



CS 422 Computer Graphics Assigned: Tuesday, 28/02/2023

Due: Tuesday, 7/03/2023

Lab Assignment 01

Objectives

Getting familiar with OpenGL API, window management and input system.

Problem Statement

You are required to create OpenGL project using project template. You should implement an application that handle user input at runtime. Input handling should be as follows:

- When user presses '+' button, a new point should be drawn at random location within application window.
- When user presses '-' button, the last point drawn should be erased.
- For every two successive points, a line should be drawn connecting them. A point is allowed to be part of only one line so that number of line is the half number of points.

 (note: if number of points is odd, the last point will not be part of any line untill user adds a new point).

Also, set point size to 5 units. Use code in this <u>link</u> as starter code.

References

- std::vector
- std::rand
- glPointSize
- glm::vec3
- glVertex3f
- Drawing points
- Line primitives
- glutPostRedisplay

Delivery Policy

- You should submit a report describing your code flow, screenshots of working code and challenges you faced (if any).
- You should submit the project source code (.cpp file(s)).
- You should cite any additional resources you used.
- Further details for the submission instructions will be posted later on MS Teams.

Good Luck