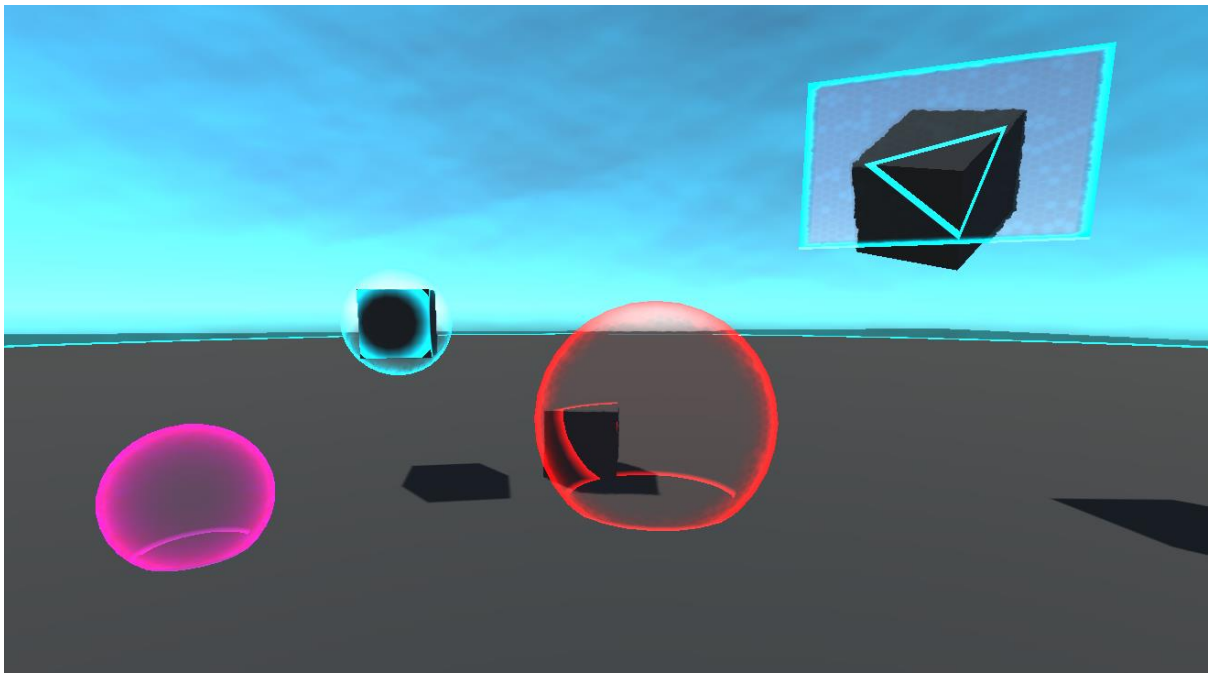
MANUAL
BARRIER AND FORCE FIELD SHADERS



www.riftfx.net

http://www.riftfx.net/contact.html

riftfx.contact@gmail.com

Contents

Setup

The demo scenes require some scripts from the Standard Assets package (CrossPlatformInput). Consult the README.txt on how to import it.

Package Description

The Barrier and Force Field Shader asset contains shaders, materials and textures used to create simple barrier effects for your game. A number of prefabs are also included which can be fully customized, including a 'skybox' style cylinder barrier which can be used for defining 'safe' zones as seen in battle royal games. The barriers simulate visual distortion as well as intersection highlights from other objects.

What's In This Package

Core

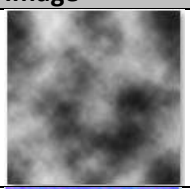
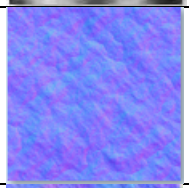
Shaders

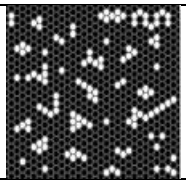
Name	Description
BarrierShader.shader	A sphere barrier effect. To be placed on sphere meshes.
BarrierWallShader.shader	A wall barrier effect. To be placed on flat plane meshes.
CylinderBarrierShader.shader	A cylindrical barrier effect. To be placed on cylindrical meshes. Triangle faces point inwards, so the player should

Materials

Name	Description
SphereBarrier1Mat.mat	Uses BarrierShader
SphereBarrier2Mat.mat	Uses BarrierShader
SphereBarrier3Mat.mat	Uses BarrierShader
WallBarrier1Mat.mat	Uses BarrierWallShader
CylinderBarrierMat.mat	Uses CylinderBarrierShader

Textures

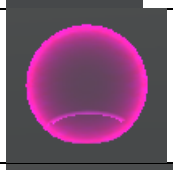
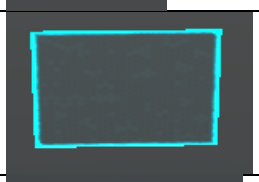
Name	Image
dissolveTexture1.png	
distortTexture1.png	
distortTexture2.png	

pattern1.png	

Scripts

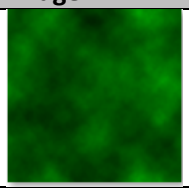
Name	Description
FaceMainCameraScript.cs	Makes the object point toward the main camera's position. Used on sphere barriers to make sure the inside rim is visible from all angles.

Prefab

Name	Image
BarrierSphere1	
BarrierSphere2	
BarrierSphere3	
BarrierWall1	
CylinderBarrier	

Other

Textures

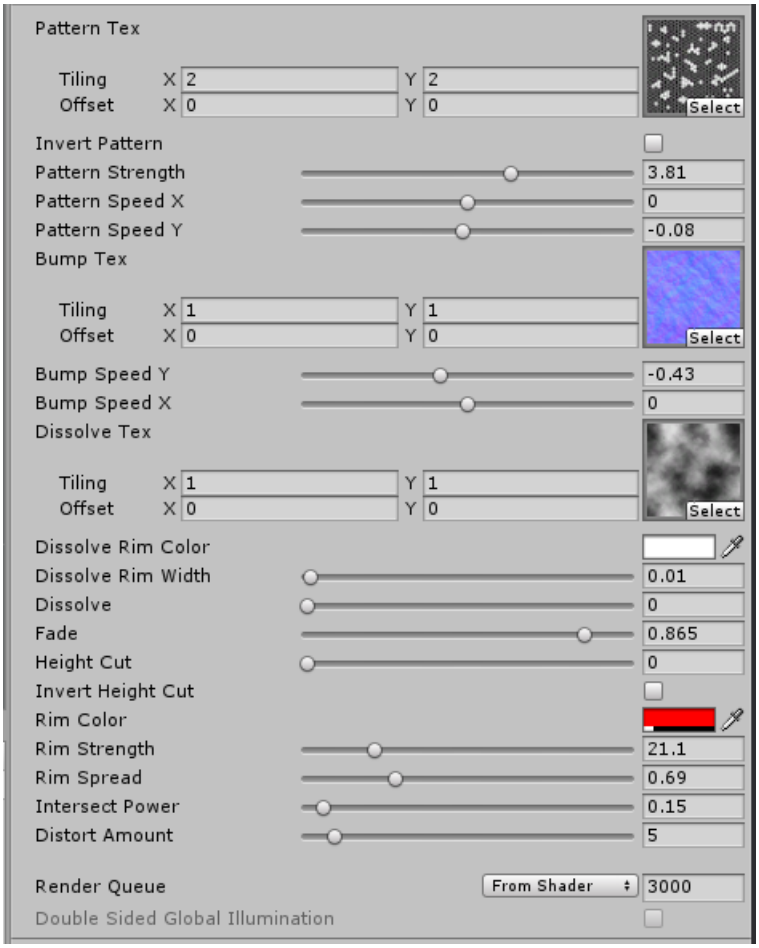
Name	Image
groundTexture1.png	

Scripts

Name	Description
ScalePulseScript.cs	Allows the object the script is placed on to change its scale in a pulsating fashion.
SimpleCameraFlyScript.cs	A first person, free look camera for easily manoeuvring the scene.

Shader Properties

All three shaders contain the exact same properties except for the CylinderBarrierShader which is lacking the “Height Cut” property.



Pattern Tex

This texture defines the main pattern of the barrier. It is a greyscale texture which is used to affect the alpha of the visible portions of the barrier.

Invert Pattern

This toggle flips the sampled values of the pattern texture.

Pattern Strength

This slider defines the strength of the pattern texture. It is used to control the blend of the pattern texture over the object.

Pattern Speed X/Y
These properties control the scrolling speed and direction of the pattern texture.

Bump Tex
This texture is a normal map that is used to create the barrier distortion.

Bump Speed X/Y
These properties control the scrolling speed and direction of the bump texture.

Dissolve Tex
This is a greyscale image used to create a dissolving effect. The texture values are used to determine if a pixel should be cut-out or not when compared to the Dissolve value.

Dissolve Rim Color
This property is used to control the color of the edges of the dissolved portions of the barrier.

Dissolve Rim Width
This property is used to control the size of the rim at the edge of dissolved portions of the barrier.

Dissolve
This property controls the cut-off value for discarding a pixel when compared to the dissolve texture sample. For example: A value of 0.5 would mean all dissolve texture samples with a greyscale of less than or equal to 0.5 are going to be discarded.

Fade
The final alpha value of the pixel returned. Basically this controls the overall opacity of the barrier. For the cylinder barrier shader, fade is also strengthened based on the distance from the top to the bottom of the cylinder (calculated using the v texture coordinate).

Height Cut
Note: Doesn't apply to cylinder barrier shader.

Height cut controls the cut-off value for discarding a pixel when compared to the v coordinate of the texture. This allows a barrier to appear or disappear vertically. For example: A value of 0.5 would mean half the object will be visible.

Invert Height Cut
This property simply inverts the vertical direction of the height cut effect. If toggled on, an object will appear from bottom to top when controlling the Height Cut slider.

Rim Color
This property defines the main outline color of the barrier.

Rim Strength
A slider to control the thickness of the barrier's rim.

Rim Spread
A slider to control the spread of the rim toward the center of the barrier.

Intersect Power
Defines the strength/size of the intersection highlights.

Distort Amount
This slider controls the amount of distortion that is produced by the barrier.

Contact
Email: riftfx.contact@gmail.com

Website: http://www.riftfx.net/contact.html