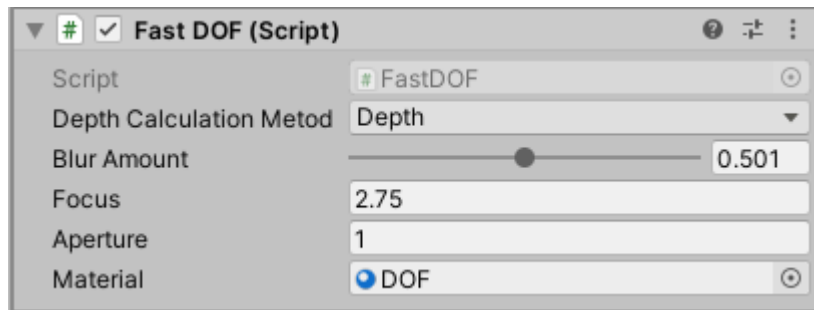


FAST MOBILE DEPTH OF FIELD

This asset consists of shaders for applying depth of field in the scene. Development the main goal was to maximally optimize the well-known technigue, keeping the quality of the final image. The shader was tested on the low-end mobile device in loaded scene.

How to apply:

1. Add FastDOF.cs script to Camera object



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

2. Attach DOF material to Material property of the script
3. Depth Calculation method has two options. Depth which uses depth texture and Custom materials which require to use the custom materials. So if you picked Depth skip the next step
4. If you picked Custom materials mode all objects in your scene should have only materials from RufatShaderlab/DOF.
 - a. Unlit
 - b. Diffuse
 - c. Specular
 - d. Bumped Diffuse
 - e. Bumped Specular
 - f. Transparent(Cutout)

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

- **DOF – The fastest depth of field shader in the Asset Store.** Runs at **46-55 fps** on low-end device (Meizu M2 note)
- **Unlit** – Modified and optimized version of standart mobile Unlit shader.
- **Diffuse** - Modified and optimized version of standart mobile Diffuse shader.
- **Specular** - Modified and optimized version of standart mobile Specular shader.
- **Bumped Diffuse** - Modified and optimized version of standart mobile Bumped Diffuse shader.
- **Bumped Specular** - Modified and optimized version of standart mobile Bumped Specular shader.

- **Transparent** - Modified and optimized version of standart Cutout shader.

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**