

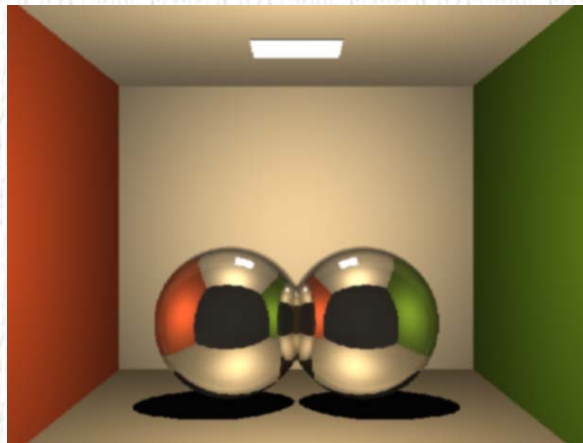
Lab 4

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<http://graphics.cs.aueb.gr/graphics/people.html>

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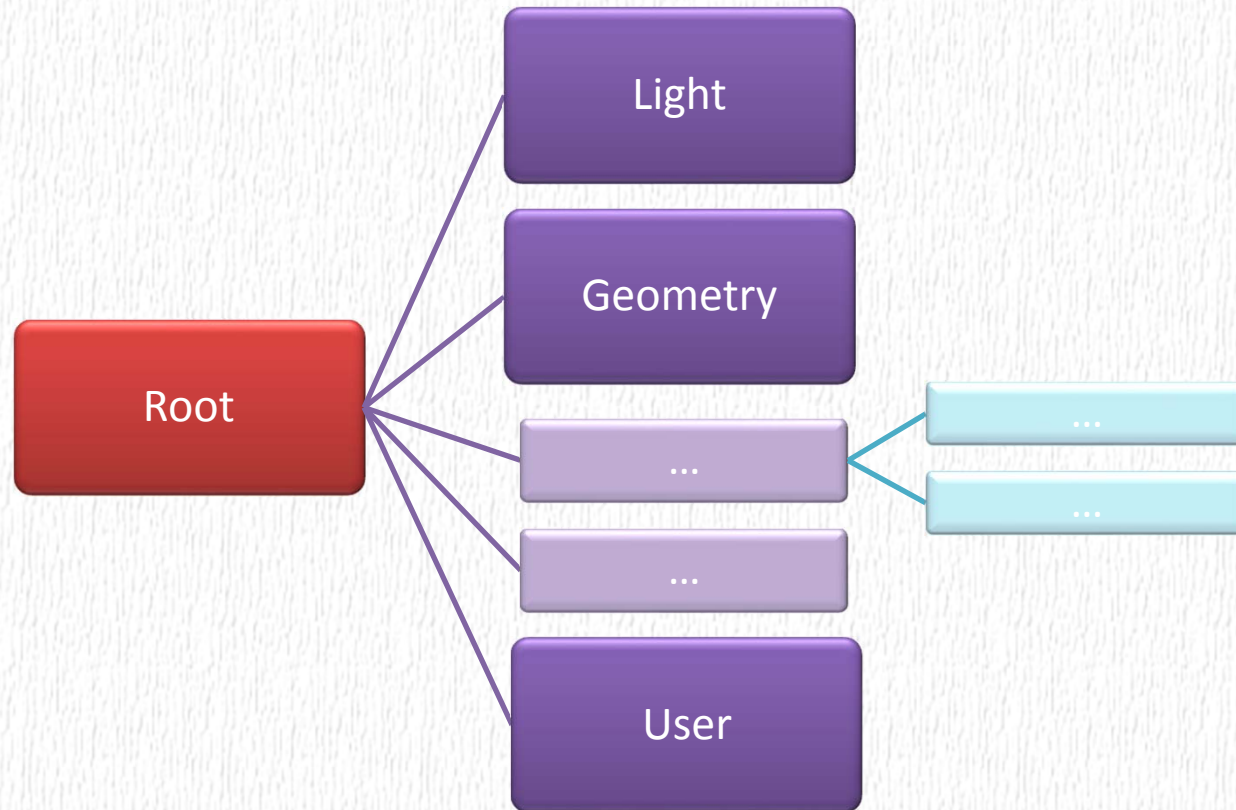
Introduction

- Scene Management
- Object Loader

Scene graph

- Stores logical relationship of elements
- Good for hierarchical transformations
- Can also read from an external file (e.g. XML)
- Nodes, group nodes, etc.

Scene graph



OBJ Loader

- File format for storing 3D models
- Supports materials and textures
- http://en.wikipedia.org/wiki/Wavefront_.obj_file

Example (loading):

```
OBJLoader* objLoader = new OBJLoader();  
OGLMesh* oglMesh =  
objLoader->loadMesh("mymesh.obj", "data_path");
```

Example (rendering):

```
Call the Draw function in the GeometryNode
```

OBJ Loader

- Treasure.obj

mtllib treasure.mtl

object Box03

g Box03

v -11.6719 0.0226 -5.8775

v 12.3849 0.0226 8.1792

v -11.6719 0.0226 8.1792

v -11.6719 10.2113 8.1792

OBJ Loader

- Treasure.mtl

newmtl _7____Default

Ka 0 0 0

Kd 1 1 1

Ks 0 0 0

Ns 10

map_Kd chest.tga

map_kA chest.tga

Done!

Check lab4 project