

Custom shaders example

Discussions

Support

sabotage3d #1 January 2, 2017, 1:02am

Hi guys,

Is there any simple example on how to use custom shaders. Something really simple like a constant vertex and fragment shader.

What is the difference between Materials , Techniques and Renderpaths ?

ghidra #2 January 2, 2017, 1:02am

I have been dealing with this the last few weeks.

I am starting to get a grip on it, but that is not to say I fully understand. Just that I am able to make a custom shader.

I wrote a blog post on the subject here:

<http://nervegass.blogspot.com/2014/12/urho-shaders-edge-detection.html>

Hopefully it helps. I'm not writer.

I can make a much simpler one tonight if i need to be more clear.

sabotage3d #3 January 2, 2017, 1:02am

Thanks ghidra,

Do you happen to have a complete project from your blog ?

Or the C++ files for the sample ?

ghidra #4 January 2, 2017, 1:02am

The only source missing from that blog post is my anglescript file, which is actually based on one of the example files.

```
#include "Scripts/Utilities/Sample.as"
```



```

void Start(){
    SampleStart();
    CreateScene();
    SetupViewport();
    SubscribeToEvents();
}

void CreateScene(){
    scene_ = Scene();
    scene_.CreateComponent("Octree");

    Node@ bgnode = scene_.CreateChild("BG");
    StaticModel@ bgobj = bgnode.CreateComponent("StaticModel");
    bgobj.model = cache.GetResource("Model", "Models/Plane.mdl");
    Material@ bmata = cache.GetResource("Material", "Materials/research/simple.xml");
    Material@ rmata = bmata.Clone();
    Color myCola = Color(Random(1.0f),Random(1.0f),Random(1.0f),1.0f);
    rmata.shaderParameters["ObjectColor"]=Variant(myCola);//single quotes c
    bgobj.material = rmata;

    bgnode.Scale(15.0f);

```

That's it.

I have worked on it since, and I had to change some names back. so hopefully if you copy and paste it still jsut works.

But the other files, the render path and the techniques, as you can see from the paths, i had in subfolders called "research" in the actual "CoreData" folders.

So /CoreData/techniques/research/simple.xml
/CoreData/RenderPath/research/Forward.xml
etc

I will try and actually make a more basic lesson, with files in the near future as I think it will be helpful for anyone trying to figure this stuff out.

[sabotage3d](#) #5 January 2, 2017, 1:02am

Thanks it works nice the only thing that seems changed is the this variable **ObjectColor** it is missing in the shader.

Where should I add it to get the random color ?

[ghidra](#) #6 January 2, 2017, 1:02am

In the material xml

```
<material>
  <technique name="Techniques/research/simple.xml" />
  <parameter name="ObjectColor" value="1.0 1.0 1.0 16" />
</material>
```

I knew i would miss something, hopefully that takes care of it.

sabotage3d #7 January 2, 2017, 1:02am

I think it is missing in the shader as well ?

ghidra #8 January 2, 2017, 1:02am

out of curiosity, are you using windows. I noticed that some of my links were weird on my windows box trying to get this to work... Again, at some point in the enar future, I will just put together something simple that I can just hand out as a zip file.
