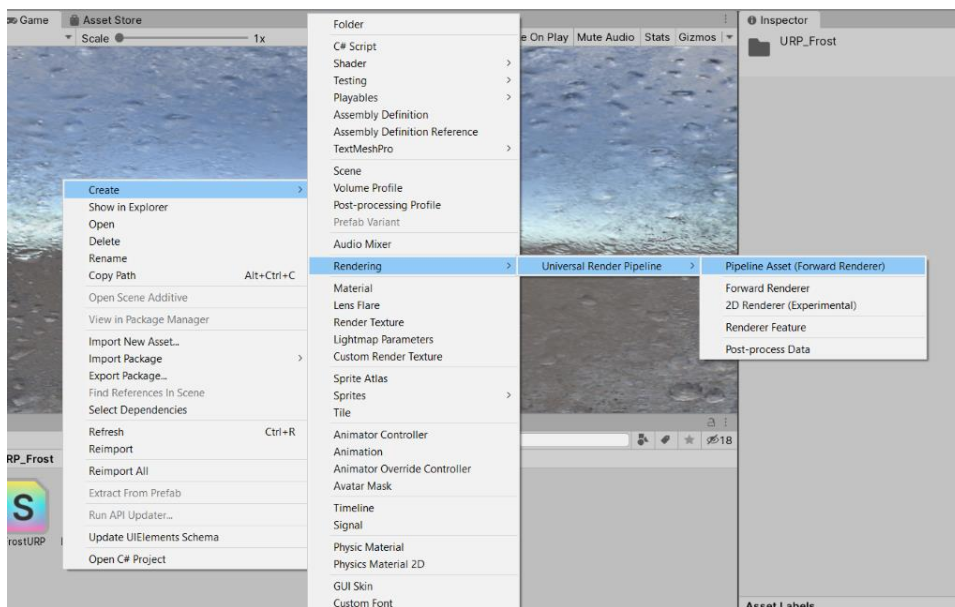


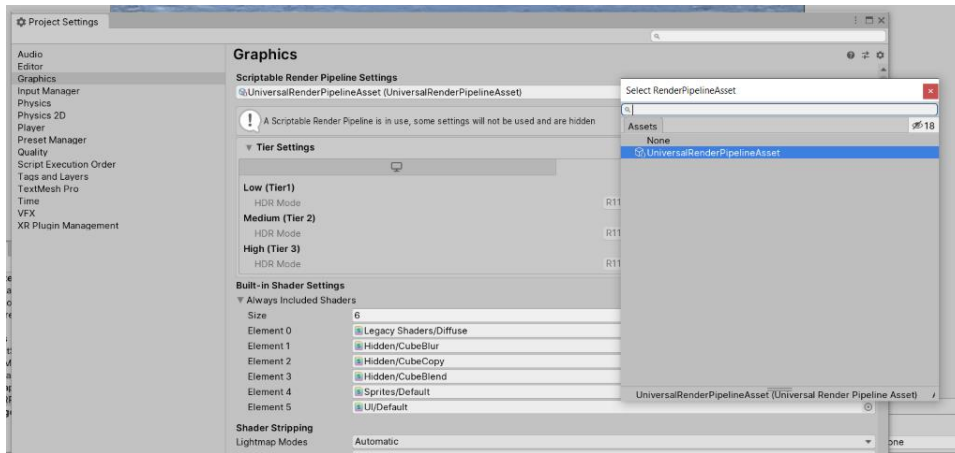
# FAST CHROMATIC ABERRATION URP

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

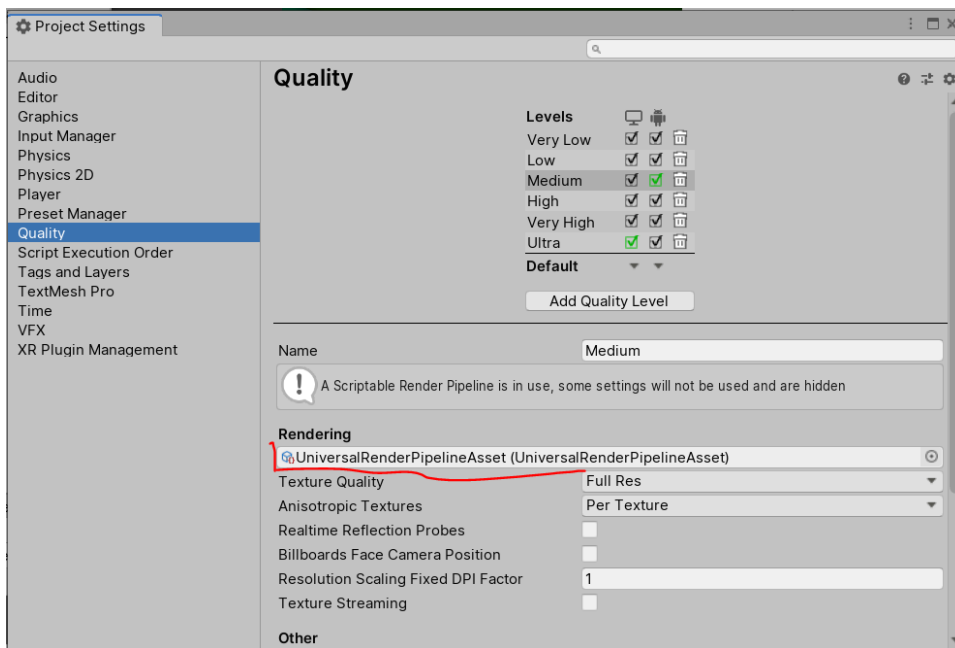
1. Firstly install the URP package to your project. Go to **Windows->Package Manager**. In the list find the LightweightRP and install it.
2. Firstly we need to create the Pipeline Asset. For that press **RightClick->Create->Rendering->UniversalRenderPipeline->PipelineAsset**



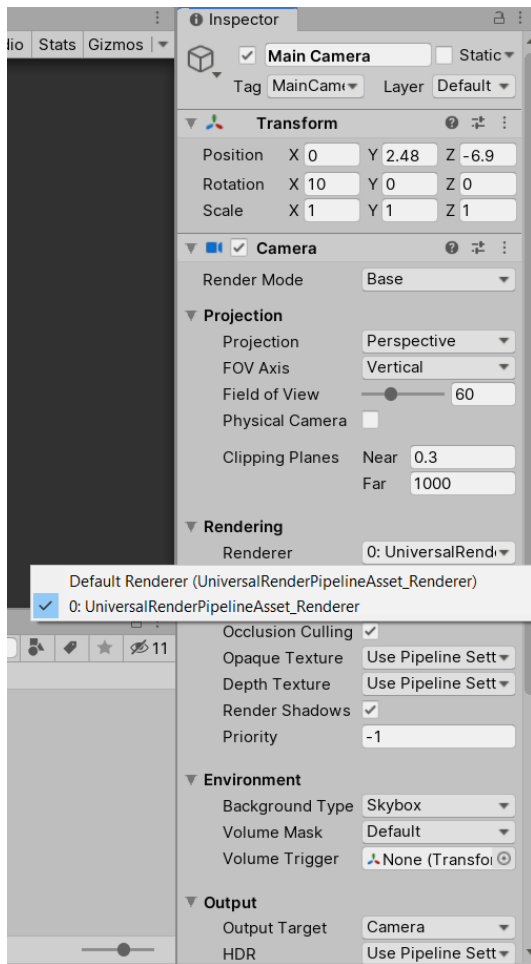
3. Go to **Edit->ProjectSettings->Graphics**. In the Scriptable Render Pipeline Settings, drag and drop the pipeline asset that we created in previous section



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

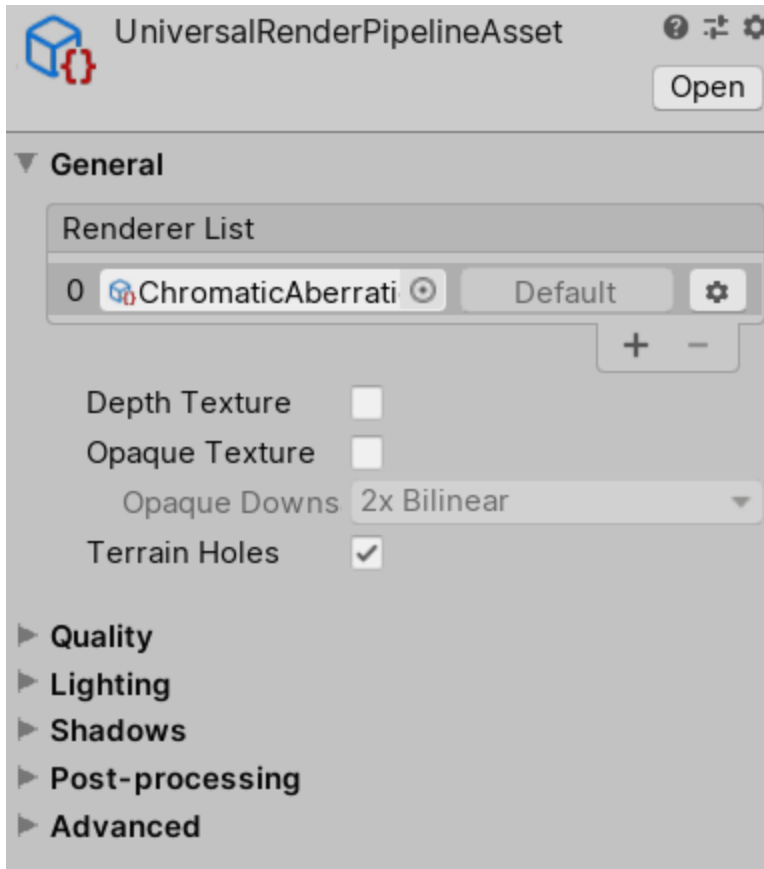


## How to apply URP Mobile Chromatic Aberration:

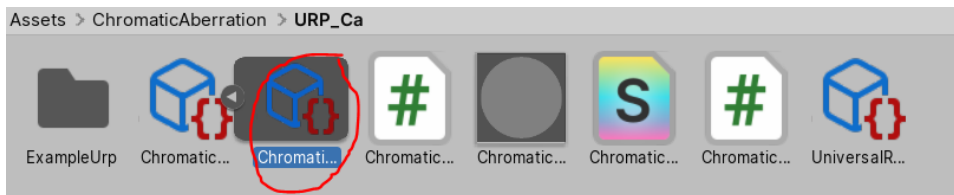
1. Firstly import the package URP\_Ca which is included in the asset

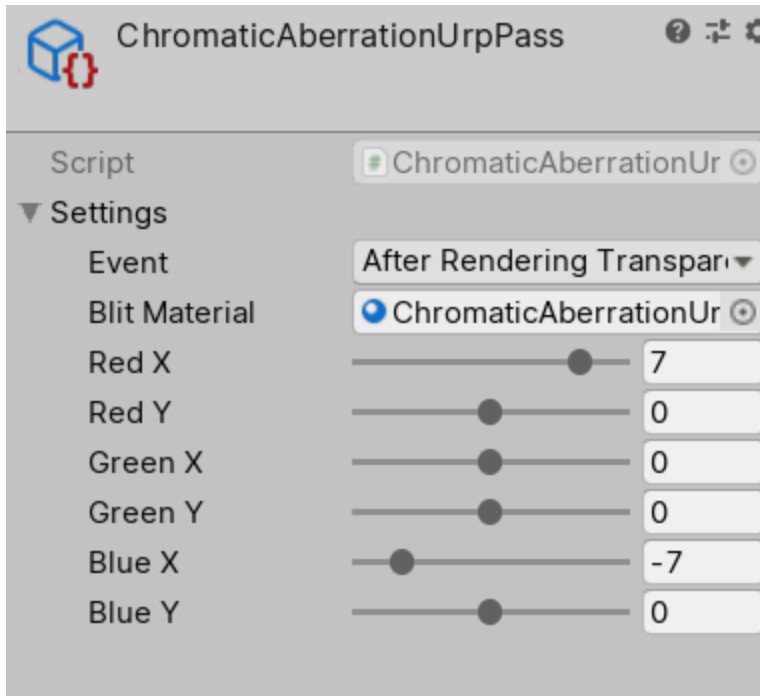


2. Open the settings of the URP pipeline asset. In the General tab for RenderType pick the Custom and pick the ChromaticAberrationUrp



3. That is pretty much it. To change the parameters go to the folder URP\_Ca. Find ChromaticAberrationUrp, extend it and select ChromaticAberrationUrpPass. You will see in the inspector the parameters of it.





## PARAMETERS

- **EVENT** – set the rendering event on which the shader will affect
- **REDX** – offset of the red filter by x axis
- **REDY** – offset of the red filter by y axis
- **GREENX** – offset of the green filter by x axis
- **GREENY** – offset of the green filter by y axis
- **BLUEX** – offset of the blue filter by x axis
- **BLUEY** – offset of the blue filter by y axis

## SHADERS

- **CHROMATIC ABERRATION** - The fastest chromatic aberration effect in the AssetStore. Completely optimized chromatic aberration shader. Runs at **50-55FPS** 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**