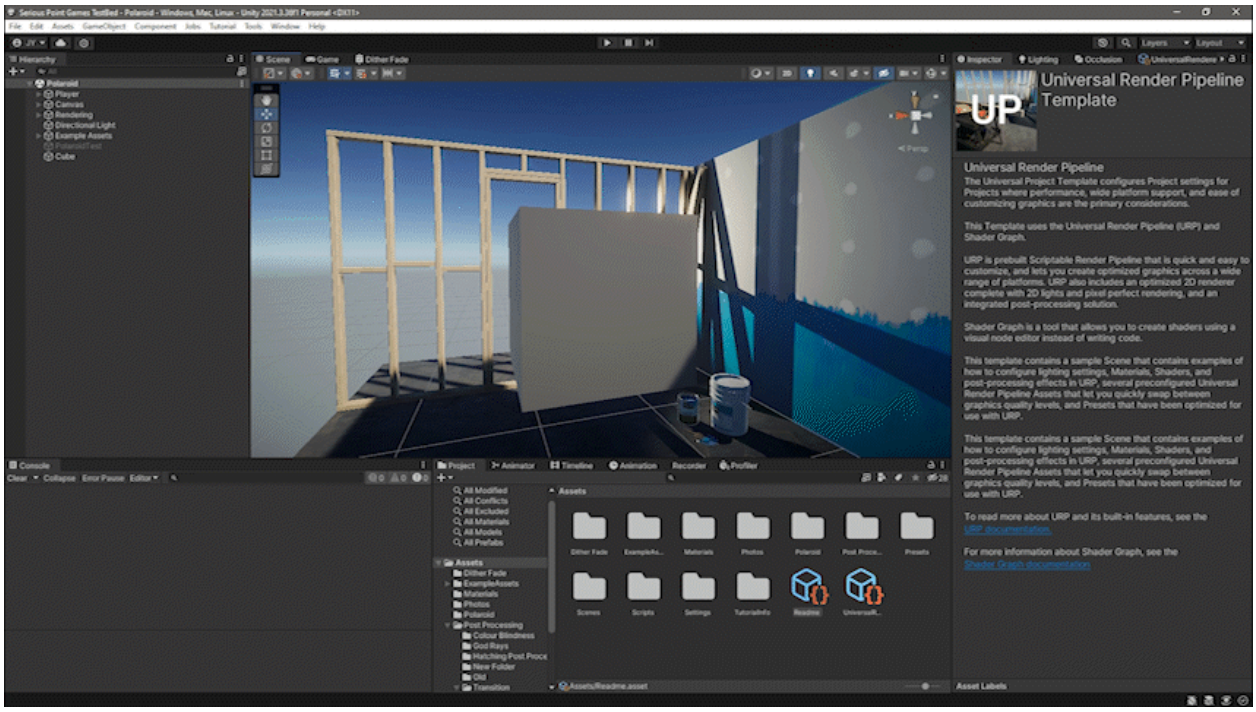

Dither Fade Effect

By Joseph Y.

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Overview

The Dither Fade effect is a shader effect that uses dithering to fade in and out an object, making it look transparent. The fading is based on the camera's distance to the object, where the object looks opaque from far but transparent when the camera is very close. It is designed to run on the Unity URP pipeline, ShaderGraph, and Unity 2019.3.9f1.

Note: This effect is a separate shader effect in ShaderGraph. If you want to incorporate it into another shader, you will need to copy its contents to that shader (if it's on ShaderGraph or node-based shader programming). If it's not on ShaderGraph, you will need to reconstruct it from scratch using HLSL/CG and ShaderLab.

The shader code for this effect is based on PabloMakes' Dither Fade in Unity YouTube video (https://www.youtube.com/watch?v=rVeS7oh3oug).

Installation

Before you begin:

1. Ensure you use the Universal Render Pipeline (URP) and Unity 2019.3.9f1.
2. Ensure you have installed the necessary packages, such as ShaderGraph.

The effect is a ShaderGraph file that you can import into Unity. You can just click and drag it into your project.

To use the effect on a mesh:

1. Create a material with the dither fade ShaderGraph.
2. Select material and drag it onto a mesh to replace the default material with the selected material. If done correctly, the object should disappear when you move the camera close to it.

Adjusting the dither fade effect

You can select the material with the dither fade shader on, to showcase the parameters that you can adjust in the inspector window. Modifying the parameters in that material would only affect objects/meshes that have that material on. Here are the details about the parameters:

1. **minDistance:** The minimum distance for the object to become fully transparent/invisible is lower, which means that the camera needs to be much closer for the effect to be fully transparent. The closer it is to the value of maxDistance, the less distance it needs to become fully transparent, making the transition from opaque to fully transparent much shorter.
2. **maxDistance:** The maximum distance that the object remains opaque.

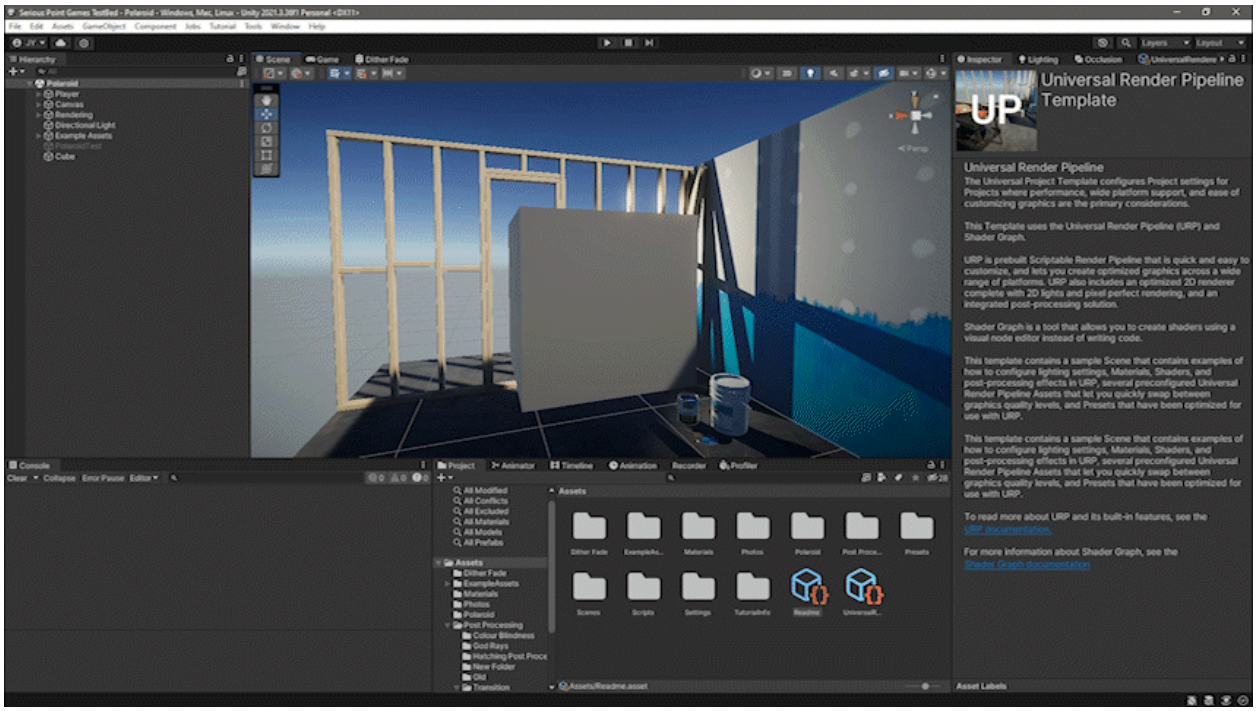
Update Log

V0.9: The base implementation of the effect.

Credits

Shader code is based on PabloMakes' Dither Fade in Unity YouTube video (https://www.youtube.com/watch?v=rVeS7oh3oug).

Examples


Universal Render Pipeline
Template
Universal Render Pipeline
The Universal Project Template configures Project settings for Projects where performance, wide platform support, and ease of customizing graphics are the primary considerations.
This Template uses the Universal Render Pipeline (URP) and Shader Graph.
URP is prebuilt Scriptable Render Pipeline that is quick and easy to customize, and lets you create optimized graphics across a wide range of platforms. URP also includes an optimized 2D renderer complete with 2D lights and pixel perfect rendering, and an integrated post-processing solution.
Shader Graph is a tool that allows you to create shaders using a visual node editor instead of writing code.
This template contains a sample Scene that contains examples of how to configure lighting settings, Materials, Shaders, and post-processing effects in URP, several preconfigured Universal Render Pipeline Assets that let you quickly swap between graphics quality levels, and Presets that have been optimized for use with URP.
This template contains a sample Scene that contains examples of how to configure lighting settings, Materials, Shaders, and post-processing effects in URP, several preconfigured Universal Render Pipeline Assets that let you quickly swap between graphics quality levels, and Presets that have been optimized for use with URP.
To read more about URP and its built-in features, see the
URP documentation.
For more information about Shader Graph, see the
Shader Graph documentation