The Comment For Program Of Kadai2

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1 Read Mesh

1.1 Using OpenMesh IO Manager to Read Or Write Mesh-Data

In my kadai2 project ,I read mesh data from obj files included in the same project directory.Reading mesh data by using code like below:

```
if (!OpenMesh::IO::read_mesh(mesh_Tetra, "r01.obj"))
{
std::cerr << "read error\n";
exit(1);
}
```

2 Display Mesh

2.1 Switch Among Shading ,Wireframe,and Point Using Input Event Of Keyboard

2.1.1 input of the program

first input 0 or 1 to determine if you want to choose shding-wireframe-point switch type ,0 is yes ,0 is no.if yes ,you will determine the object type,otherwise ,you will choose the display format you want see,including faces,wireframe and point of a single object.finally, you have to determine whether you want to add the lighting to get shading effect.0 is no,1 is yes.

2.1.2 switch between smooth and flat shading

During the stage of displaying the object,press s key or f key to implement smooth shaing model or flat shading model.

2.1.3 The calculation Of Norm Vector Of Vertex And Face

Using openmesh lib to calculate norm vector automatically like code below:

```
    // Add face normals as default property
mesh_Tetra.request_face_normals();
// Add vertex normals as default property (ref. previous tutorial)
mesh_Tetra.request_vertex_normals();

// If the file did not provide vertex normals, then calculate them

OpenMesh::IO::Options opt;
if (!opt.check(OpenMesh::IO::Options::VertexNormal) &&
mesh_Tetra.has_face_normals() && mesh_Tetra.has_vertex_normals())
{
// let the mesh update the normals
mesh_Tetra.update_normals();
}
```

3 The Information of Polygons

In my kadai2 project ,everytime you display some tpye of object ,the geometry information of this object will shown in the command window.

4 The Output For Program

4.1 Output For Smooth Shading and Flat Shading

4.2 Output For Switch Between Shading Wireframe and Point

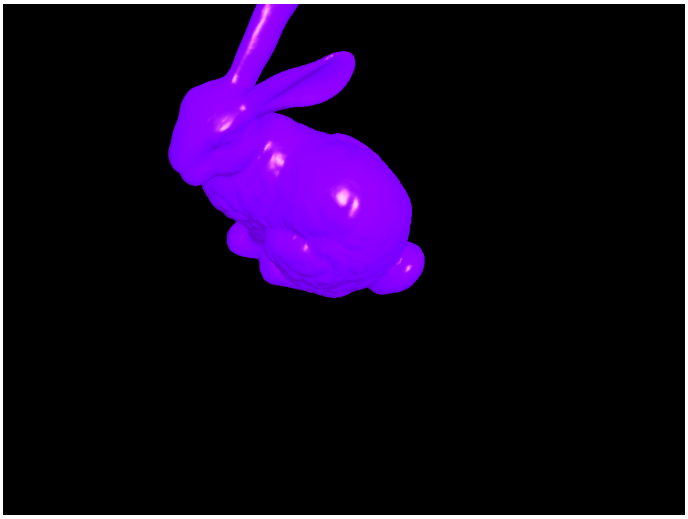

Figure 1: A simple caption