CSI 494 — SpTp: Computer Graphics

Homework #4, Implementation due on Thursday, Docs due Tuesday.

In this homework you will be extending your OpenGL implementation to clip GL lines to a grey region. Remember your program must compile and execute or you receive a 0.

Project Requirements:

1. Your program should follow these steps

   (a) Draw lines in a white color using opengl

   (b) Draw a grey box

   (c) Draw clipped lines in red using opengl.

2. Allow the user to clip lines to a rectangular region. Use the UI set up for the rectangular box from the earlier project.

3. Allow the user to turn clipping on at the command line by using a -c option.

4. Allow the user to toggle clipping on/off by pressing the 'c' key

5. In your README, discuss the difficulties of implementing clipping. Also discuss the results of your work. Is there anything interesting about the solutions?

6. **Extra Credit:** For extra credit you may clip circles and/or clip lines to a circular region.