# COT 4521: Intro. to Computational Geometry (Fall 2020)

## Project 0: Introduction to Processing

#### **Ground Rules**

This assignment is intended to be done alone. You may ask others for help with figuring out strategies. However, the code must be yours (MOSS will be used).

#### **Submission**

Compress your sketch into a single zip file and upload to canvas.

### **Assignment Instructions**

This assignment will help you become familiar with Processing and build some basic data structures for storing geometric data.

- Download and familiarize yourself with Processing (http://processing.org/download/). Use the available tutorials (http://processing.org/tutorials/) and examples (http://processing.org/examples/) to help you understand how Processing works.
- Use the provided skeleton code, first fill in all of the TODO items.
- Then complete a sketch with the following requirements.
  - When the mouse is clicked, a new point should be added to the point list. This point should be drawn using an ellipse and include a label.
  - Every point should be connected to the previously added point with an edge in the edge list. The edges list should be drawn every frame. When the edge is created, the edge's printInfo() function should be called to display information about the new edge.
  - Every 3 points should form a triangle that is added to the triangle list. The triangles should be drawn and colored based upon whether they are stored in a clockwise or counterclockwise order. When the triangle is created, the triangle's printInfo() function should be called to display information about the new triangle.

