# Materials Needed
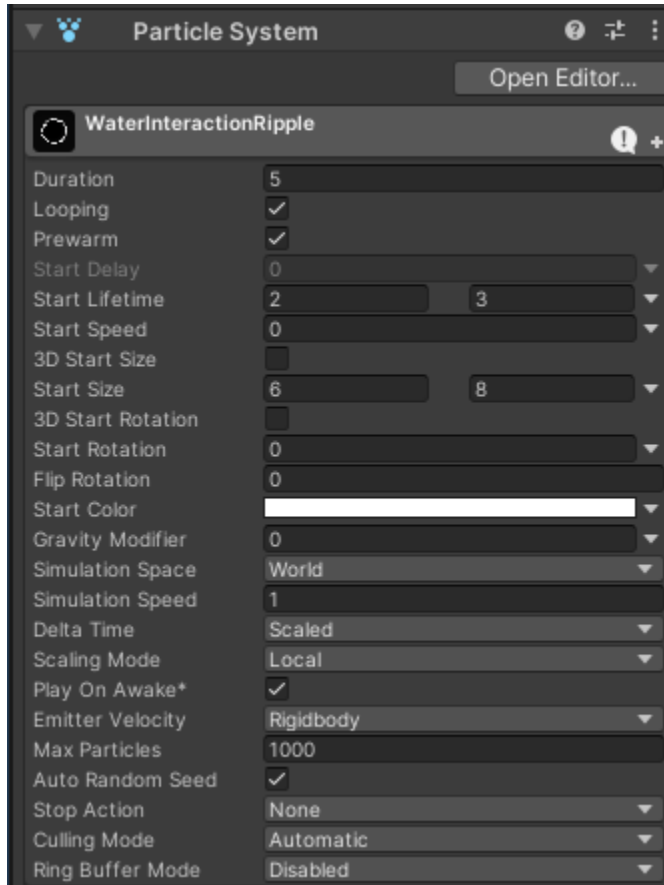
1. Particle Texture (InteractionParticle.png)
2. Interaction Script (WaterInteraction.cs)
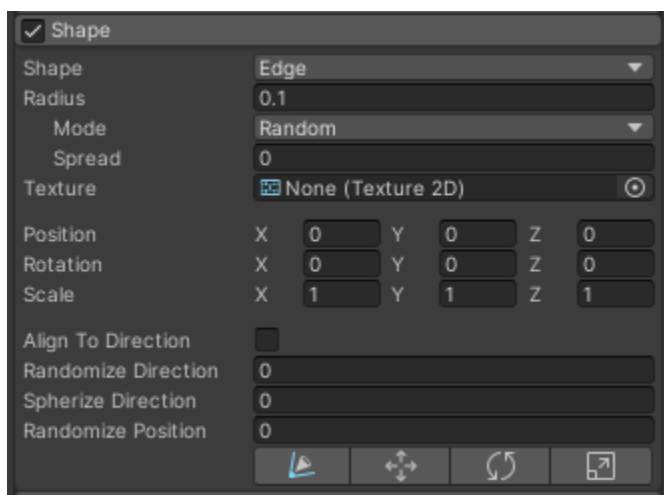3. Ground Plane (gnd,fbx)
4. Water Plane (h20.fbx)

Important Notes

1. This method only works IF the water itself is a **flat plane**. Water with vertex displacement can still work with this method but do be aware that it could break the interactive immersion.

2. The interactive particle itself has no shadow, thus making it look a little "fake" in some sense.

3. This technique is based on research work of a 1st batch IM student, Low Kang Xuan.
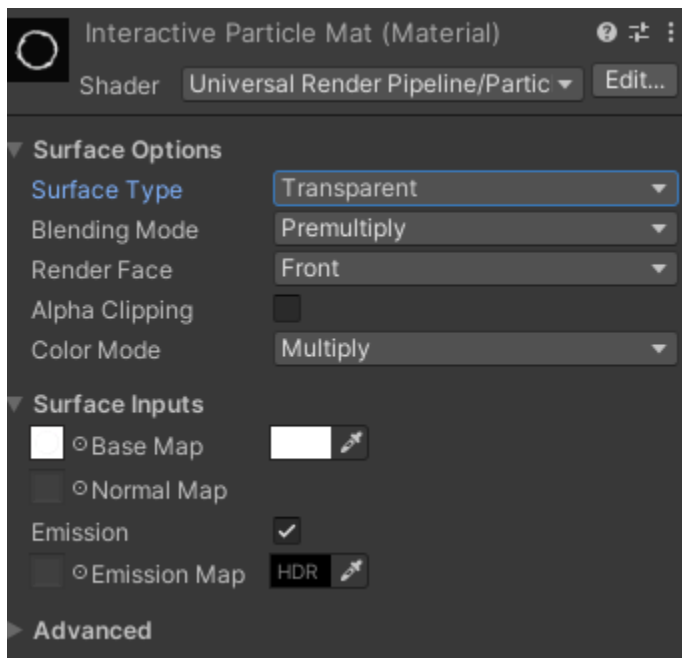
# Particle System Setup

1. Create a new Particle System in your scene

2. Tick the **Prewarm** option, **Start Lifetime** between **2** and **3, Start Speed** to **0, Start Size** between **6** and **8, Start Color** to **White,** and **Simulation Space** to **World**
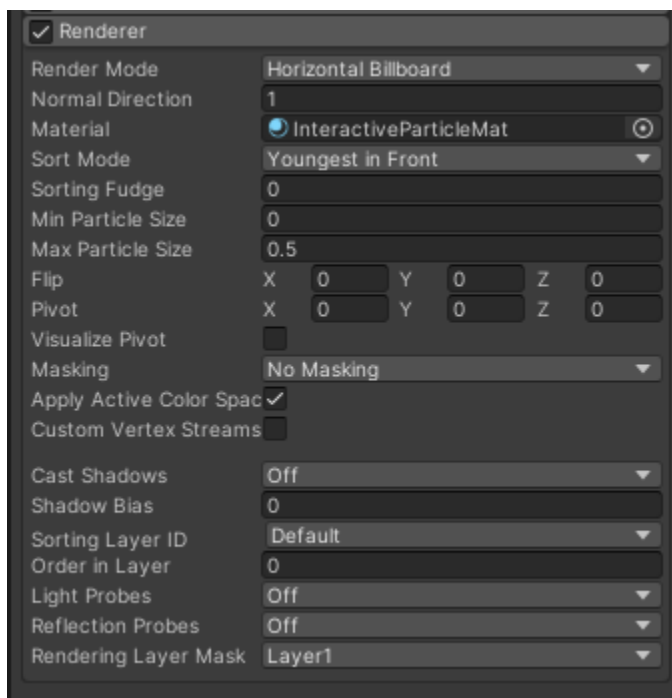


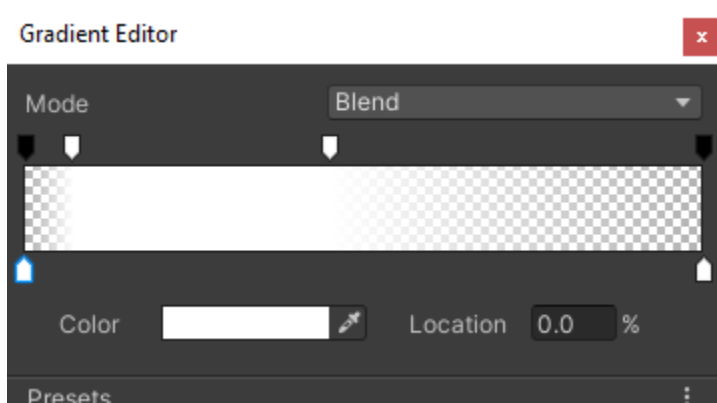3. Change the shape to **Edge**, with a very small **Radius (0.1)**

4. Create a new Material set to **Universal Render Pipeline/Particles/Unlit** and add the above texture. Set the Surface Type to **Transparent**, Blending Mode to **PreMultiply**, and Color mode to **Multiply**
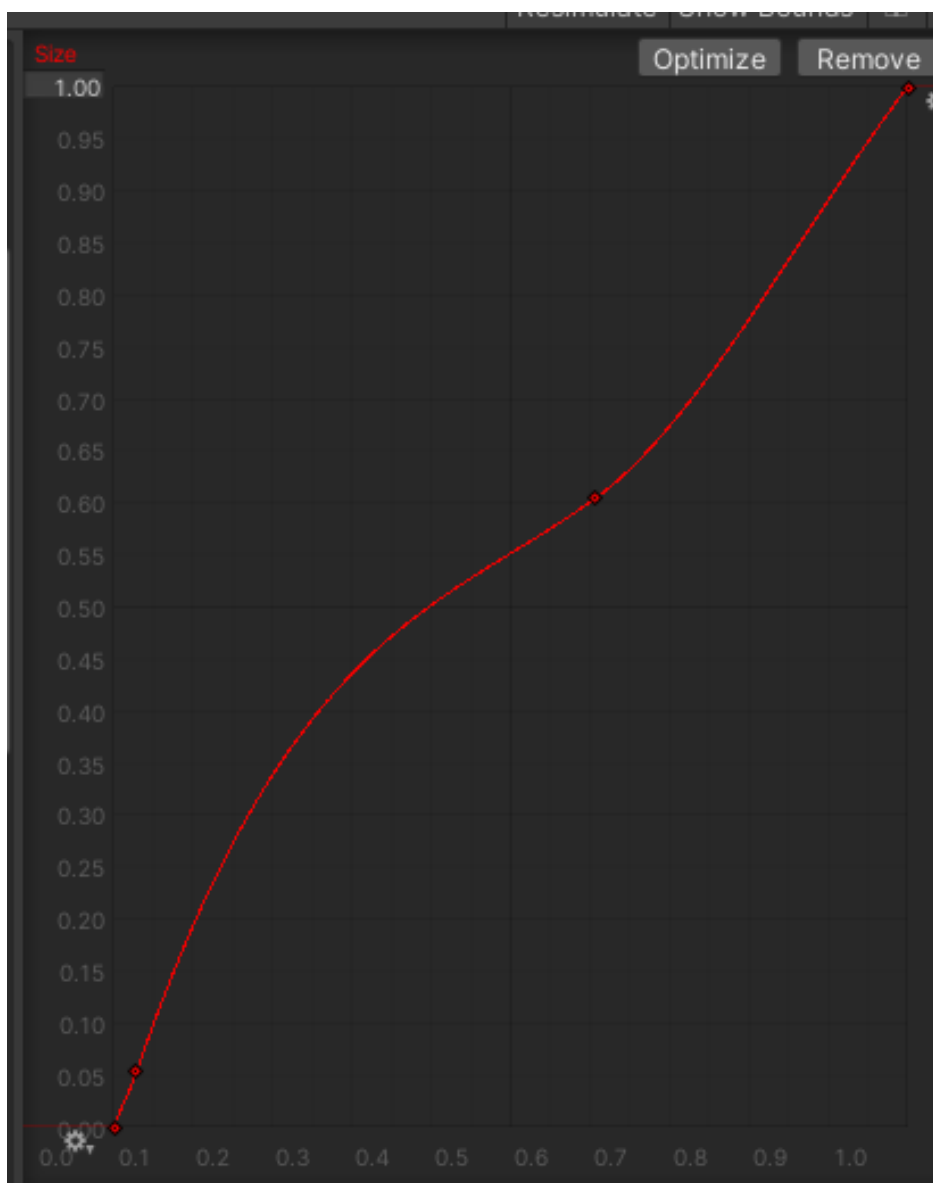


5. In the Renderer section of the Particle System; Set **Render Mode** to **Horizontal Billboard,** Set **Material** to the new AlphaBlended Ripple Material, and set **Sort Mode** to **Youngest in Front**
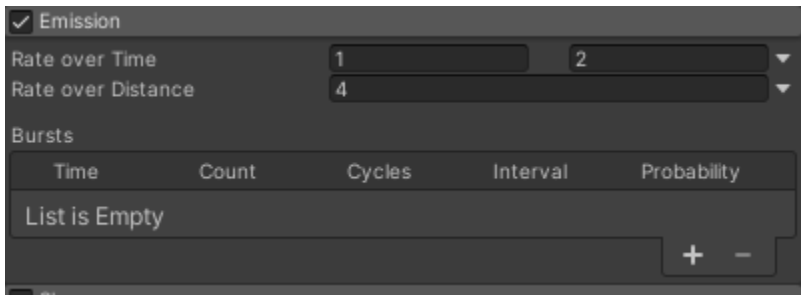
6. Turn on **Color over Lifetime** and create a gradient of white that blends from 0 alpha to opaque white and to 0 alpha (see below)
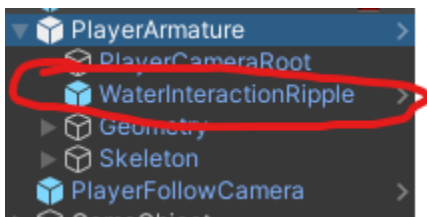


7. Turn on **Size over Lifetime** and make a curve that starts growing quick and then gradually slows down as time gets longer …

8. Under Emission tab, set the **Rate over Time** to between **1** and **2**
   Set the **Rate over Distance** to **4**



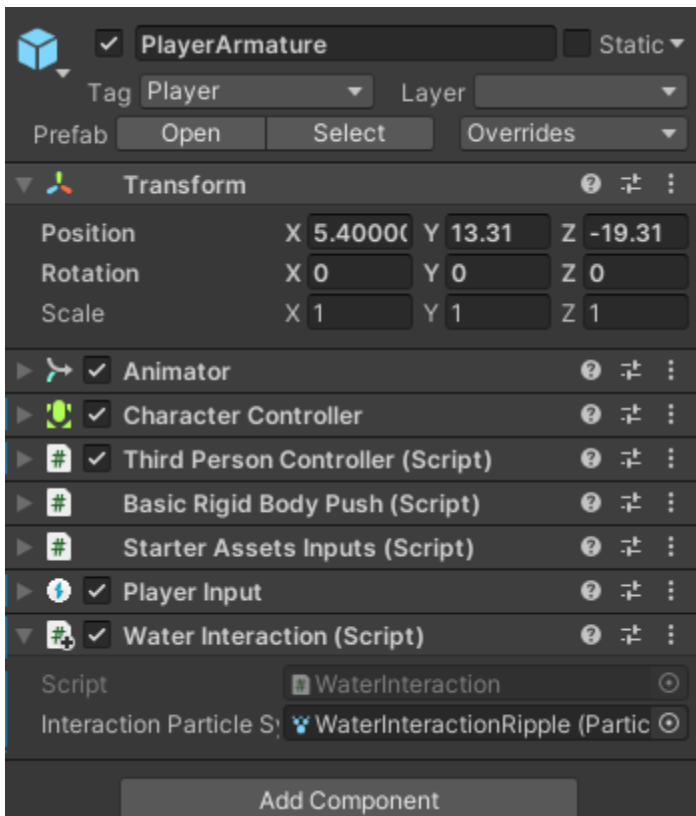9. Add the newly created Particle System as a child of the **PlayerArmature**

# Water Collider Setup

1. Choose the water mesh, then Inspector menu press Add Component > Physics > **Box Collider**

2. Tick the **Is Trigger** box

# Script Setup

1. Add the **Water Interaction Script** as a component of the **PlayerArmature**



2. Drag the **Particle System** into the **Interaction Particle System parameter** of the script

# Particle FX values adjustments

Note the initial values used for the particles system may not be suitable. You will need to make value adjustments to get towards a feel you like.