

OpenGL - Sommercampus

Second Day

Exercise 6: Mapping a texture on a gluQuadric

Use `QImage` to import some texture. The method `QGLWidget::convertToGLFormat()` provides conversion to OpenGL format. Enable `GL_TEXTURE_2D` and use `glTexParameter()` for setting the parameters. Use `gluQuadricTexture()` for texturing the surface.

Exercise 7: Adding Atmospheric effects

Add an object multiple times to the scene, in increasing distance from the viewpoint. Enable Fog, and see the effect of exponentially decreasing or linearly decreasing fog blend factor. Take care to call `glClearColor()` with the fog color!

Exercise 8: Alpha Blending

Add two very simple objects to the scene (say polygons), but with $Alpha < 1$. Enable Alpha Blending, and see the effect of various Blend functions. Why is it not always enough to have both objects an $Alpha$ of 0.5 when you wish to give them equal importance?