Chukong Technologies

Shaders and Materials

PC-3DMAX

Cocos3D Team

Contents

1 Shaders and Materials

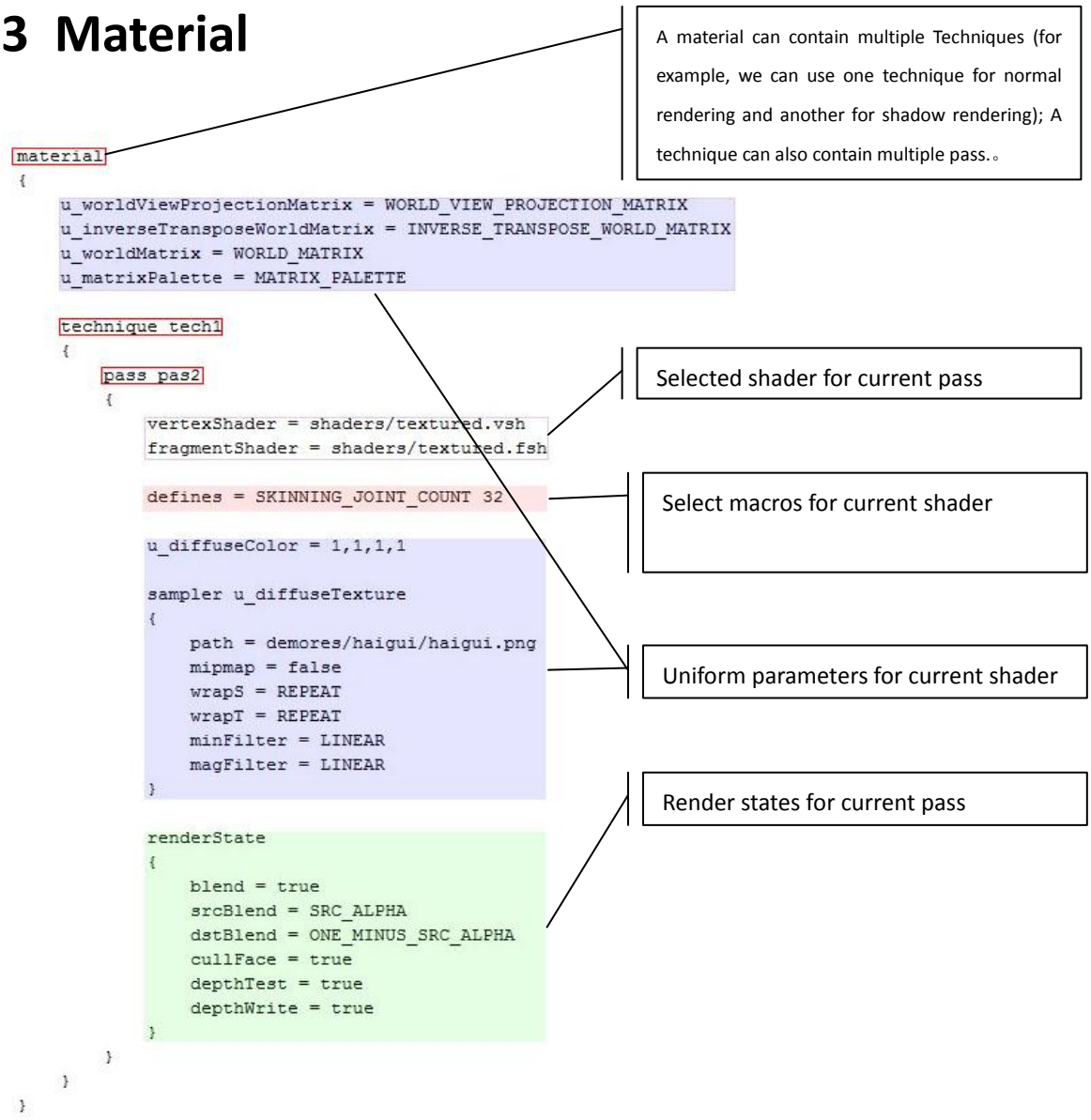
The *.vsh/*.fsh files are a way of defining how an object is rendered within the Cocos3D engine.

The *.material files are meta-data files that contain artist-editable features, including shader file, shader properties, and texture references. ModelEditor can create and modify material files that can be assigned to mesh objects.。

2 Shader

Cocos3D ships with some commonly used shaders, which can be found in the Resources/3d/shaders folder。

3 Material



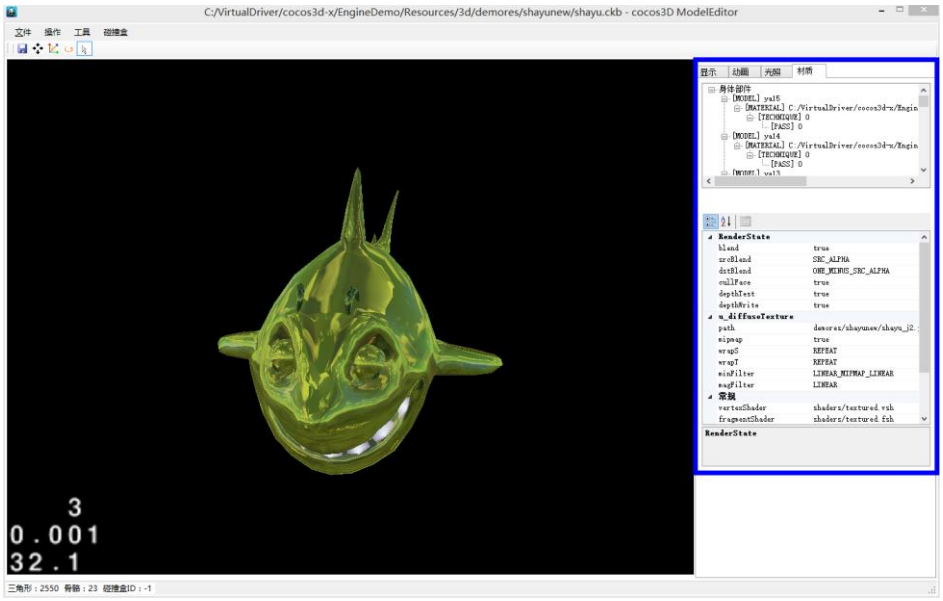
Tips: 1: Above, the basic structure supported by the Cocos3D engine material script, the parameters of the first blue region using the automatic assignment mechanism by the Cocos3D engine, Cocos3D also supports the following common values of automatic assignment:：

```
// Binds a node's World matrix.
WORLD_MATRIX,
// Binds the View matrix of the active camera for the node's scene.
VIEW_MATRIX,
// Binds the Projection matrix of the active camera for the node's scene.
PROJECTION_MATRIX,
// Binds a node's WorldView matrix.
WORLD_VIEW_MATRIX,
// Binds the ViewProjection matrix of the active camera for the node's scene.
VIEW_PROJECTION_MATRIX,
// Binds a node's WorldViewProjection matrix.
WORLD_VIEW_PROJECTION_MATRIX,
// Binds a node's InverseTransposeWorl matrix.
INVERSE_TRANSPOSE_WORLD_MATRIX,
// Binds a node's InverseTransposeWorldView matrix.
INVERSE_TRANSPOSE_WORLD_VIEW_MATRIX,
// Binds the position (C3DVector3) of the active camera for the node's scene.
CAMERA_WORLD_POSITION,
// Binds the view-space position (C3DVector3) of the active camera for the node's scene.
CAMERA_VIEW_POSITION,
// Binds the matrix palette of C3DMeshSkin attached to a node's model.
MATRIX_PALETTE,
// Binds the total time and delat time.
TIME_PARAM,
```

2： Valid attributes and macros used by the material script depends on the shader’s impliments.

4 Debug

Developers can use the model editor for material script debugging.


C:/VirtualDriver/cocos3d-x/EngineDemo/Resources/3d/demores/shayunew/shayu.ckb - cocos3D ModelEditor
文件
操作
工具
碰撞盒
显示
动画
光照
材质
身体部件
[MODEL] ya15
[MATERIAL] C:/VirtualDriver/cocos3d-x/Engin
[TECHNIQUE] 0
[PASS] 0
[MODEL] ya14
[MATERIAL] C:/VirtualDriver/cocos3d-x/Engin
[TECHNIQUE] 0
[PASS] 0
RenderState
blend true
srcBlend SRC_ALPHA
dstBlend ONE_MINUS_SRC_ALPHA
cullFace true
depthTest true
depthWrite true
u_diffuseTexture
path demores/shayunew/shayu_j2.
mipmap true
wrapS REPEAT
wrapT REPEAT
minFilter LINEAR_MIPMAP_LINEAR
magFilter LINEAR
常规
vertexShader shaders/textured.vsh
fragmentShader shaders/textured.fsh
RenderState
3
0.001
32.1
三角形：2550 骨骼：23 碰撞盒ID：-1