

LAB 10 SHADOW MAPS

LAB TASKS

1. Using the code provided in the lecture and on Blackboard (depth shaders) create an application that renders a plane and displays the greyscale depth information as shown in the lecture.
2. Using the code discussed in the lecture and that provided on Blackboard build the shadow map example discussed in the lecture.
3. Change the bias value and note the effect it has. For example, set it to 0.0f, and higher.
 - a. Attempt to create examples of shadow acne.
 - b. and peter panning.
4. Change the resolution of the shadow map and note the effect of the shadows. Try different resolutions such as
 - a. 4096x4096
 - b. 1024x1024
 - c. 512x512
 - d. 256x256
5. Update the shadow pixel shader so that when a pixel is outside the range of the lights frustum, normal lighting occurs instead of the only ambient light currently implemented.

RESEARCH TASKS

No research tasks this week. Instead use the time for working on coursework.