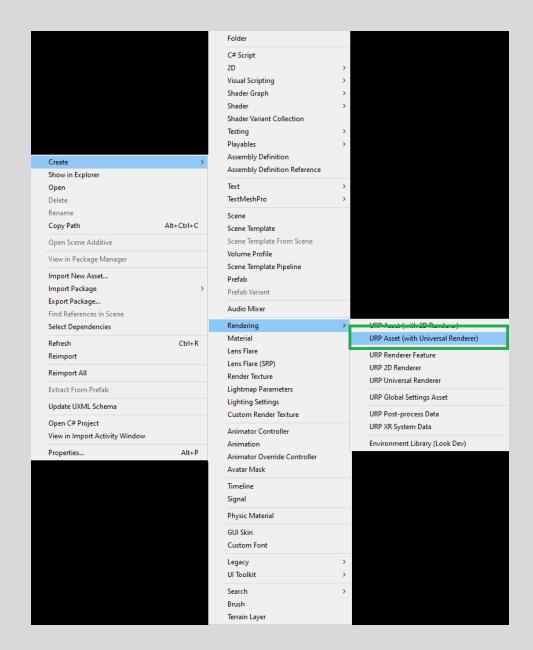


Double Click on "**URP Dependencies.unitypackage**" then click on the "**Import**" button.

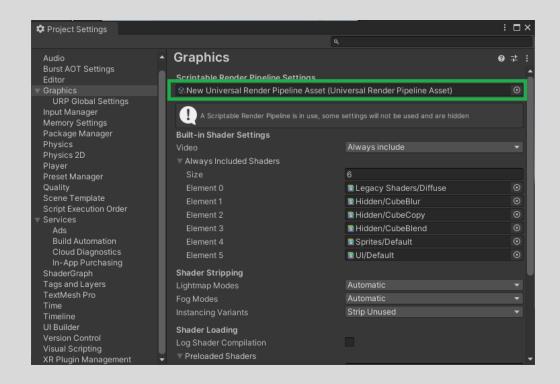
Note: Make sure to check all of the given files to import into your project also you should make sure Unity **Universal Render Pipeline** Package exists in your project otherwise you will get some errors.



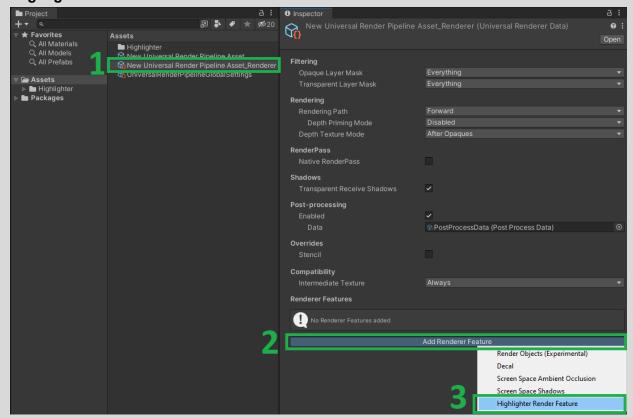
If you have not create any URP Assets, Please right click on empty place of "Assets" folder and navigate to Create>Rendering>URP Asset (with Universal Rendering) to create new URP assets



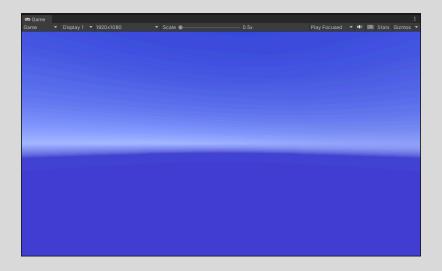
Open **Project Settings** from **Edit>Project Settings** then select "**Graphics**" and assign **Render Pipeline Asset** into the "**Scriptable Render Pipeline Settings**" field.



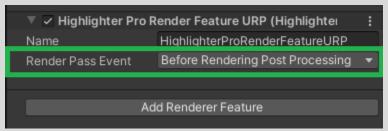
Please select the **Universal Render Pipeline Asset_Renderer** scriptable object from the asset folder then click on the "**Add Render Feature**" button from the inspector and choose "**Highlighter Render Feature**".



If you completed successfully the above steps you will be able to see some background color in your game view.

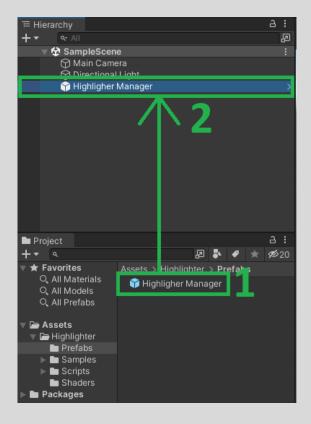


After adding the **Highlighter** render feature, you will be able to change "**Render Pass Event**" from the inspector.



Step 2: Add Highlighter Manager Prefab in the Scene

Navigate the "**Highlighter Manager**" prefab and drag into the scene from following directory **Highlighter>Prefabs>Highlighter Manager.prefab.** Now you can change the background color with the Highlighter Manager component from the inspector.



Step 3: Add Highlight effect Component on gameobject

You have to add at least one component of highlight effects on a Game Object which one you want to highlight. You can also add multiple effects on a single Game Object.

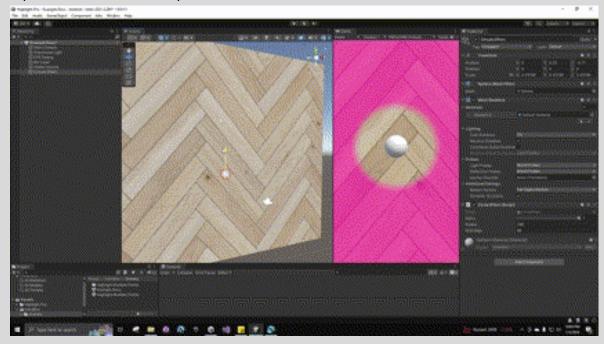
Select a game object and add any components listed below which highlight effects you want to apply on the selected gameobject.

Note: The **highlight effect** will be only visible when the **gameobject** is placed in front of the **Camera**. If the **gameobject** placed behind the **Camera** you will be unable to see the effect.

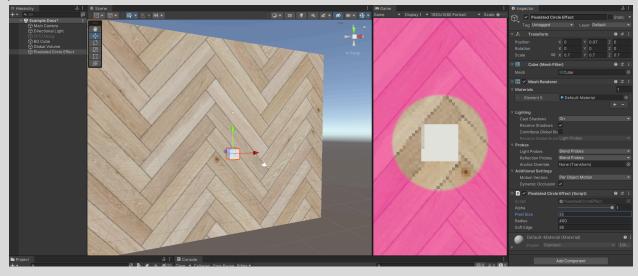
Highlighter allows you to apply highlight effects listed below.

- Circle Effect
- Pixelated Circle Effect
- Rectangle Effect
- Pixelated Rectangle Effect
- Radial Wave Effect

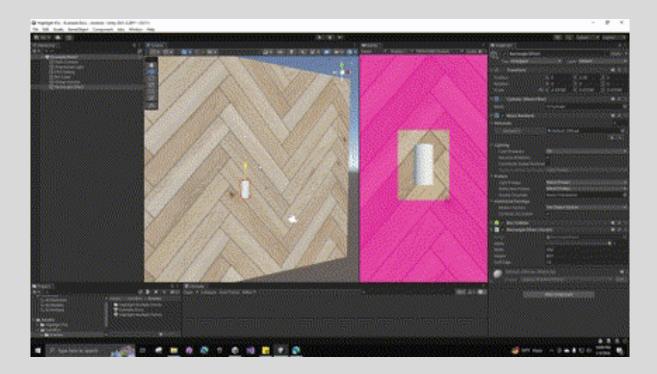
Circle Effect: It is a component that allows you to highlight a gameobject that contains this Component with circular shape.



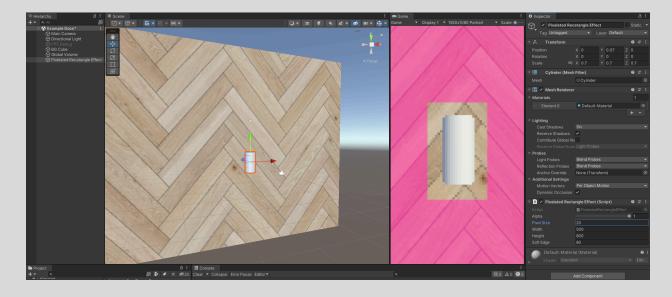
Pixelated Circle Effect: It is a component that allows you to highlight a gameobject that contains this Component with pixelated circular shape. The highlighted area will render with pixelated effect.



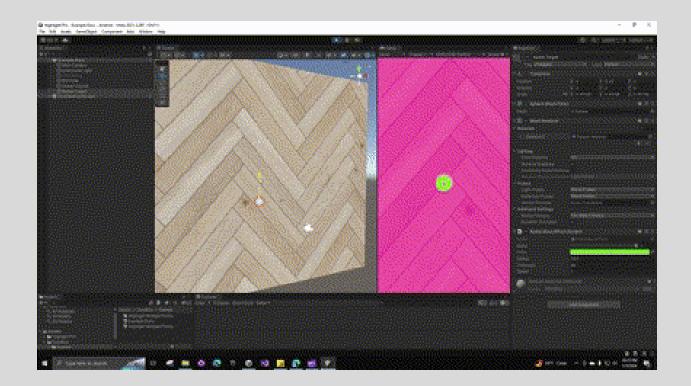
Rectangle Effect: It is a component that allows you to highlight a gameobject that contains a this Component with rectangle shape.



Pixelated Rectangle Effect: It is a component that allows you to highlight a gameobject that contains a this Component with pixelated rectangle shape. The highlighted area will render with pixelated effect.

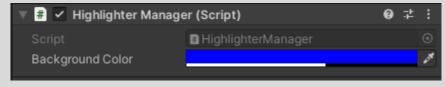


Radial Wave Effect: It is a component that allows you to highlight a gameobject that contains a this Component with radial wave effect.



API Documentation

HighlighterManager

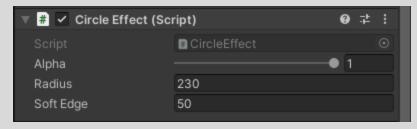


Public Property:

static Color BackgroundColor {get; set;}

Change the background fill color of the game view

Circle Effect



Public Property

uint radius:

Resize the radius of a highlighted circle.

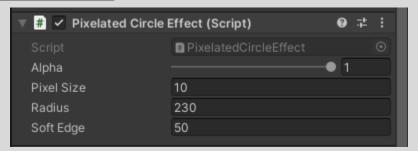
uint softEdge:

Edge softness of the highlighted circle. You can change the circle edge from soft to hard by changing this value.

float alpha:

It's an inherited property, The alpha value shows how transparent this effect is to render on the screen.

Pixelated Circle Effect:



Public Property

uint pixelSize:

Pixel size of highlighted area. You can change the pixel size of the highlighted area.

uint radius:

Resize the radius of a highlightable circle.

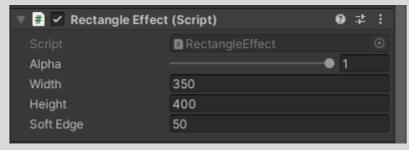
uint softEdge:

Edge softness of the highlighted circle. You can change the circle edge from soft to hard by changing this value.

float alpha:

It's an inherited property, The alpha value shows how transparent this effect is to render on the screen.

Rectangle Effect



Public Property

uint width:

Width of a highlighted rectangle. You can resize the width of the "Rectangle Effect" component by changing this value.

uint height:

Height of a highlighted rectangle. You can resize the height of the "Rectangle Effect" component by changing this value.

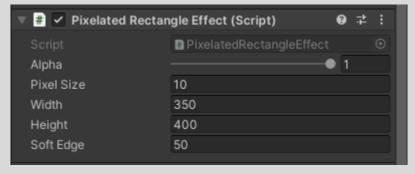
uint softEdge:

Edge softness of the highlighted rectangle.

float alpha:

It's an inherited property, The alpha value shows how transparent this effect is to render on the screen.

Pixelated Rectangle Effect



Public Property

uint pixelSize:

Pixel size of highlighted area. You can change the pixel size of the highlighted area.

uint width:

Width of a highlighted rectangle. You can resize the width of the "Pixelated Rectangle Effect" component by changing this value.

uint height:

Height of a highlighted rectangle. You can resize the height of the "Pixelated Rectangle Effect" component by changing this value.

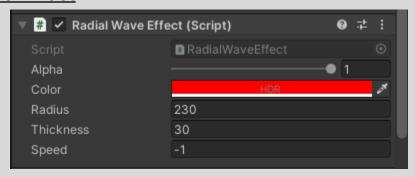
uint softEdge:

Edge softness of the highlighted rectangle.

float alpha:

It's an inherited property, The alpha value shows how transparent this effect is to render on the screen.

Radial Wave Effect



Public Property

Color color:

Color of the effect.

uint radius:

Radius of the radial wave, How much radius covers this "RadialWaveEffect".

uint thickness:

The thickness of the wave, how thick it will fill the wave edge to render.

float speed :

Speed of the wave, how fast the wave travels. You can change the wave direction by changing the sign of the speed value from negative to positive.

float alpha:

It's an inherited property, The alpha value shows how transparent this effect is to render on the screen.

Thanks For Reading