CS 33400, Fall 2012
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Due: Saturday October 20 at 6:00am

Assignment 6—Shadow Mapping

In a nutshell

Extend your interactive 3-D graphics application with the ability to render shadows.

Details

1. Shadow mapping
   - One point light source.
   - Shadow map resolution: 512x512.
   - Use an epsilon for the depth comparison to correctly rule surfaces seen by the light as not in shadow.
2. Example
   - Demonstrate shadow mapping on a 3-D scene with at least one object that casts a shadow onto a second object and onto a ground plane.
   - Make a 30s 30fps video showing your shadow mapping.
     i. First 10s segment the camera moves and nothing else.
     ii. Second 10s segment the point light source moves and nothing else.
     iii. Third 10s segment the object casting the shadow moves and nothing else.
3. Extra credit
   - Two or more light sources (2%)
   - Swinging projector displaying letters “CS 334” on the 3-D scene (4%)
   - Projective texture mapping or real world scene with at least 20 triangles (5%)

Turn in

- Code.
- Movie file.
- A README.txt description of your GUI.