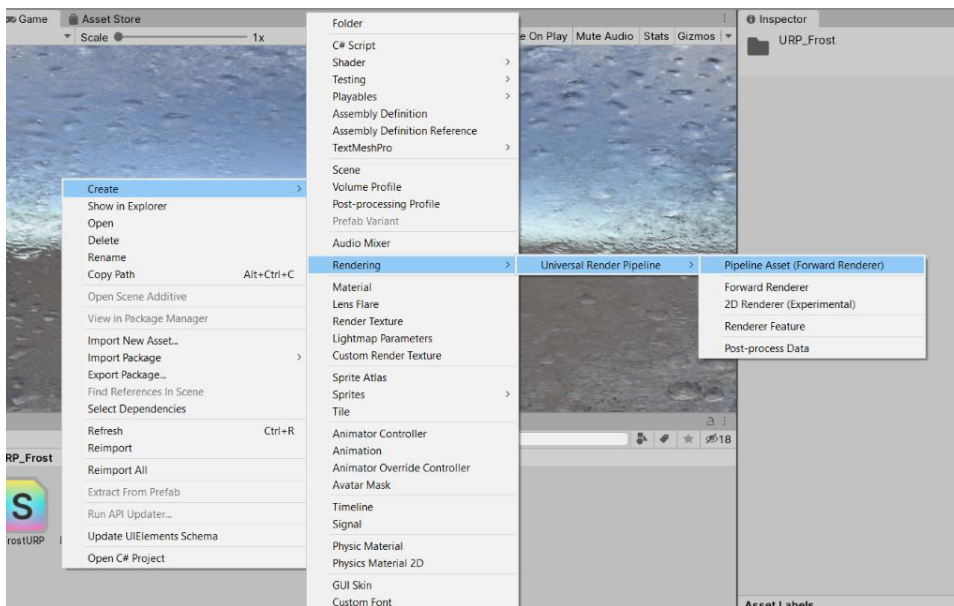


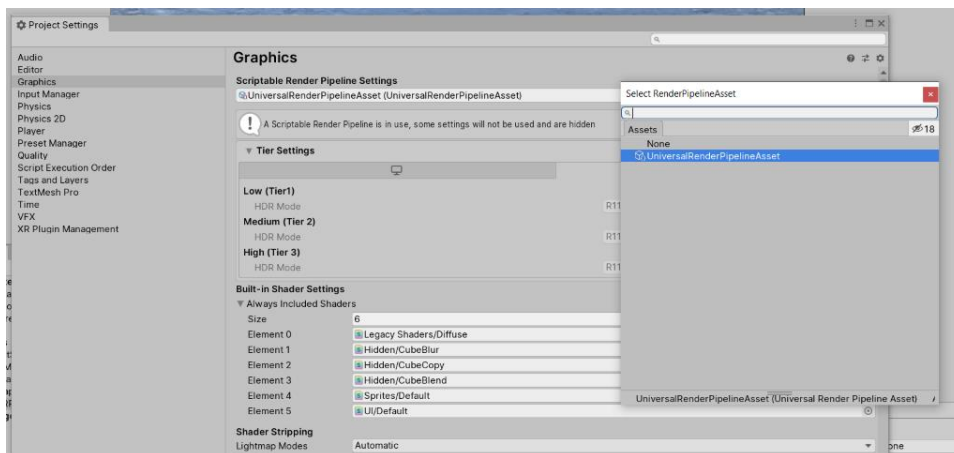
FAST GLITCH URP

How to setup URP(if you have already configured URP for your scene skip this part):

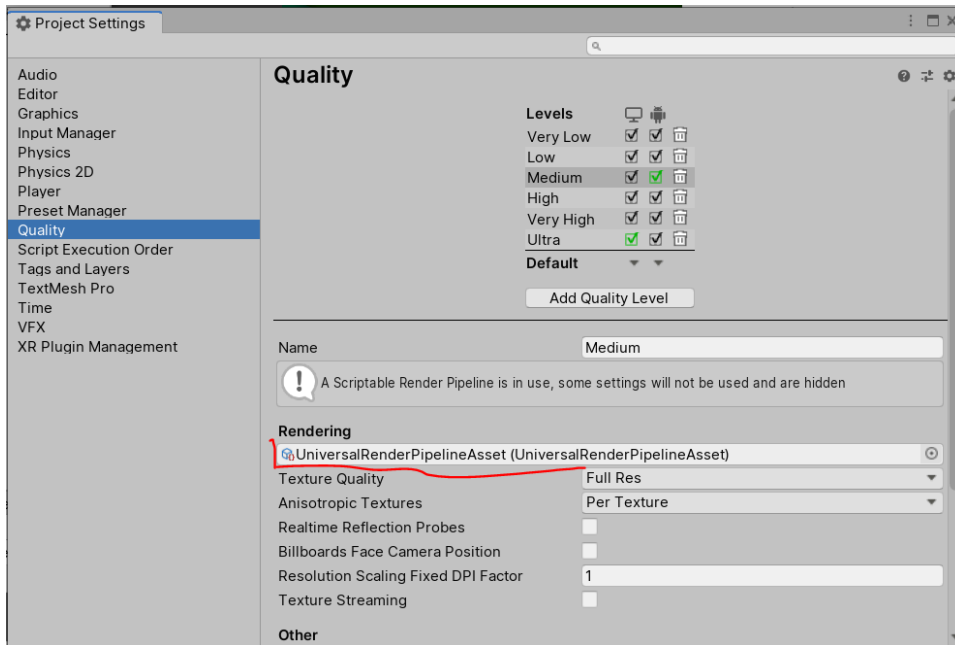
1. Firstly install the URP package to your project. Go to **Windows->Package Manager**. In the list find the UniversalRP and install it.
2. Firstly we need to create the Pipeline Asset. For that press **RightClick->Create->Rendering->UniversalRenderPipeline->PipelineAsset**



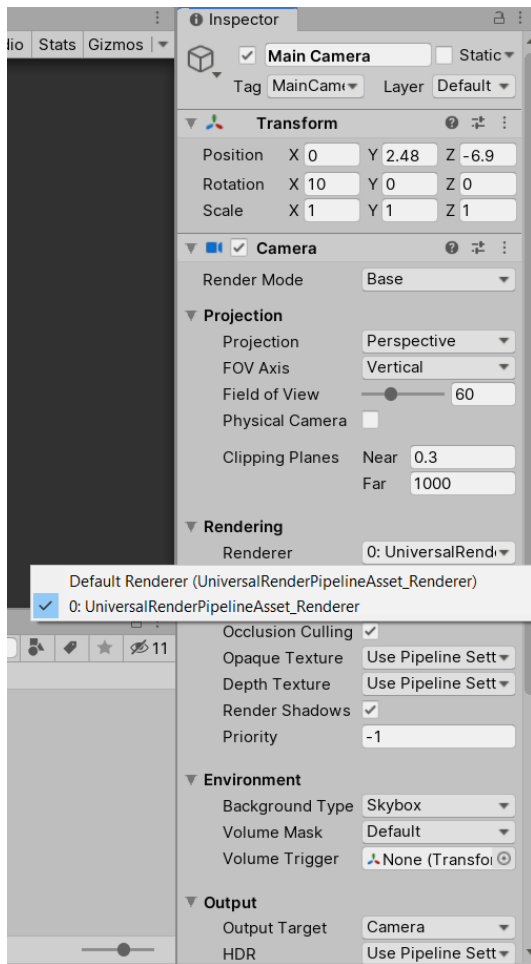
3. Go to **Edit->ProjectSettings->Graphics**. In the Scriptable Render Pipeline Settings, drag and drop the pipeline asset that we created in previous section



4. Go to **Edit->Project Settings->Quality**. In rendering section drag and drop the pipeline asset you created

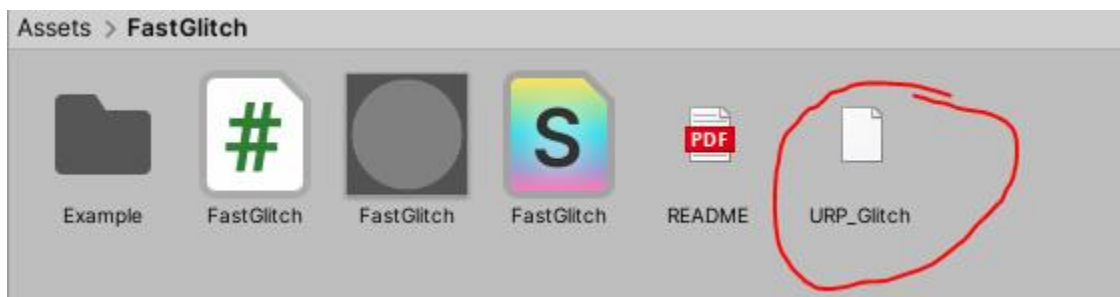


5. Go to your camera object and in **Rendering** settings pick for **Renderer** the pipeline asset you created

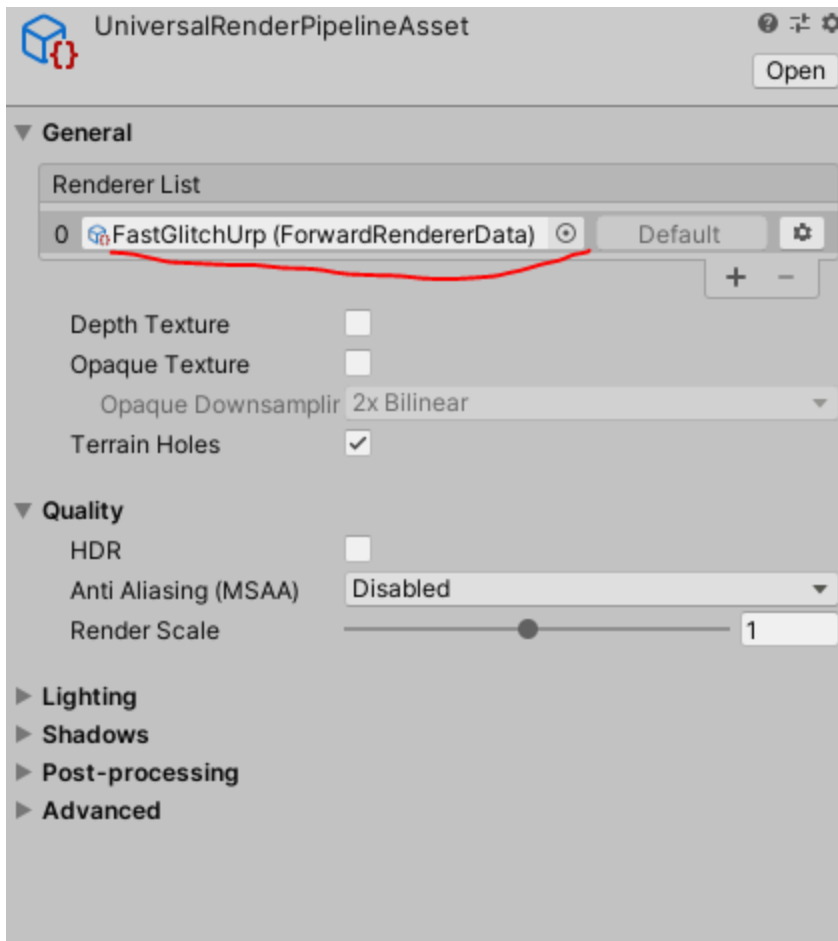


How to apply URP Fast Glitch:

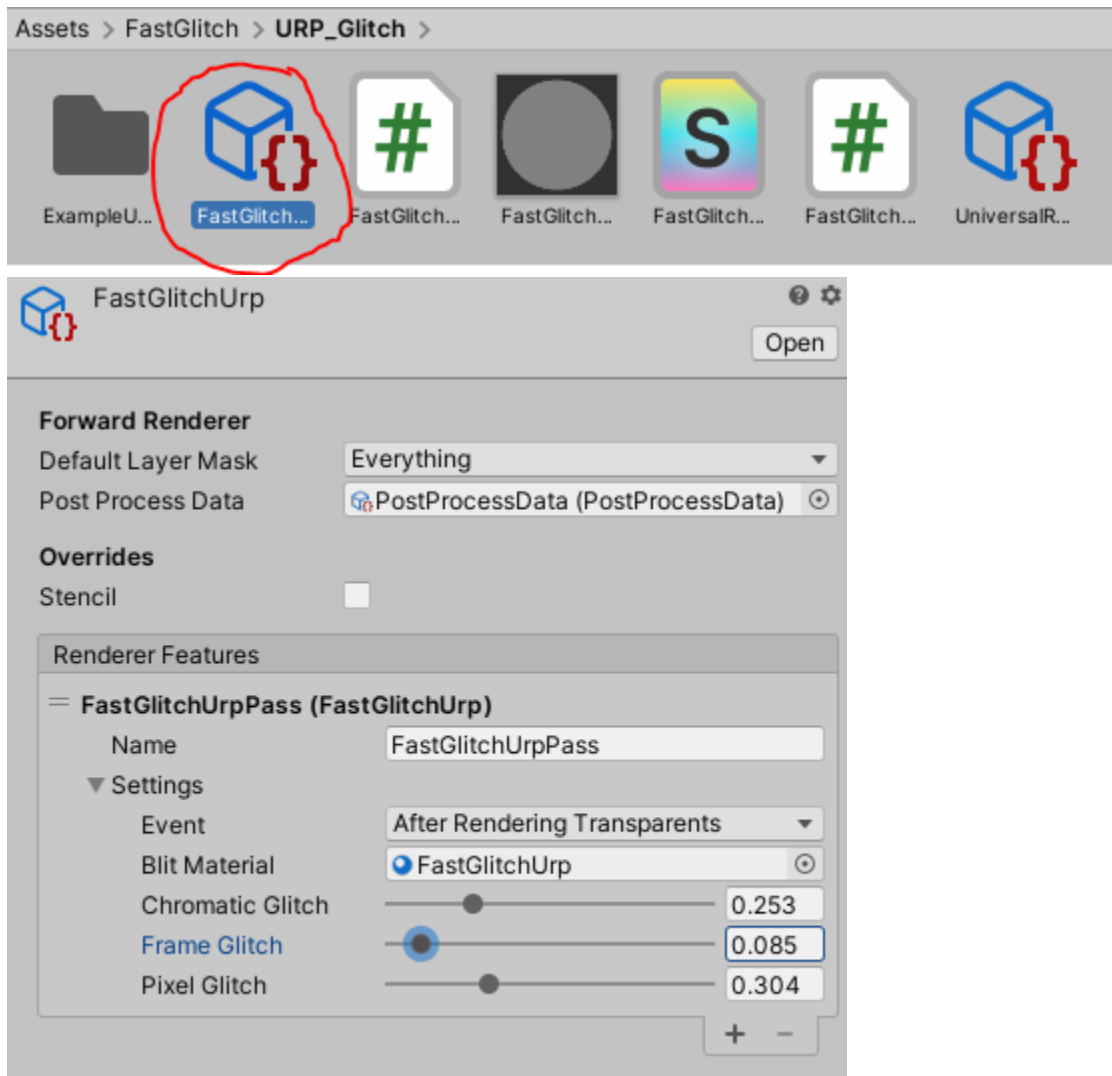
1. Firstly import the package URP_Glitch which is included in the asset



2. Open the settings of the URP pipeline asset. In the General tab for RenderType pick the Custom and pick the FastGlitchUrp



3. That is pretty much it. To change the parameters go to the folder URP_Glitch. Find FastGlitchUrp, select. You will see in the inspector the parameters of it.



PARAMETERS

- **CHROMATIC GLITCH** - Random horizontal shifts of Red and Green channels. The value increases the offset and frequency of this shift.
- **FRAME GLITCH** - Wavy deformations of the image. The value increases the distortion amount and frequency.
- **PIXEL GLITCH** - Pixel chunks distortion. The value increases distorted pixel chunks amount and frequency.

How to edit parameters on Runtime with custom scripts:

Among other files in URP_Glitch folder you can also find EditValues.

Attach this script to any object in the scene to edit the values from the component, or copy the code to the script in wich you want to edit the parameters.

How to apply URP Mobile Sharpen:

1. Firstly import the package **URP_Sharpen** which is included in the asset
2. Open the settings of the URP pipeline asset. In the **General** tab for **RenderType** pick the **Custom** and pick the **SharpenUrp**
3. That is pretty much it. To change the parameters go to the folder **URP_Sharpen**. Find **SharpenUrp**, extend it and select **SharpenUrpPass**. You will see in the inspector the parameters of it.

PARAMETERS

- **EVENT** – set the rendering event on which the shader will affect
- **SHARPNESS** – sharpness of the image

SHADERS

- **Sharpen- The fastest sharpen in the AssetStore.** Completely optimized Sharpen shader. Runs at **45-58 FPS** on lowend mobile device(with proper settings).

All the testing was made on low-end mobile device Meizu M2 Note in the scene containing:

- 101 **different gameObjects,**
- 101 **different Materials,**
- 51 **different Textures,**
- 1 **Directional Light(realtime),**
- approximately 45k polygons**