



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**