

# COT 4521-001: Introduction to Computational Geometry (Fall 2018)

## Project 0: Introduction to Processing

### 1 Objectives

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

### 2 Ground Rules

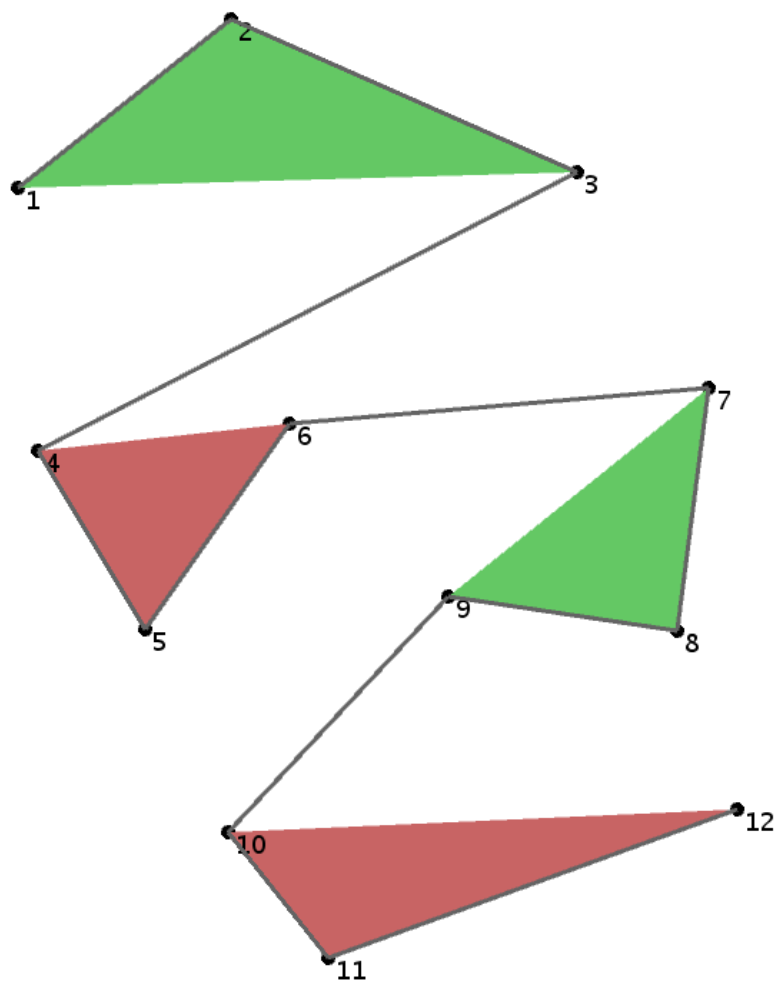
This assignment is intended to be done alone. You may ask others for help with figuring out how to use the program. However, the write-up and its ideas should be developed by you.

### 3 Assignment Instructions

- 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 to 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.
  - 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.

### 4 Submission

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



**Figure 1:** Example of output.