

## **Assignment 4—due Thursday October 19**

In a nutshell, implement texture mapping

Enhance the application from A3 with the following features:

- Perspective correct rasterization parameter interpolation
- Texture mapping
  - Lookup the textures by bilinear interpolation or by nearest neighbor (modes should be selectable through GUI)
  - Model a room with a box; texture map the faces of the box with photographs of the walls
- Create a path that shows off your scene
  - Rendering the path should be triggered via the user interface
  - Visualize the path, include the path visualization in the report (render the path with cameras at the key frames, connected with a line)
  - Make a 320x240 30fps 10s movie that is compressed to a size smaller than 16MB

### ***Extra credit***

- Nice scene, with complex geometry and additional texture maps (x%)
- Mip-mapping (2%)
- Anisotropic filtering (2%)

### ***What to turn in***

- Turn in your assignments via the web; email me and the TA a URL with your assignment archive; let us know if you do not have access to web space
- Implementation source files and project; use relative paths; we should be able to build your project easily
- A report that includes the coolest image you made, as well as instructions on how to use the Graphical User Interface (GUI)
- The video file
- The path visualization image included in the report