

Development

I initially wanted to use the shader script, because it's more optimized, but after developing it, doing some tests and research, i've discovered that it doesn't work so well with HDRP, so i've made another one using Shader Graph.

For the second one i used World positions to mask out the correct directions the water should flow, so no matter what rotation you put the cube, the animation stills behaves as it would in real life, for the lateral droplets i created a mask in photoshop, and animated it's positions downwards and with a jiggle to simulate imperfections in the object, for the top part i did a mask using voronoi and steps to only allow the effect for a few seconds a time.

I also created 2 color masks, one for the base color of the object, and another for the water effect, so this material would work in any type of object.

there is also a normal and smooth mask, so the water stands out even more.

Optimization

For optimization I would look at the shader graph and find out what else I could delete for optimization, also would add a texture slot for the main texture, and UV, allowing more versatility to the shader.

Controllers.



Stretch: allows to control the X and Y scale of the mask.

Rain Speed: Control the speed of the rain, X from left to right and Y Up and down.

TopRainSpeed: the amount of particles on the top of the cube.

Base color: base color of the cube.

Water Color: Color of the water effect.