## CS 0401 Fall 2015

Snapshots demonstrating functionality required for Assig5.java and MyPoly.java Read this document very carefully so you know what is necessary in your implementations.

Note 1: These snapshots demonstrate only the original functionality of Assig5.java (and MyPoly.java). To see the requirements for the enhanced functionality required of Assig5B.java (and MyPoly.java, see also handout <u>A5Bsnap.htm</u>.

Note 2: This document does not necessarily demonstrate all Assignment 5 requirements. Please see the Assignment 5 document for details on the assignment requirements.

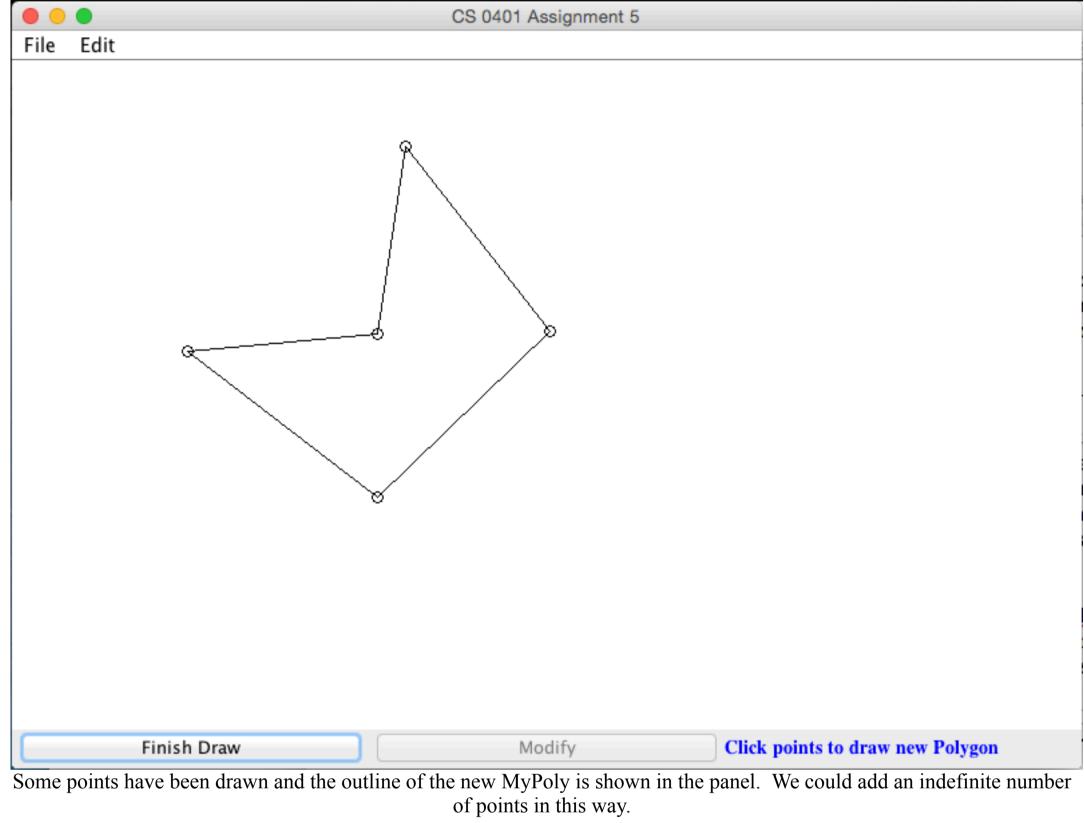
## **Assig5 Snapshots**

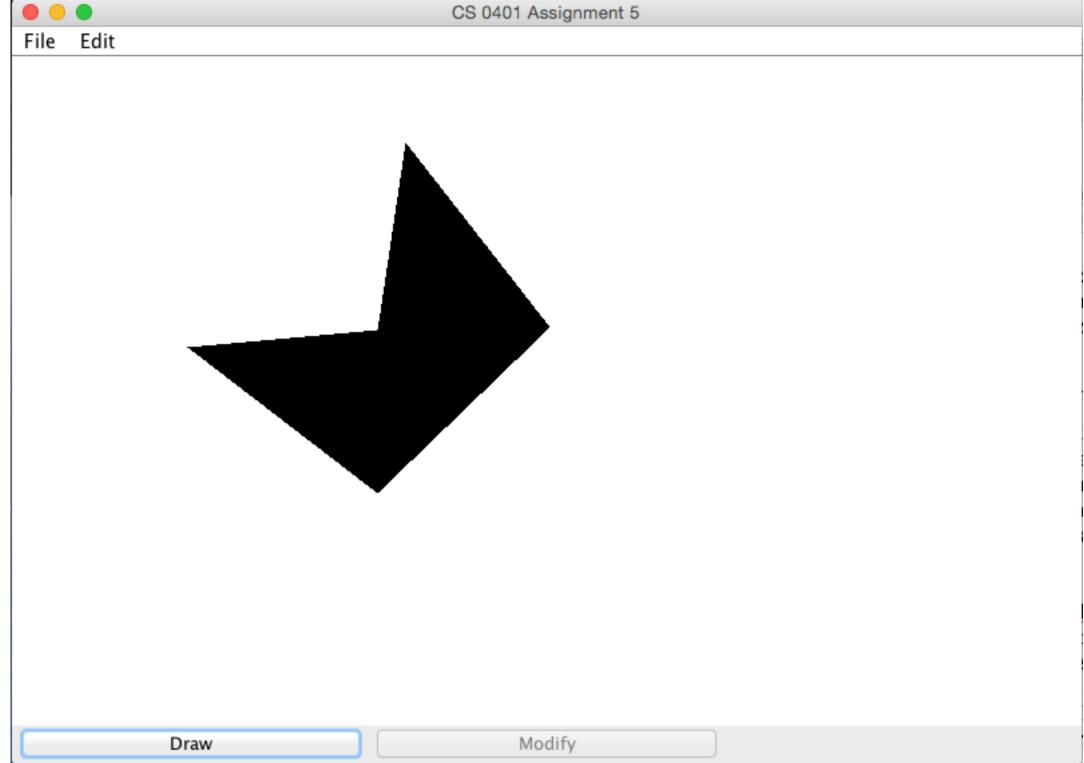
(Assig5.java as given with your implementation of MyPoly.java)

CS 0401 Assignment 5

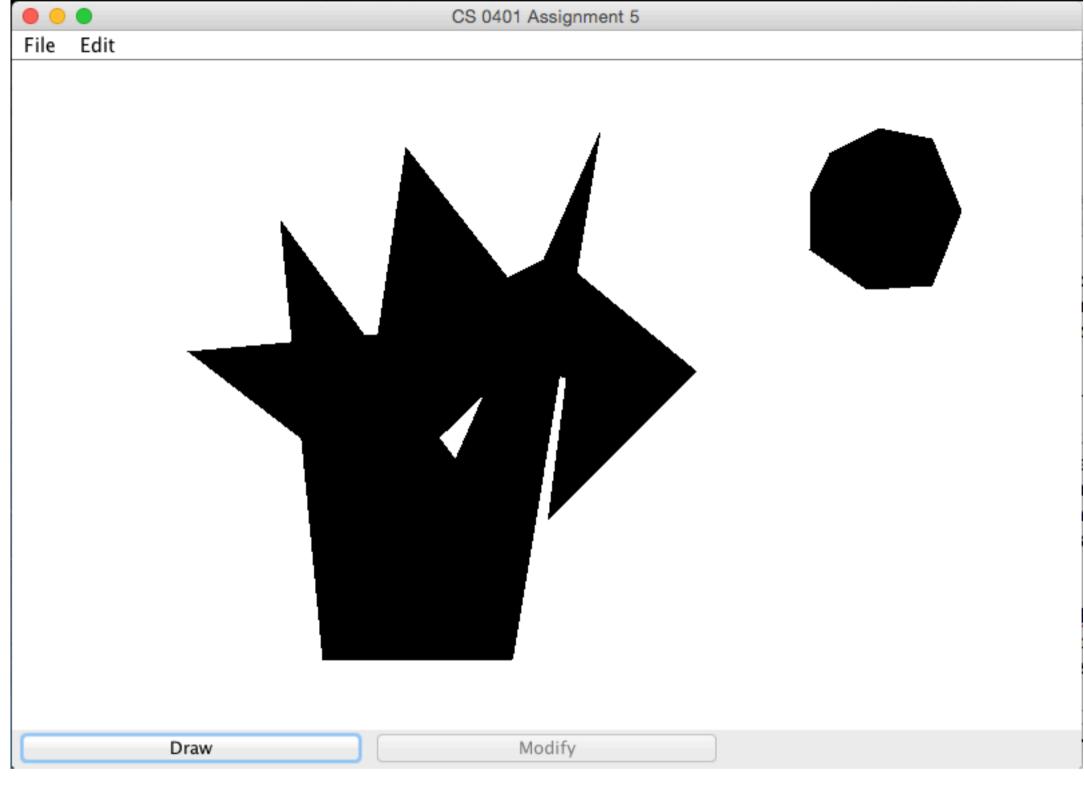
File	Edit			
	Draw		Modify	
Initial window shown when program is invoked.				



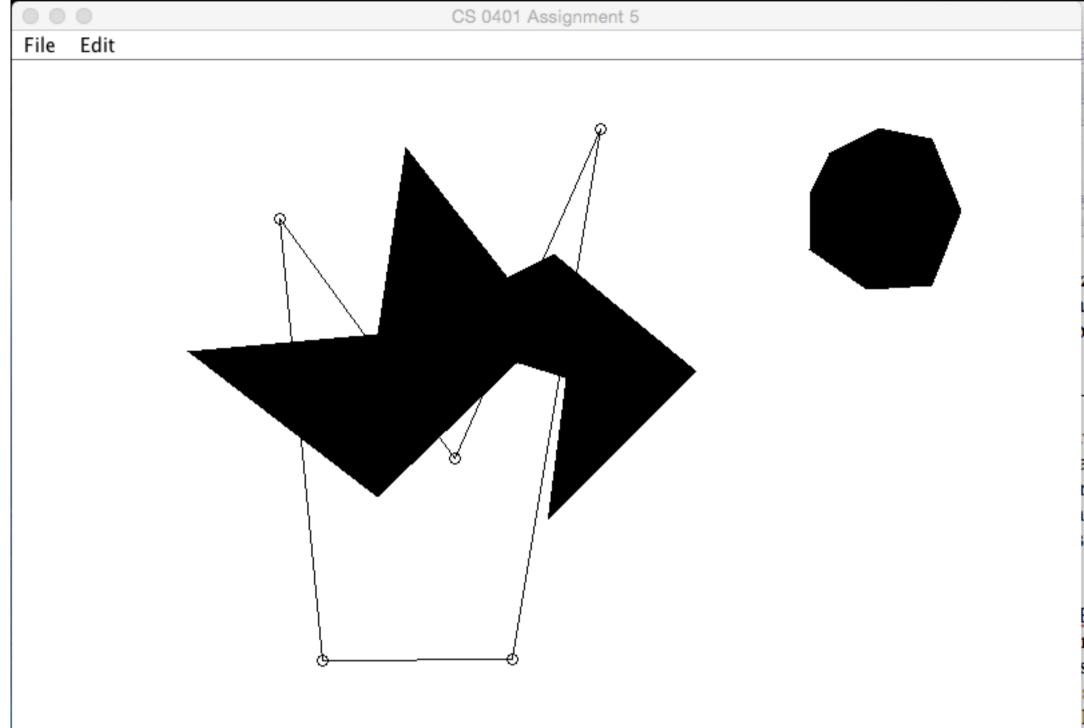




The Draw button has been clicked again and the MyPoly is now shown filled in rather than as an outline. Note that the Draw button is back to its original state.



Three more objects have been drawn. Note that they are all the default black color and when they overlap it is difficult to see their boundaries.

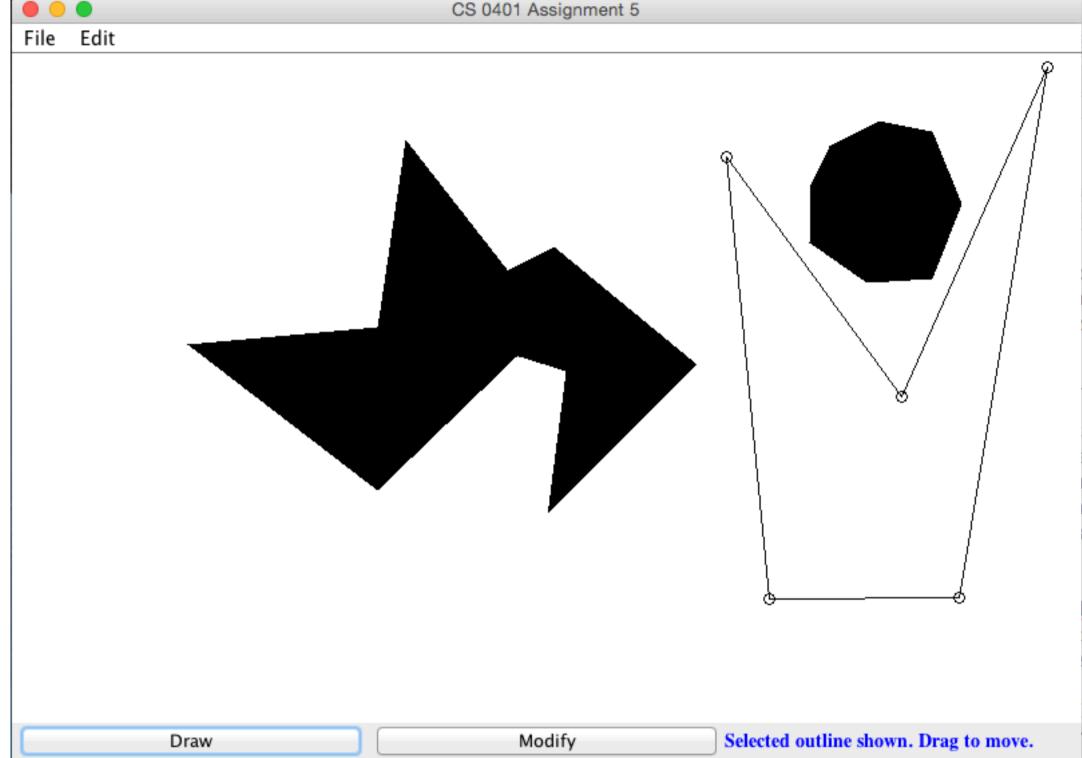


Clicking on a MyPoly will select it and show it as an outline with the individual points being shown. At this point it could be dragged to move it or it could be modified if the user clicks on the Modify button. Also, the Edit menu buttons will now also be enabled. See details on each of these below. Note that successive clicks on an intersection of the shapes will select each in turn in a circular fashion.

Modify

Draw

Selected outline shown. Drag to move.



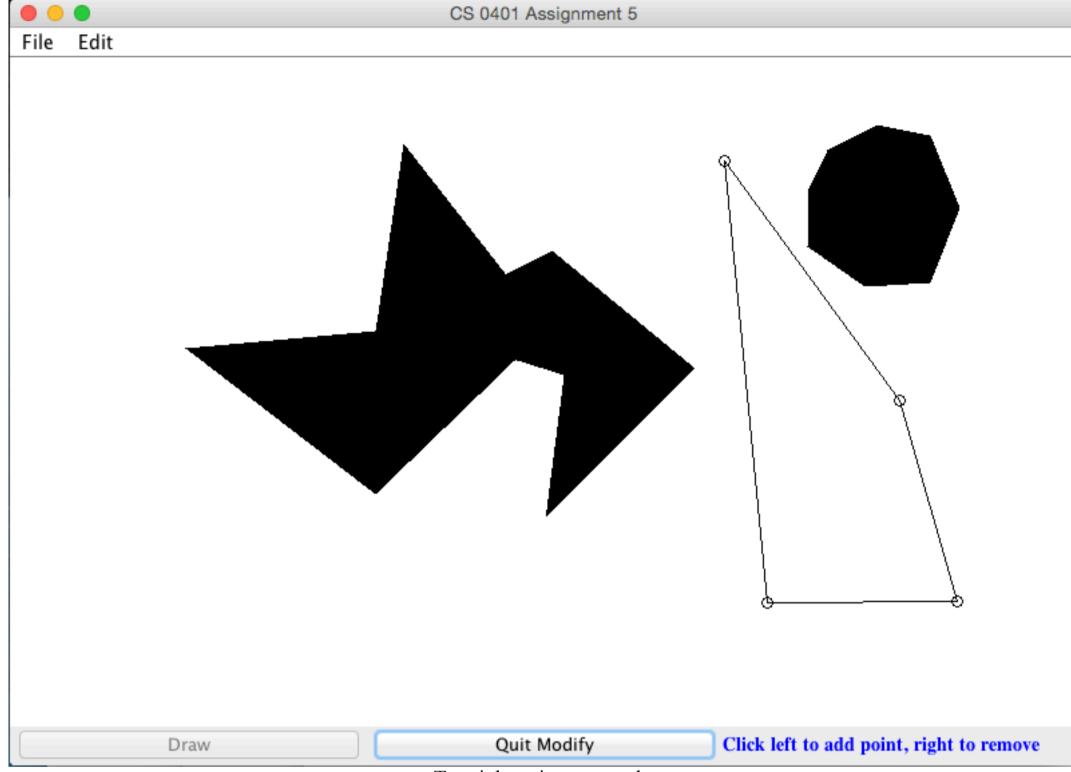
Shape has now been moved by dragging the mouse. Note that it is still selected after the move, so it could be move multiple times as long as the user continues to click within the same MyPoly object.

Now the panel is in "modify" mode. This should have the following behavior: 1) A left click will add a new point between the two points closest to that point. The distance is calculated using some predefined methods in the Java Line2D.Double class. I have done some of this work for you in method getClosest() in MyPoly.java. However, you will need to write the code to build the new MyPoly taking into account the new point. See the MyPoly.java code and Assig5.java code for some guidance with this. Also see Assig5.java for the actual syntax necessary in your MyPoly class. 2) A right click within one of the "point" circles will delete that point from the selected MyPoly. 3) A right click that is not within any "point" circle will have no effect on the selected MyPoly. If a right click removes that last point from a MyPoly then it is removed from the list of shapes. For help with 2) and 3) see Assig5.java and MyPoly.java.

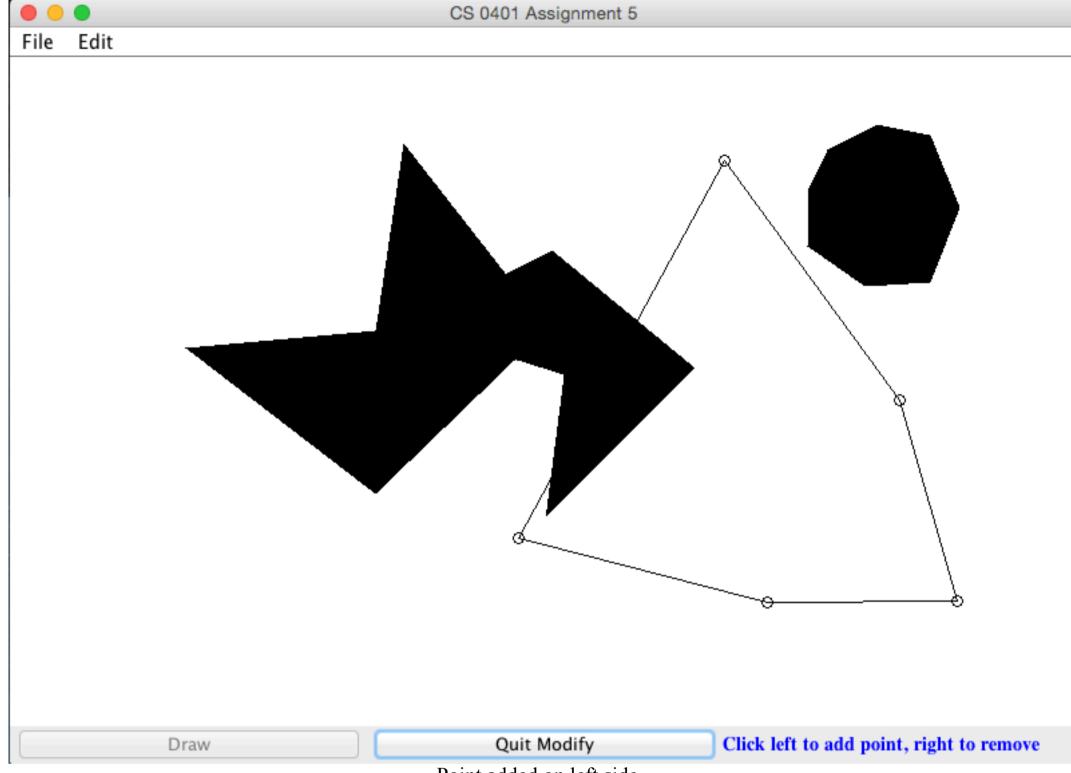
Quit Modify

Click left to add point, right to remove

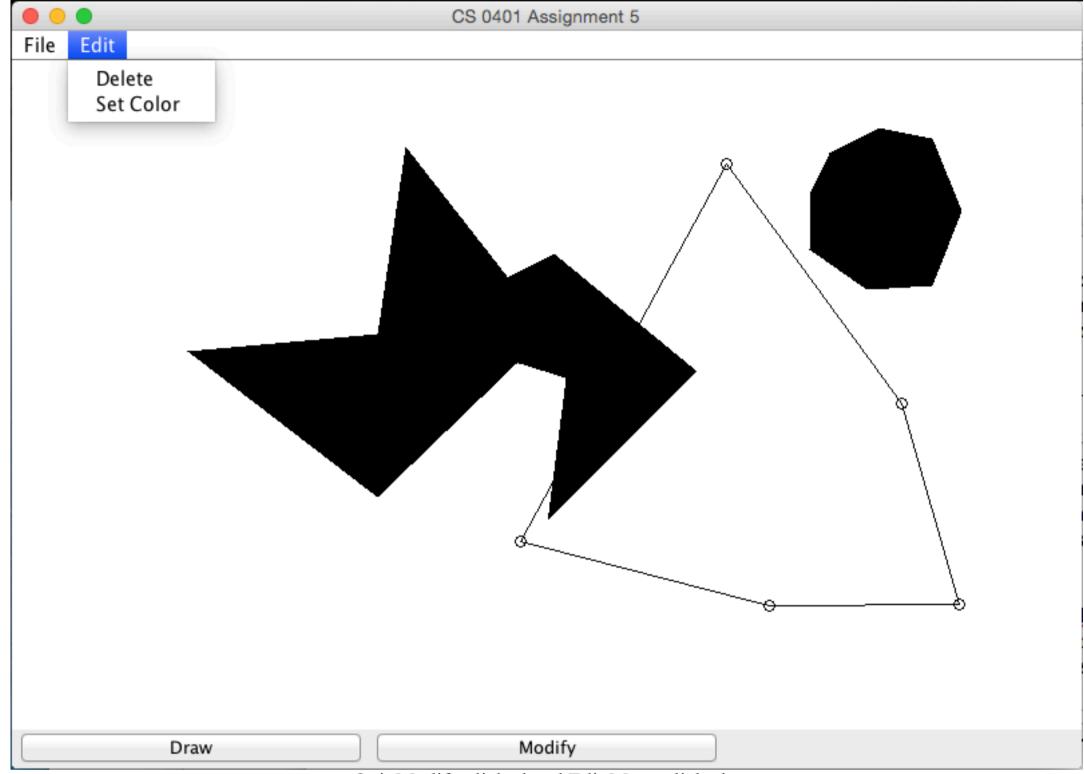
Draw



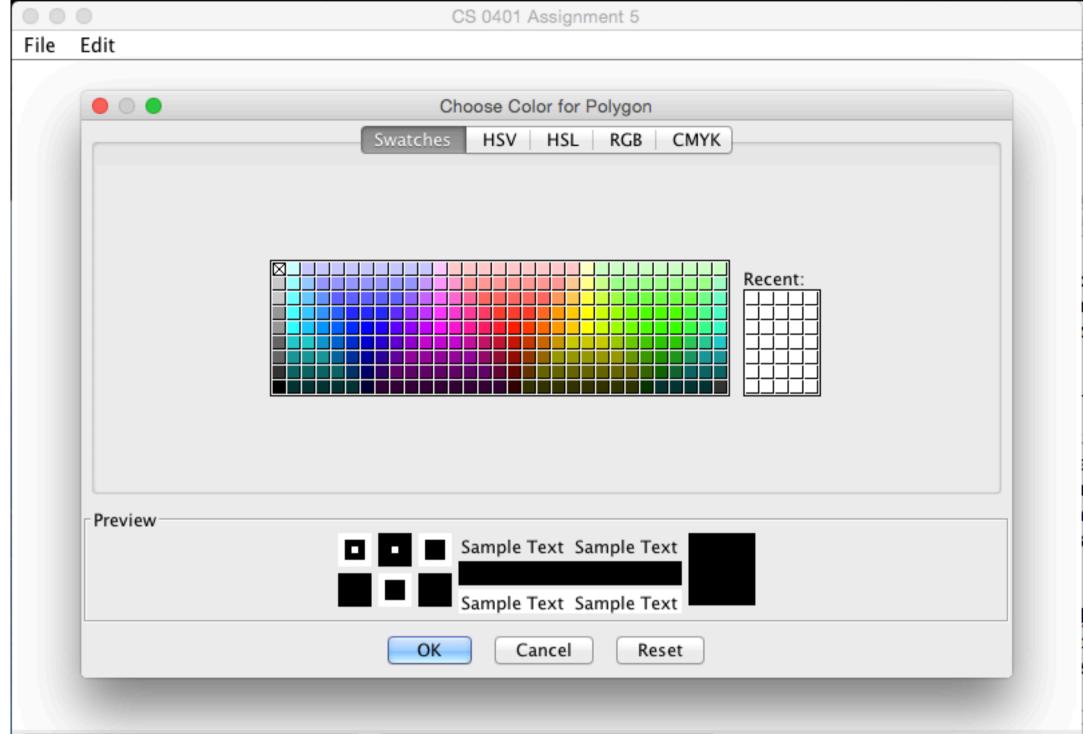
Top right point removed.



Point added on left side.



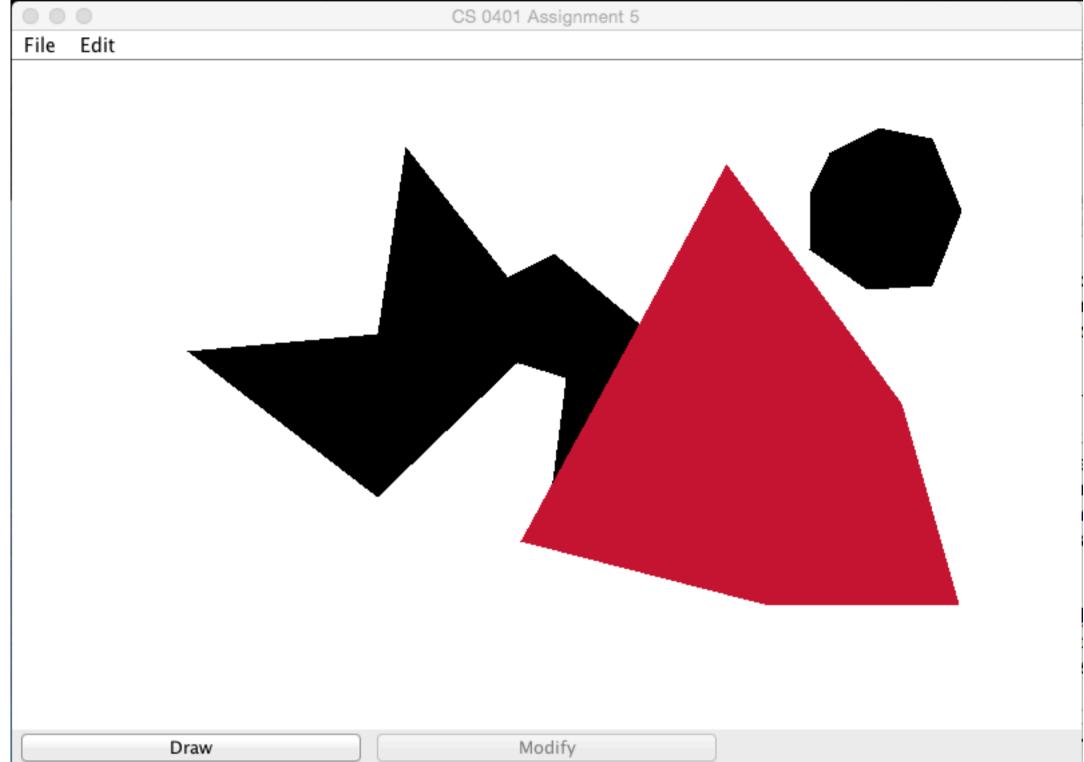
Quit Modify clicked and Edit Menu clicked.



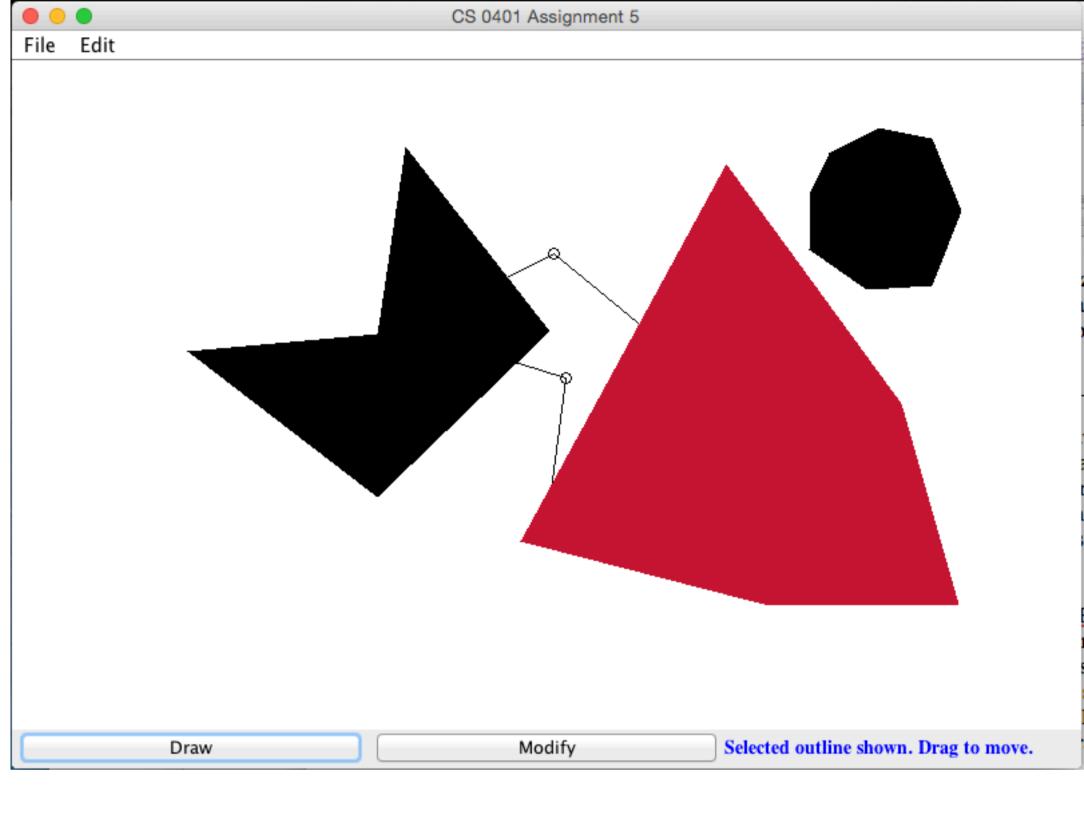
Set Color menu option chosen, and JColorChooser is opened.

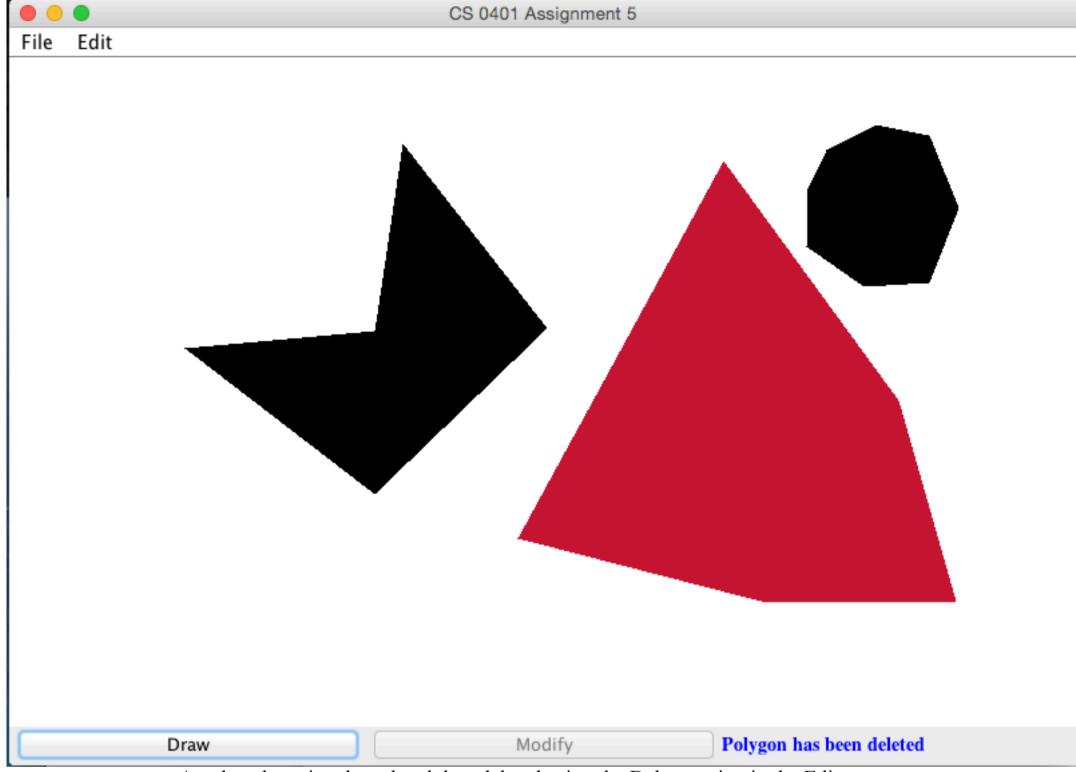
Modify

Draw

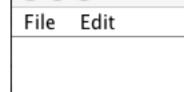


New color chosen and then the mouse is clicked outside of the selected shape. This unselects the MyPoly and it is shown filled rather than in outline.

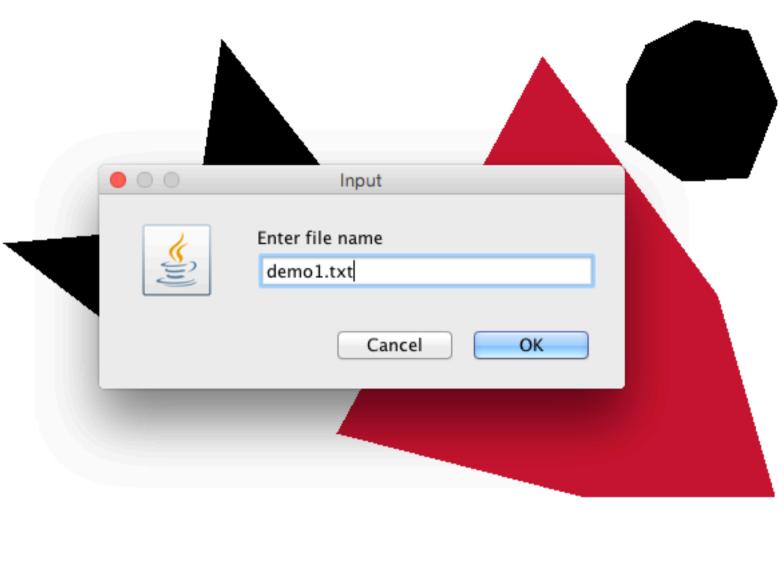




Another shape is selected and then deleted using the Delete option in the Edit menu.



Draw



User saves the scene using the File / Save menu option. The format of the saved file is shown below.

Modify

Polygon has been deleted

```
demo1.txt

3
131,217:273,326:402,202:294,64:273,204|0,0,0
534,77:380,359:566,407:708,406:665,256|204,0,51
611,69:597,98:596,141:639,171:688,168:710,112:688,58:648,50|0,0,0
```

Note the format of this file. The first line is the number of MyPoly objects in the list. Each of the successive lines is the details of one of the MyPoly objects. Note the two parts to each line (separated by the vertical bar). The first part is the (x,y) points within the MyPoly (separated by colons). The second part is the (r, g, b) color for the MyPoly. Both of these are necessary to identify the MyPoly and to allow it to be restored later. This program does not have an "Open" or "Restore" option, but you will need to add this in Assig5B. For more details on saving the file, see the saveImages() method in Assig5.java.

There is no image here because the File / Exit menu item has been clicked. This closes the program.