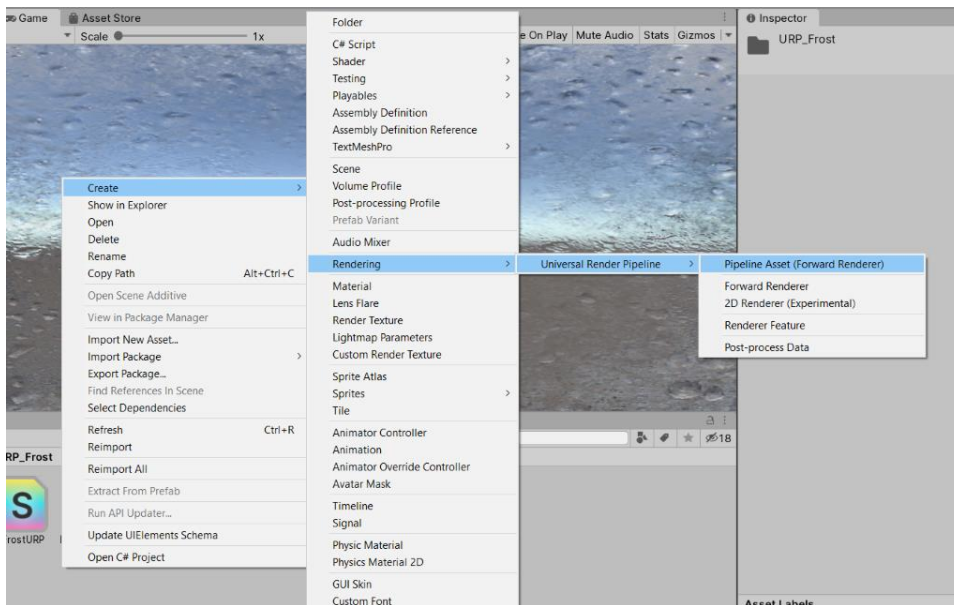


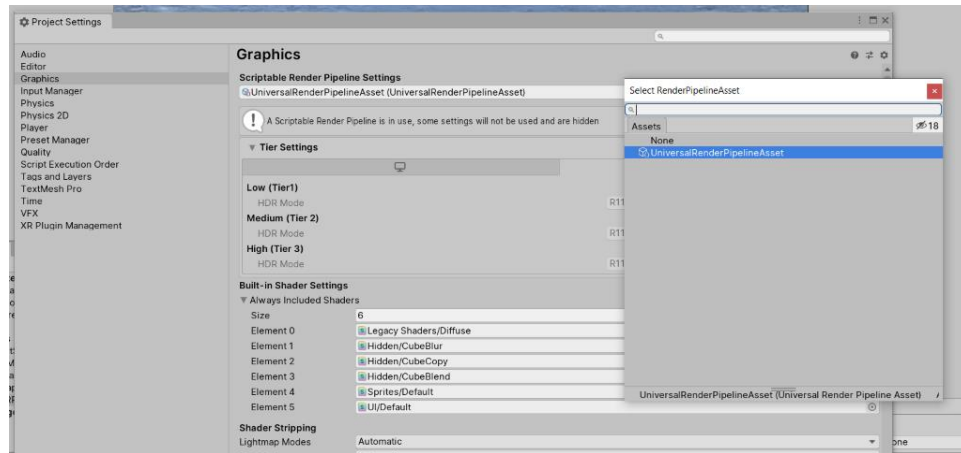
FAST MOBILE DEPTH OF FIELD URP

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

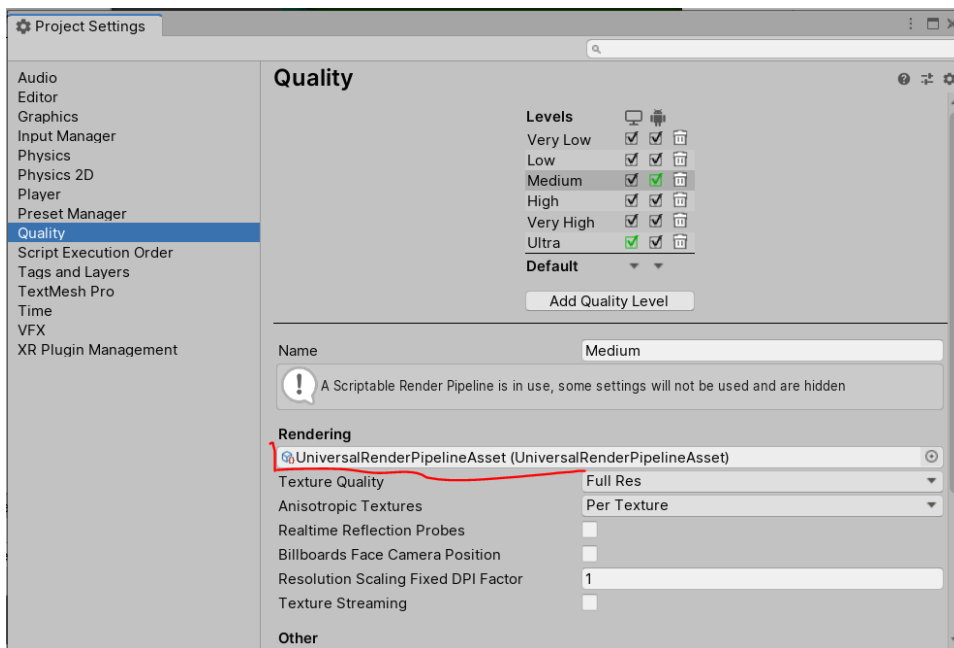
1. Firstly install the URP package to your project. Go to **Windows->Package Manager**. In the list find the LightweightRP and install it.
2. Firstly we need to create the Pipeline Asset. For that press **RightClick->Create->Rendering->UniversalRenderPipeline->PipelineAsset**



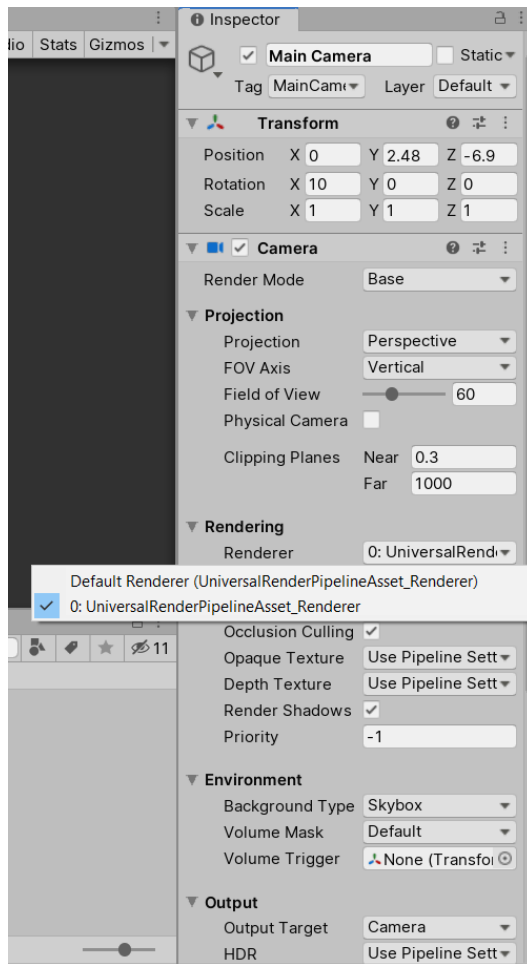
3. Go to **Edit->ProjectSettings->Graphics**. In the Scriptable Render Pipeline Settings, drag and drop the pipeline asset that we created in previous section



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



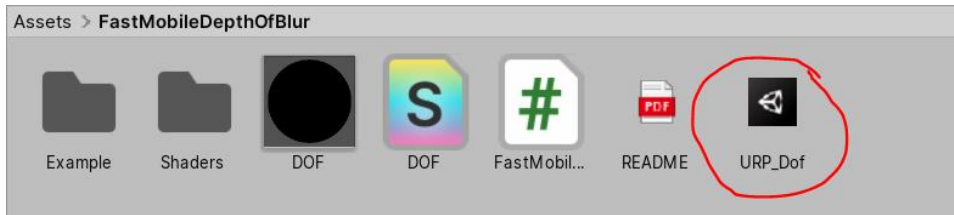
5. Go to your camera object and in **Rendering** settings pick for **Renderer** the pipeline asset you created



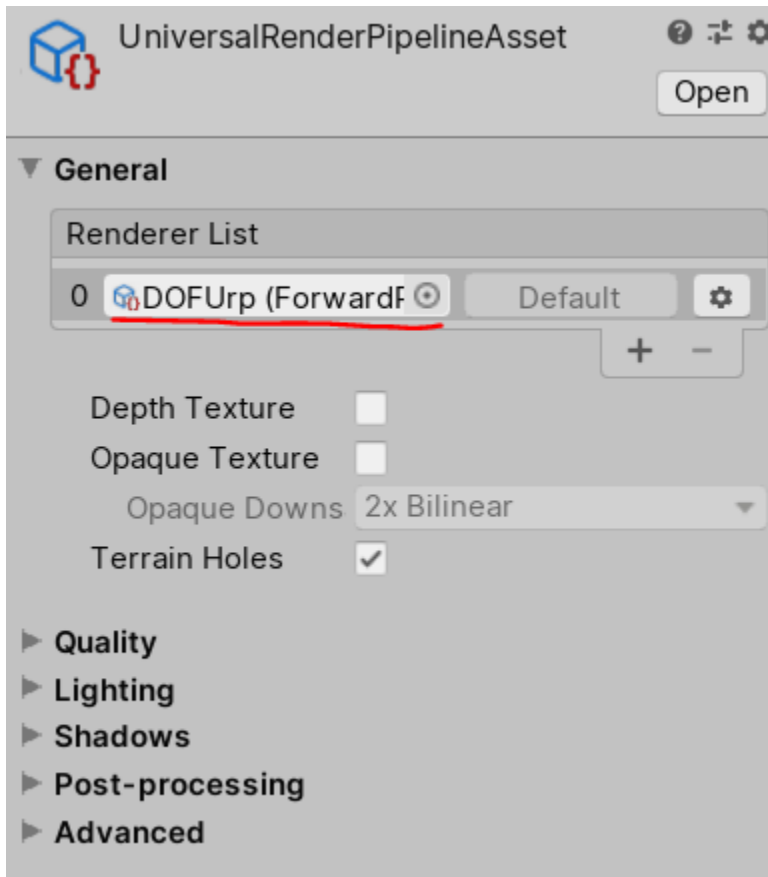
How to apply URP Mobile Depth Of Field:

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

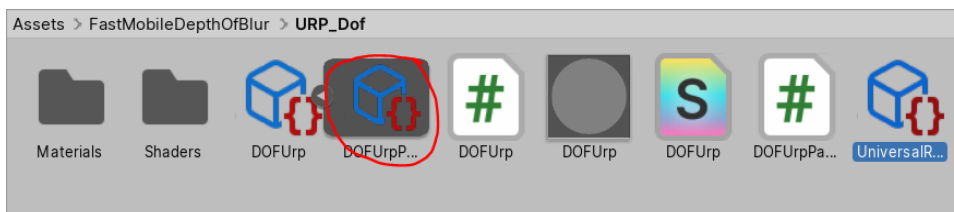
Note that if you pick Color option for the Background of the Camera, do not forget to set its alpha value to max. By default it is zero.

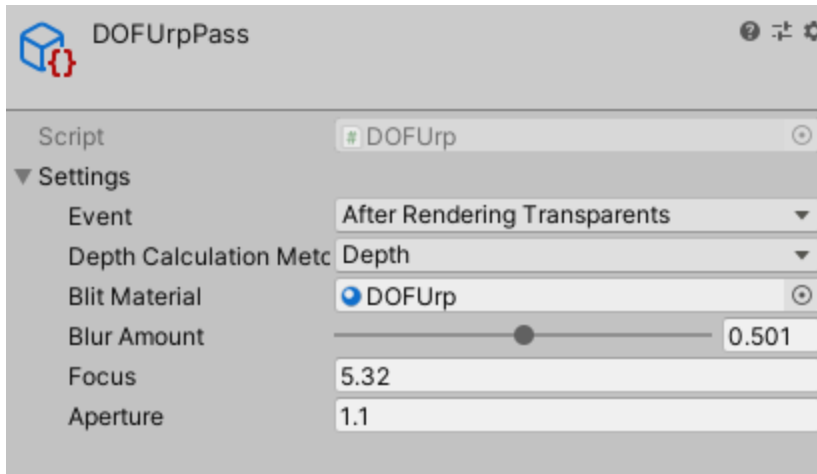


2. Open the settings of the URP pipeline asset. In the General tab for RenderType pick the Custom and pick the DOFUr

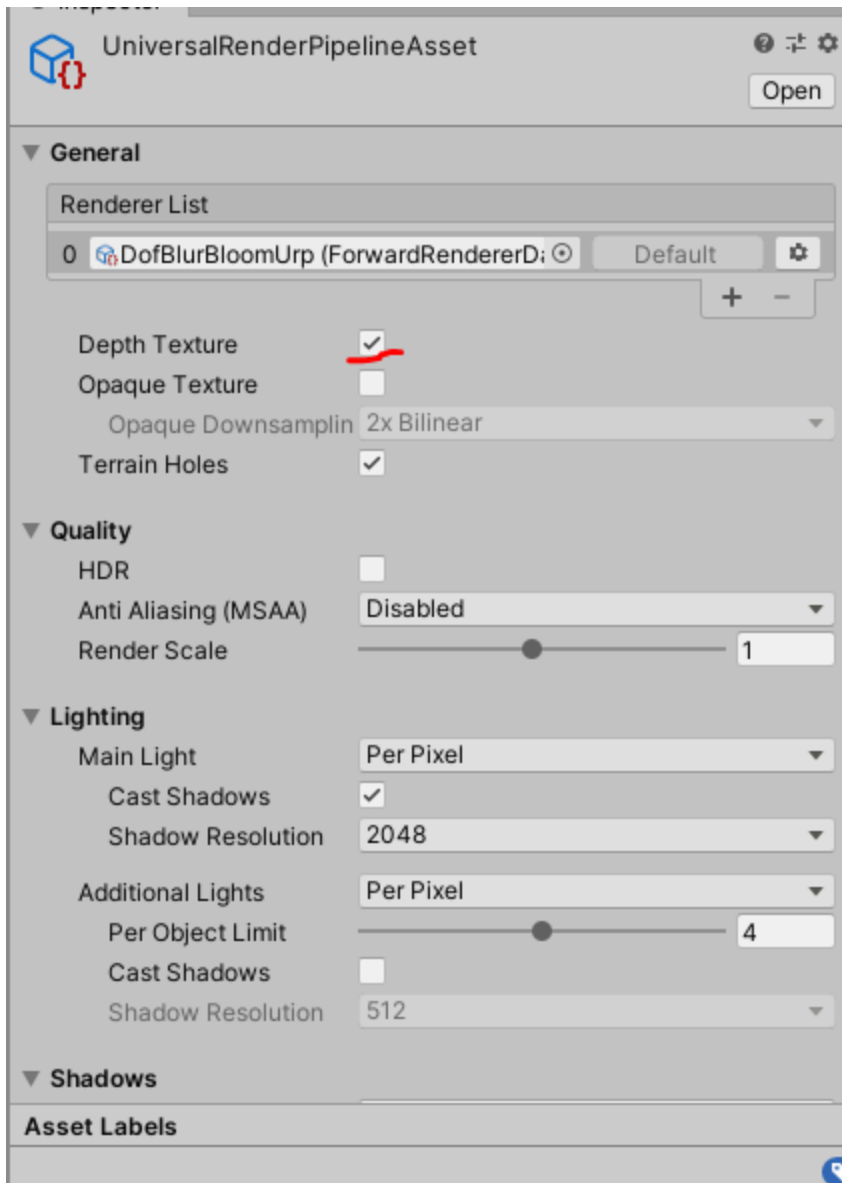


3. That is pretty much it. To change the parameters go to the URP_Dof folder. Find DOFUr, extend it and select DOFUr. You will see in the inspector the parameters of it.





4. **Depth Calculation method has two options. Depth which uses depth texture and Custom materials which require to use the custom materials. If you picked thi method do not forget to tick the checkbox DepthTexture in the pipeline asset**



5. If you picked Custom materials you dont need Depth Texture, so **disable** it. In this mode all objects in your scene should have only materials from RufatShaderlab/DOFUrp:
- Lit
 - SimpleLit
 - BakedLit
 - Unlit

PARAMETERS

- **DEPTH CALCULATION METHOD – Has two options:**
 - **Depth** - depth data calculated from the camera depth texture
 - **Custom materials** – depth data is stored in the custom materials. So for observing the depth of field effect you must use only custom materials in this mode. **This approach is much faster than depth mode and the difference may be noticed in the low end devices.**
- **BLUR AMOUNT** – level of blur on your scene
 - **Try to keep Blur amount values as low as possible, it will boost your performance.** Here is the scheme of passes according to blur amount or bloom diffuse:
 - **0 – 0.25 1 pass**
 - **0.26 - 0.5 2 passes**
 - **0.51 - 0.75 3 passes**
 - **0.76 - 1 5 passes**
- **FOCUS** – focus distance of the camera. Zone where final image were not be blurred
- **APERTURE** – value which determines the level of DOF. Determines the area from the focus point which won't be blurred. Less the value of the aperture, more area would be focused.

SHADERS

- **DOFUrP – The fastest depth of field shader in the Asset Store.** Runs at **46-55 fps** on low-end device (Meizu M2 note)

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**

