Fake Fog

CODYDREAM

Guide and Documentation

Supporting

This is mainly for unity urp
Made in unity 2022 LTS.

This can be used for HDRP too (not tested).
Also for Built in Render pipeline (not sure).
*for that try setting shaders targets HDRP and Built in

*note if you see Pink Objects , Set Rendering pipeline to URP (**Tutorial**)

Key Features

- Multilayered Ground Fog
- Fog Ring
  *Note for best visuals apply unity default Fog too.
  *If you are modifying the fog , be careful stacking fog layers , it cause Overdraw
  * this scene good for low end hardware

Advance Demo scene

Key Features

This scene include
- God rays particle system
- Multilayered Terrain Fog (advance fog)
- Fog ring (advance fog)
- Wind Particle systems

See more details

What is new in Advance fog

It has a vertex shader to simulate fog uneven Height
Also it has Fading to simulate fog disappear when camera
Is near the fog

Why use Terrain for Advance fog instead of Quad

Advance fog terrain shader needs vertex for displacement
.Since unity urp does not support tessellation , we need a
High poly mesh . Having high poly mesh that cover entire
scene is bad. Unity terrain support tessellation so we use that
    Instead of a high poly mesh

God Rays (particle system)

Since we are not doing real volumetric fog , we can not accurately simulate light beams , so we use unity particle system to approximate light beams . (fake fog and fake god rays are good for performance wide)

Wind (particle systems)

Wind adds some nice touch for the scene

Note

- Using particle systems give load on cpu , if you are familiar with unity VFX , you can use that to implement these effects

Advance Night Demo

Key Features

This scene include
- Rain Particle system
- Aurora
- Things included in Advance Demo Scene

See more details

Aurora

A little bit of touch to sky to make it beautiful

Rain Particle system

This particle system help to create atmosphere .
For use it simple put it on the scene at a reasonable highest (rain drops only fall for some seconds). Also there is a flash effect when rain drop hit a collider
Again if you want use VFX instead of particle system for the rain

Additional Tool

There is a tool for creating fog ring instead of manually
Putting quads.
It is located under "tools/ place objects in circle "
To use that
Set the center (ex :- player or camera)
Set the object (fog quad)
Set the circle radius and objects amount
And click place objects
*note adjust offset to break the seamless of object placement
   *note click Delete All spawn objects to delete spawned objects

Limitations

Transparent Fog when stacked become a problem because
It do a thing called "Overdraw" .
So Don't Stack too much transparent fogs
Usually 2 to 3 fog quads are enough

Future Expectations

To Use VFX instead of particle systems
And to add more features ...

Thanks for using Cody Dreams product