VSFX 375 – OpenGL Intro – Exercise 5

DATE DUE: see class notes

Hand in through the Dropbox as per the submission guidelines.

Using OpenGL, create a color vision game. This assignment was inspired by a game seen at
https://www.igame.com/eye-test/(no longer available)
You can still play it using the Way Back Machine
https://web.archive.org/web/20150624180535/https://www.igame.com/eye-test

The original game is not available. There are other versions such as this one at
http://timepaz.com/EyeTest/

There are videos of the previous version in action:
https://www.youtube.com/watch?v=68VfaSTRnlg
https://www.youtube.com/watch?v=dis-EiS0B6E

It went viral in 2015
https://web.archive.org/web/20150704003832/https://www.igamingbusiness.com/press/igamecom-eye-test-phenomenon-goes-viral

Similar games can be found on your phone such as Kuku Kube – Eye Test (google play store)
https://play.google.com/store/apps/details?id=com.huynd.kukukube&hl=en_US&gl=US

Goals:
This assignment will focus on the student being introduced to OpenGL and becoming familiar with basic graphics library routines.

Requirements:
Minimum requirements:
- Create a game as show in class or as seen on the above website(s)
- drawing squares on the screen, mouse response (timing, resizing and score output are considered challenges)

Challenges for the more advanced users: You are only required to get the game drawing and changing. Timing, resizing and adding more features are left to the advanced users. I want this to be an introduction to OpenGL, however some of you may want to explore beyond the requirement.

Grading Guidelines:

You will be graded on how well your game works, how well it is designed and how clearly the code is written.

Be creative, have fun.

Specifically:

Considerations:

Design Decisions:

-draw by vertex or draw by shape?
-should space be consistent or change?
-what is the relationship expressed in n as the number of squares and spaces?
-what determines when you move to a different size?
-draw centered? draw left corner?

**Keep in mind in OpenGL the origin is the bottom left of the
viewport (depending on how you set up your ortho view you will remap)**

How often to switch?
How to determine "special" square?

These are all hints into coding your solution.