

NKU CSC 480

Spring 2006

Programming Assignment 4

For this assignment you will add the following features to your wormhole / pilot program (Assignment 3):

1. The plane and the wormhole “adapters” will be lit and textured. Find a reasonably simple texture (e.g. from some old Windows wallpapers). Before you add the texture, your first version should be just to practice lighting it. Have a single light source. The toroidal wormhole itself should still be in wireframe.
2. The spaceship itself should be a more interesting mesh than just a cone, and it should be seen as solid (in the third person).
3. The plane will be populated with a small set (5-10) of fixed small solid random objects—teapots, icosahedrons, etc. Each of these should be slowly spinning on its own axis.
4. The objects above should cast shadows on the plane. Locate your light source at about “mid morning” so the shadows are noticeable.
5. Hitting the **w** key toggles between solid and all-wireframe view.

DUE: By 9am Tuesday **April 11**. Submit your program in a single file named **Pilot2__*.cpp**, with your last name replacing *. No late assignments will be accepted. As always, programs are graded on design and style as well as nominal correctness and visual aesthetics. Start early, work incrementally, test as you go.