Purpose: Create your own screensaver

Summary: Using simple geometric primitives, transparency, animation, and double-buffering, create a screen saver

Details:

Lab 5 Submission
If you are finished with lab 5, print out your code (fully commented, of course) and hand it in. I will try to catch you during lab or class to see a demo of your geometric primitives.

Screensaver
The ideal properties of a screensaver\(^1\) are:

- It should be dynamic — the contents of the screen should change frequently, if not constantly
- It should be visually interesting — pleasing to the eye
- It should make use of the full screen, or at least most of it (there should be some significant probability that every pixel will get changed eventually)
- It should be at least somewhat unpredictable — there should be little likelihood that someone watching it for several minutes will see a repetition of the same pattern and behavior

Write a screensaver-like application in OpenGL. Use window of size at least 600 pixels wide by 500 pixels tall (or bigger, if you want). I am assuming most people will write a 2-dimensional application, but if you want to get daring and work in 3-dimensional coordinates, be my guest (it might be harder than you think).

Use double-buffering and an idle function to update your screen saver. You may use any features of OpenGL — you don’t have to limit yourself to just the ones we’ve studied in class. (Warning — I don’t know a whole lot beyond the ones we’ve studied in class!)

\(^1\) according to Bob Roos, at any rate