

Snapshots demonstrating functionality required for Assig5B.java and MyPoly.java

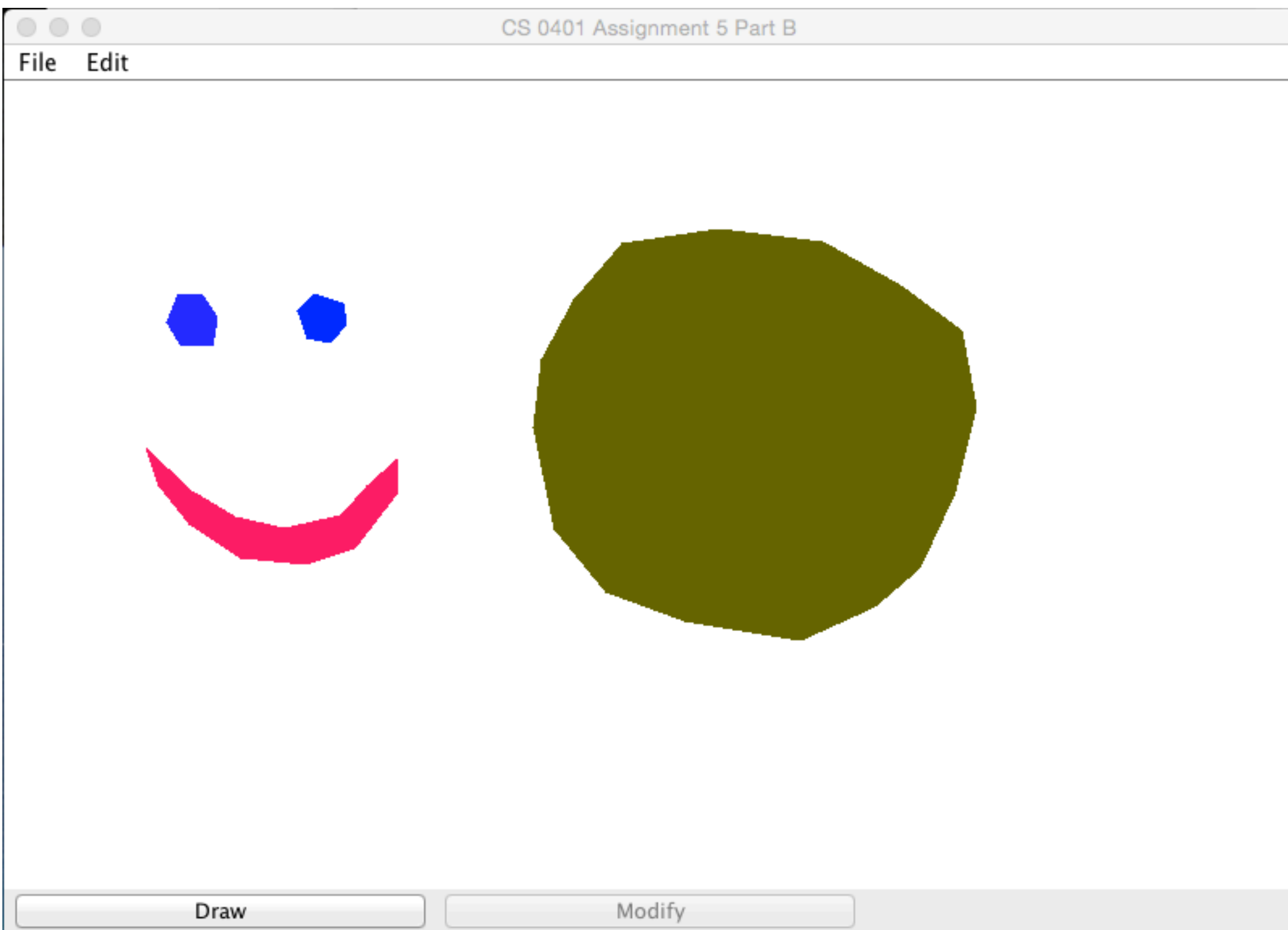
Read this document very carefully so you know what is necessary in your implementations.

Note 1: These snapshots demonstrate only the functionality of Assig5B.java and related functionality of MyPoly.java To see the requirements for MyPoly as related to Assig5.java **see handout [A5snap.htm](#).**

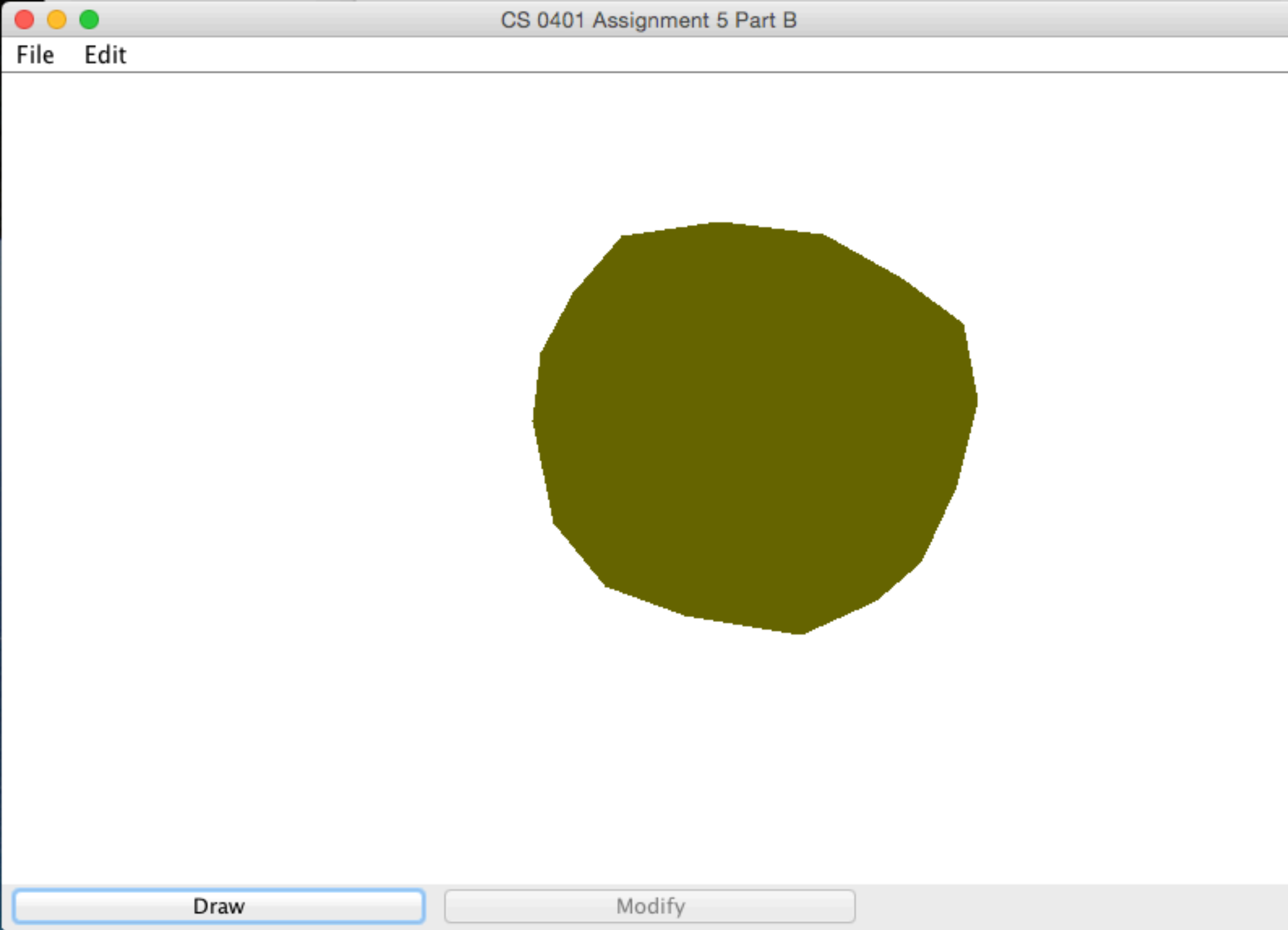
Note 2: This document does not necessarily demonstrate all Assignment 5 requirements. Please see the Assignment 5 document for details on the assignment requirements.

Assig5B Snapshots

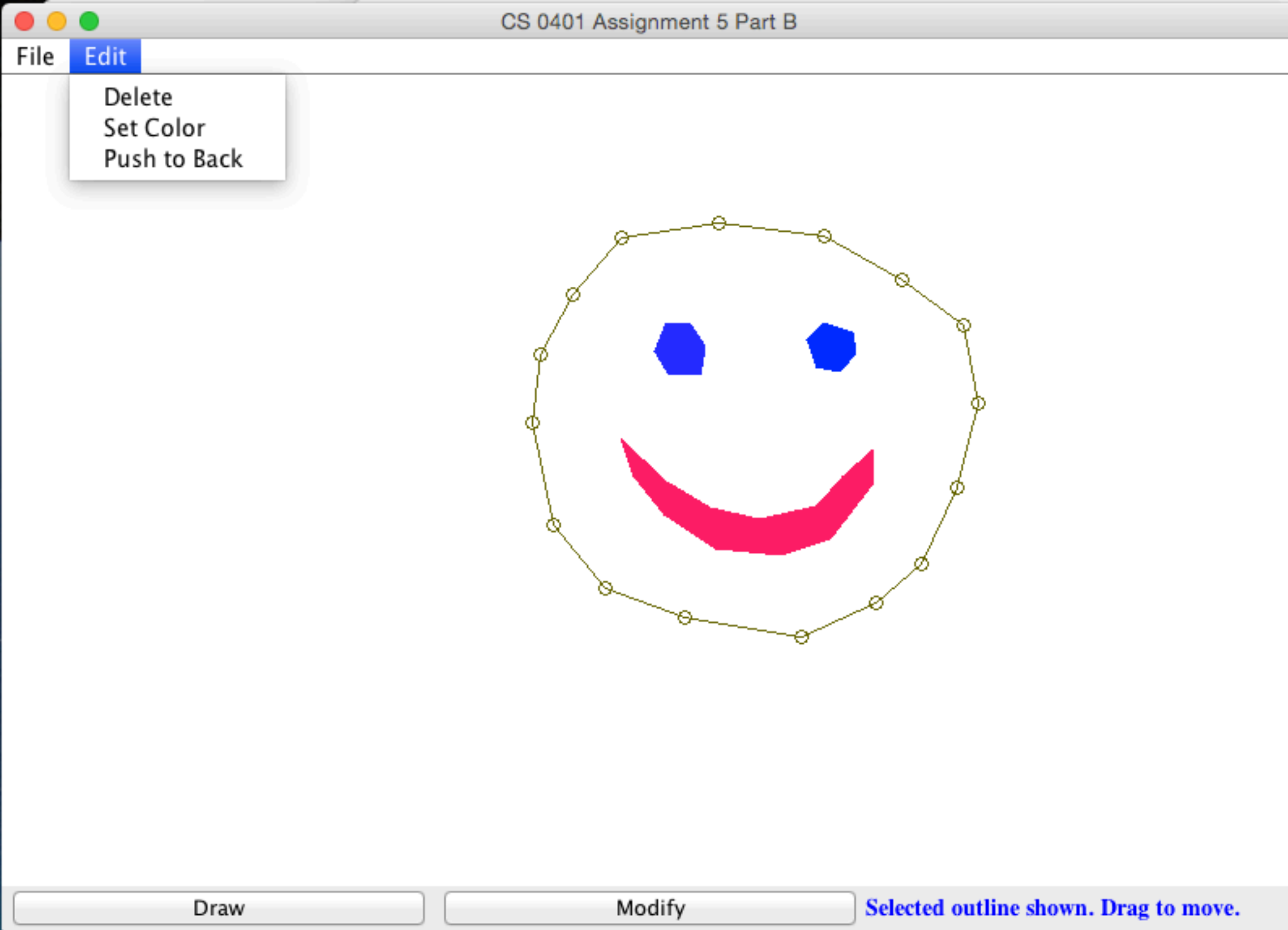
(Assig5B.java as you are required to implement as well as necessary enhancements of MyPoly.java)



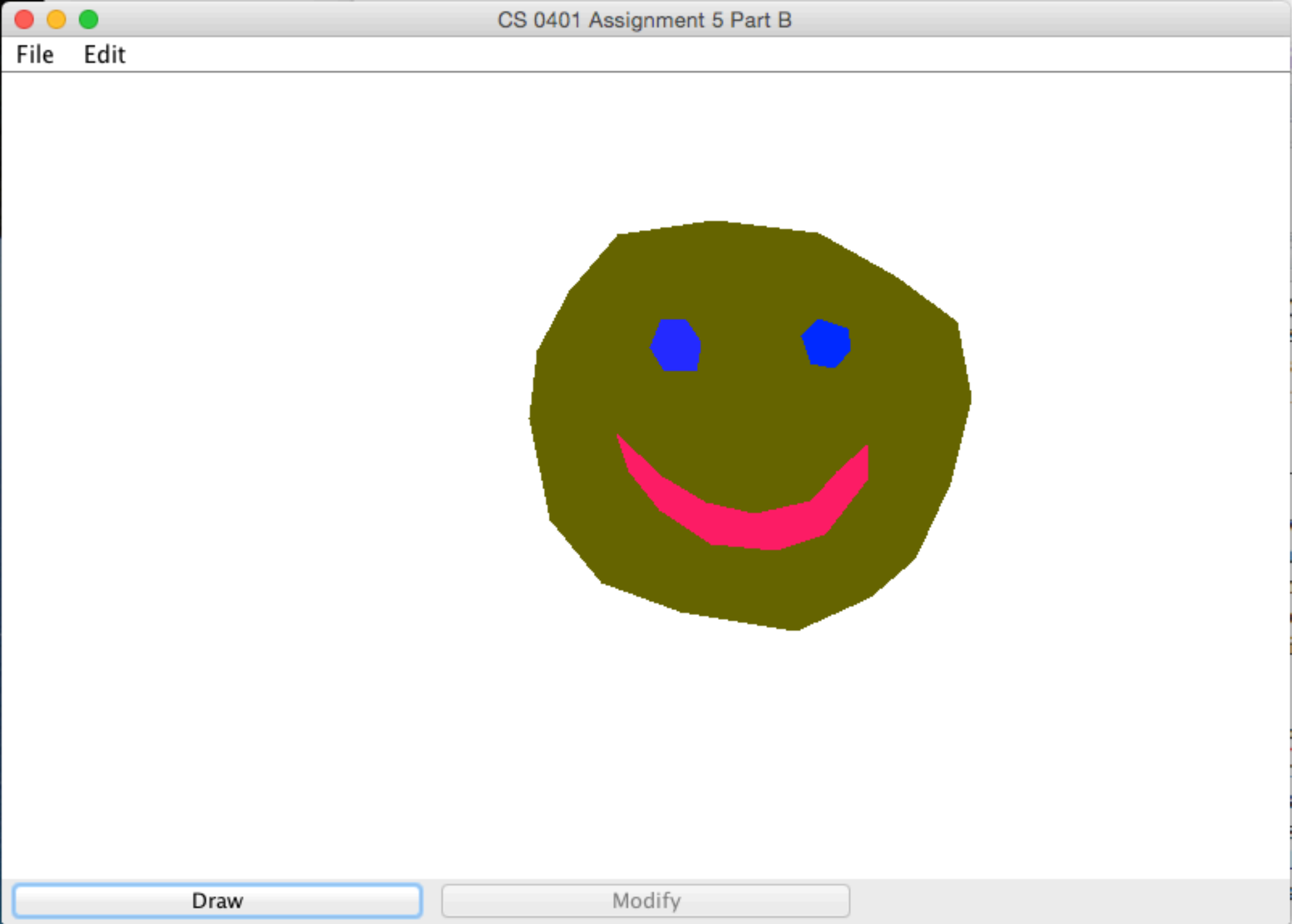
Program is started, some shapes drawn and colors chosen. See A5snap.htm for details about this process.



After moving some of the shapes, it now seems like the scene has only one MyPoly in it. However, in fact the other three shapes are simply being masked by the "circle". This is because the circle is drawn last and therefore overwrites the images of the other three figures. To fix this issue, we can move the large image "to the back" of the display. To do this, we simply have to move that image object to the front of the list so that it is drawn first. This is a menu option in the Edit menu.



The large item is selected so now its outline is shown. The other shapes can be seen behind it. The user is about to select the "Push to Back" menu option.

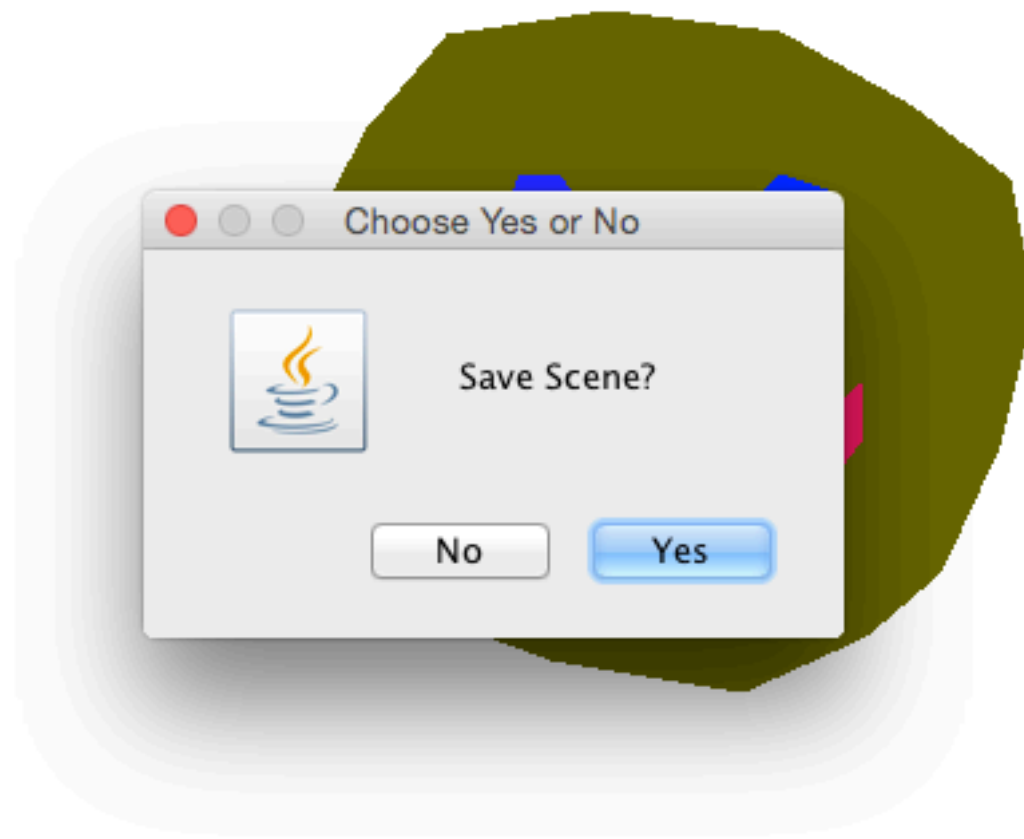


"Push to Back" has been chosen and the item has been unselected. Now the face appears as we want it to.



The "Open" menu option is about to be chosen. (Note the other options shown as well). Since we have not yet saved this image, the program will prompt to save it before opening the new file. This "check" for modification should be done for all of the options above that will either reset the scene (New), replace it with another scene (Open), or close it (Exit). If the scene has not been modified since it was last saved, the prompt should not be given. If no file for the scene yet exists, the file name should also be prompted. Think about how you can add this functionality to your program.

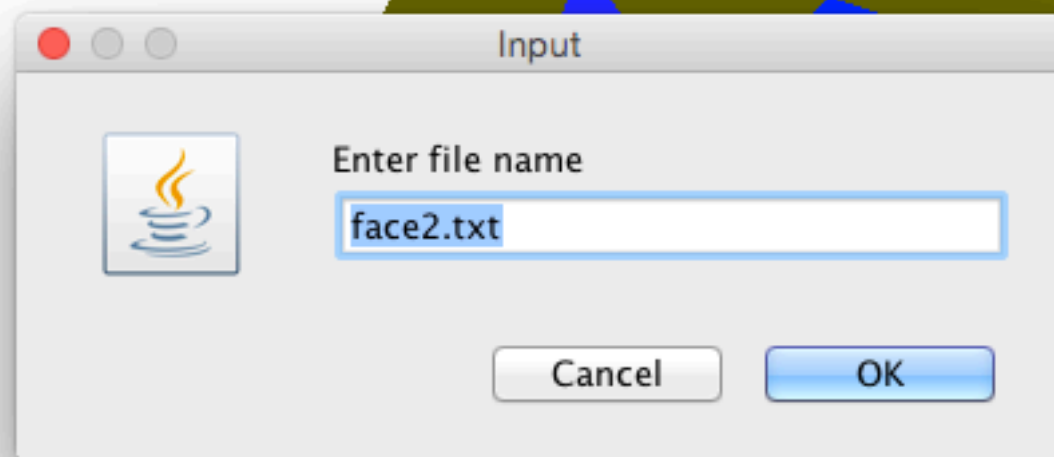
File Edit



Draw

Modify

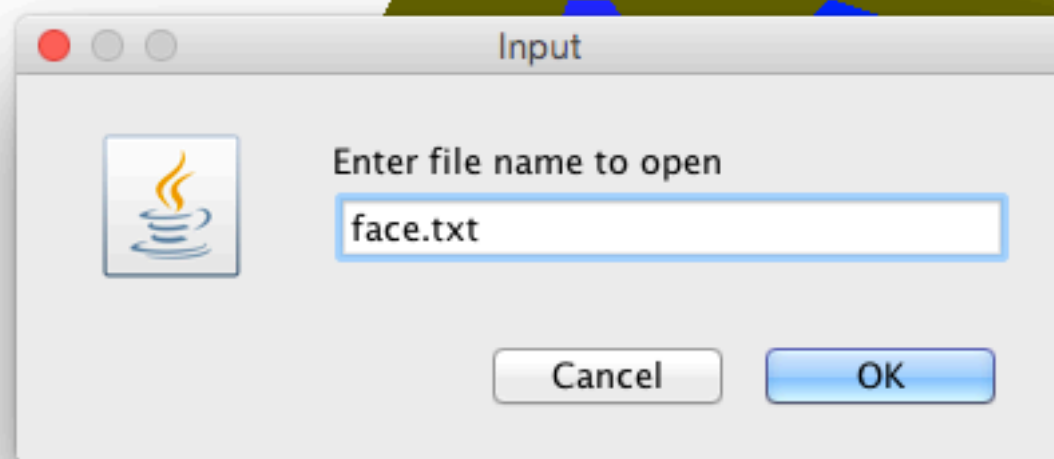
File Edit



Draw

Modify

File Edit



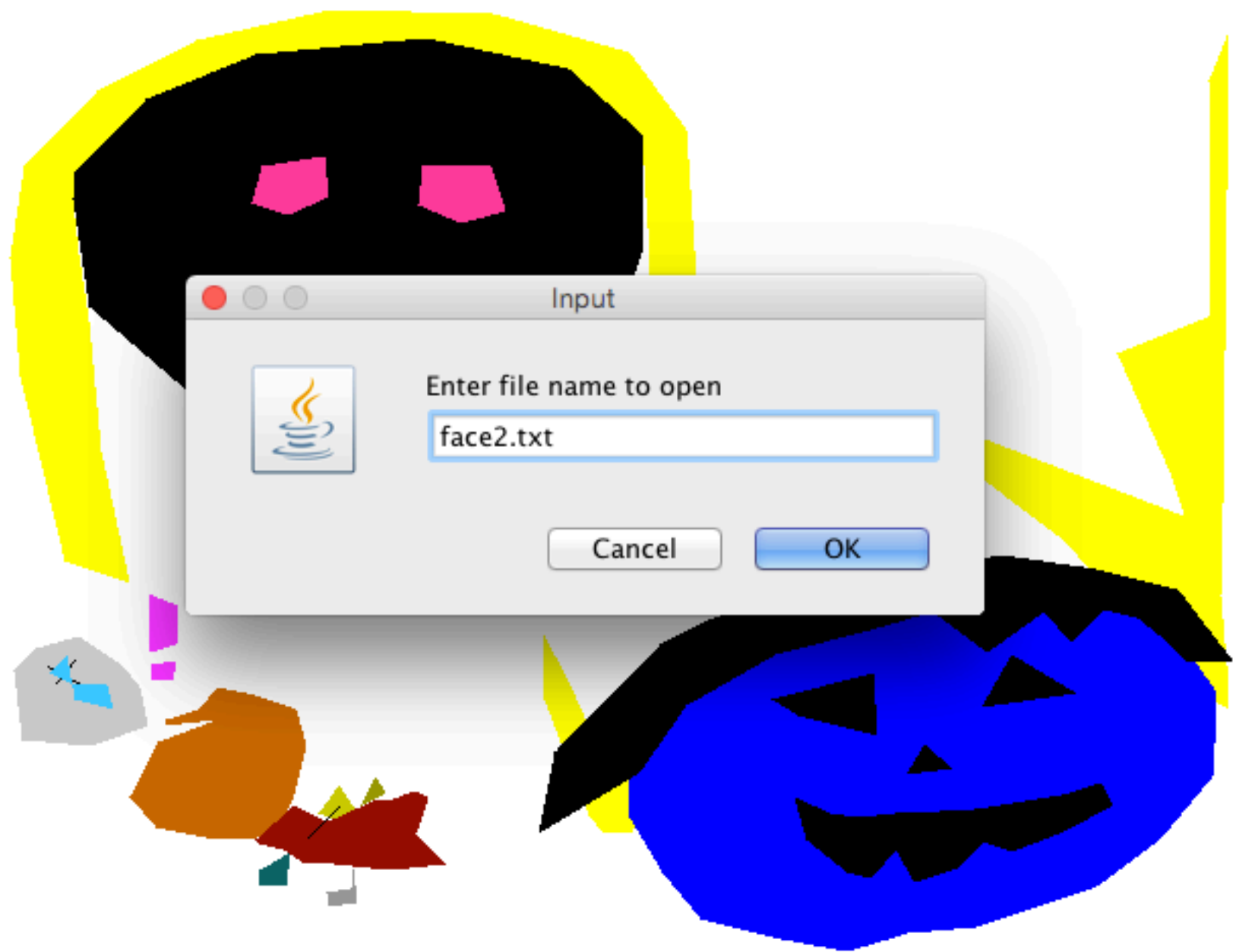
Draw

Modify



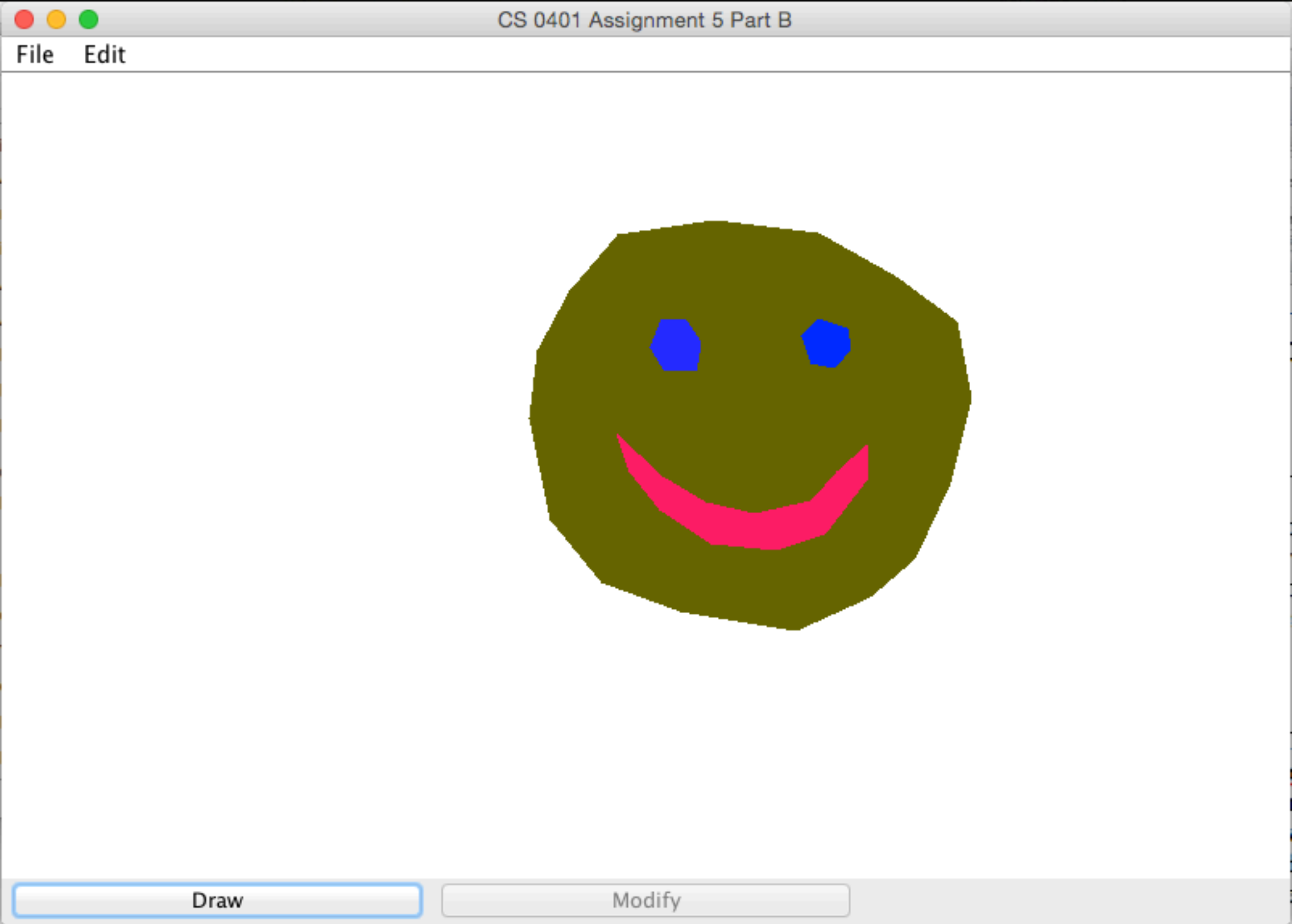
Note the sequence of events above. The program detects that the scene has been modified so it asks the user whether to save it or not. It then detects that no file yet exists for this scene so it asks the user for the new file name. It then saves the file and asks the user for the name of the file to open. Finally it displays that file. To Open a file you will have to parse the text file representing a scene (for format see A5snap.htm) and use that to create all of the MyPoly shapes and put them into the list. This will require some thought and will require coding both in the Assig5B class and the (maybe) MyPoly class.

File Edit



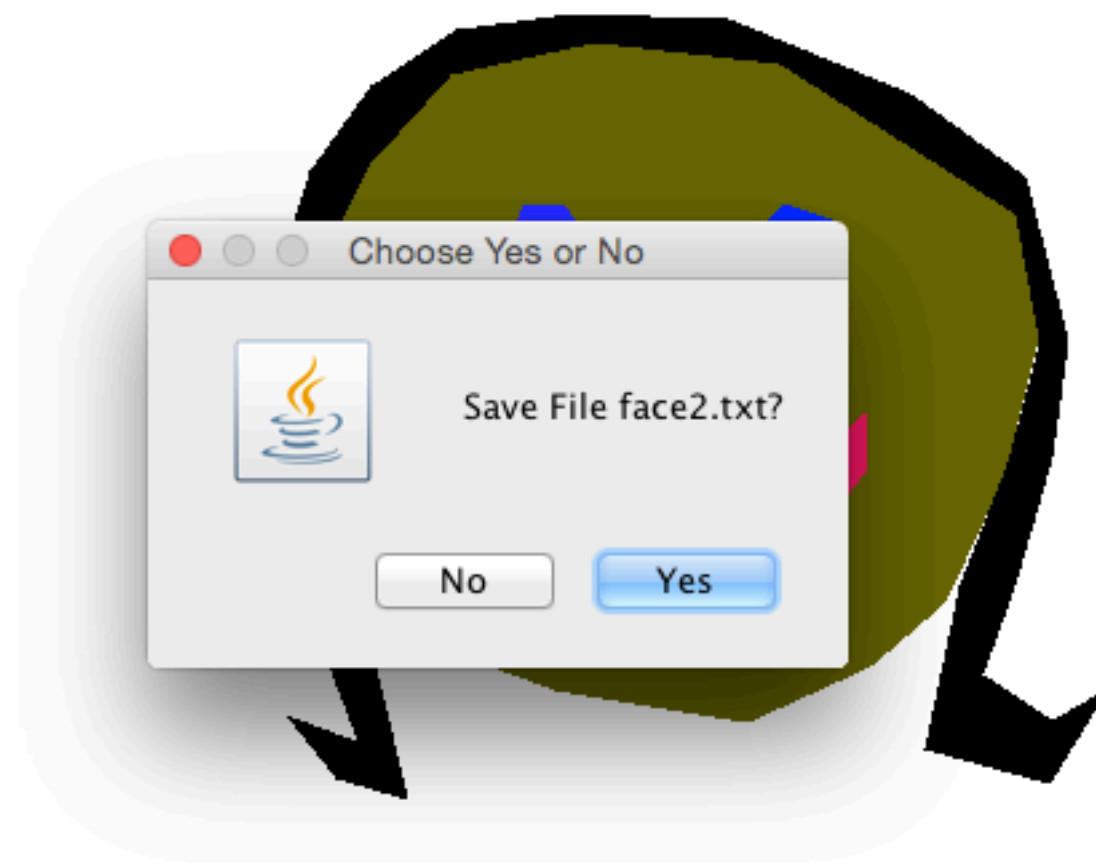
Draw

Modify



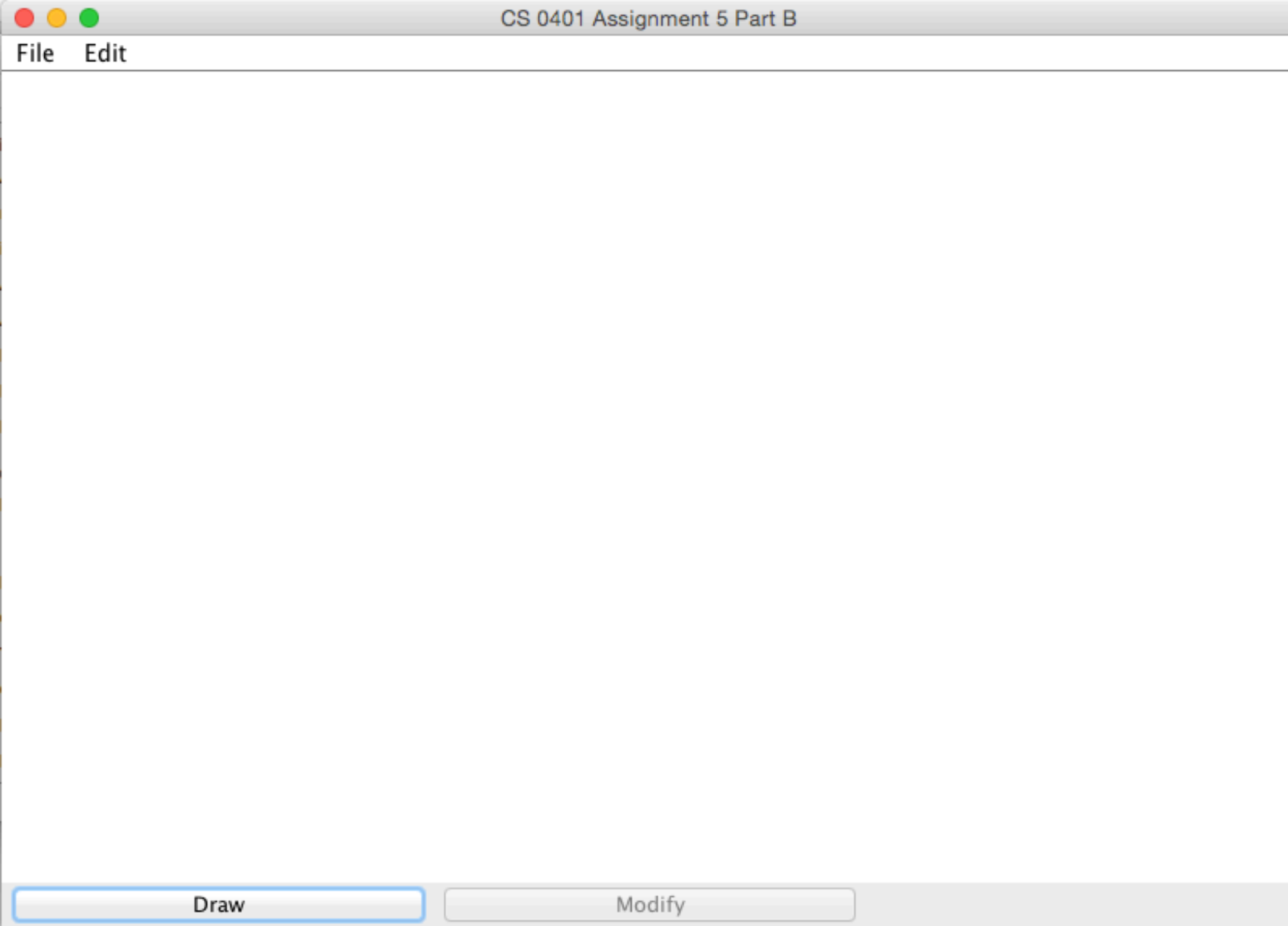
The Open menu item was again selected, but this time no changes had been made to the previous scene, so there is no prompt to save the scene.

File Edit



Draw

Modify



The "New" menu option has now been selected after an edit was made to the figure. Since the file name was already known, the prompt to save includes the file name. The old scene is then saved and the canvas is reset. Below is the resulting file "face2.txt".

```
1 |5
2 382,100:352,135:332,172:327,214:340,277:372,316:421,334:493,346:539,325:567,301:589,254:
... 602,202:593,154:555,126:507,99:442,91|102,102,0
3 409,152:402,170:411,185:431,185:434,167:425,153|51,51,255
4 502,180:517,183:527,171:525,158:506,152:496,163|0,51,255
5 381,223:389,247:408,271:440,292:481,296:511,286:538,251:537,230:518,247:502,265:467,273:
... 437,266:410,250|255,0,102
6 366,375:355,329:338,267:328,208:333,175:352,137:382,104:436,92:505,100:593,156:602,204:590
... ,249:572,295:559,356:606,369:628,333:607,345:581,328:593,295:607,247:613,203:597,142:554,
... 111:486,83:428,81:384,87:352,108:329,140:318,175:315,213:316,243:324,288:339,332:347,353:
... 320,343:339,367|0,0,0
```

Note that some of the lines are very long, since they contain a lot of points.

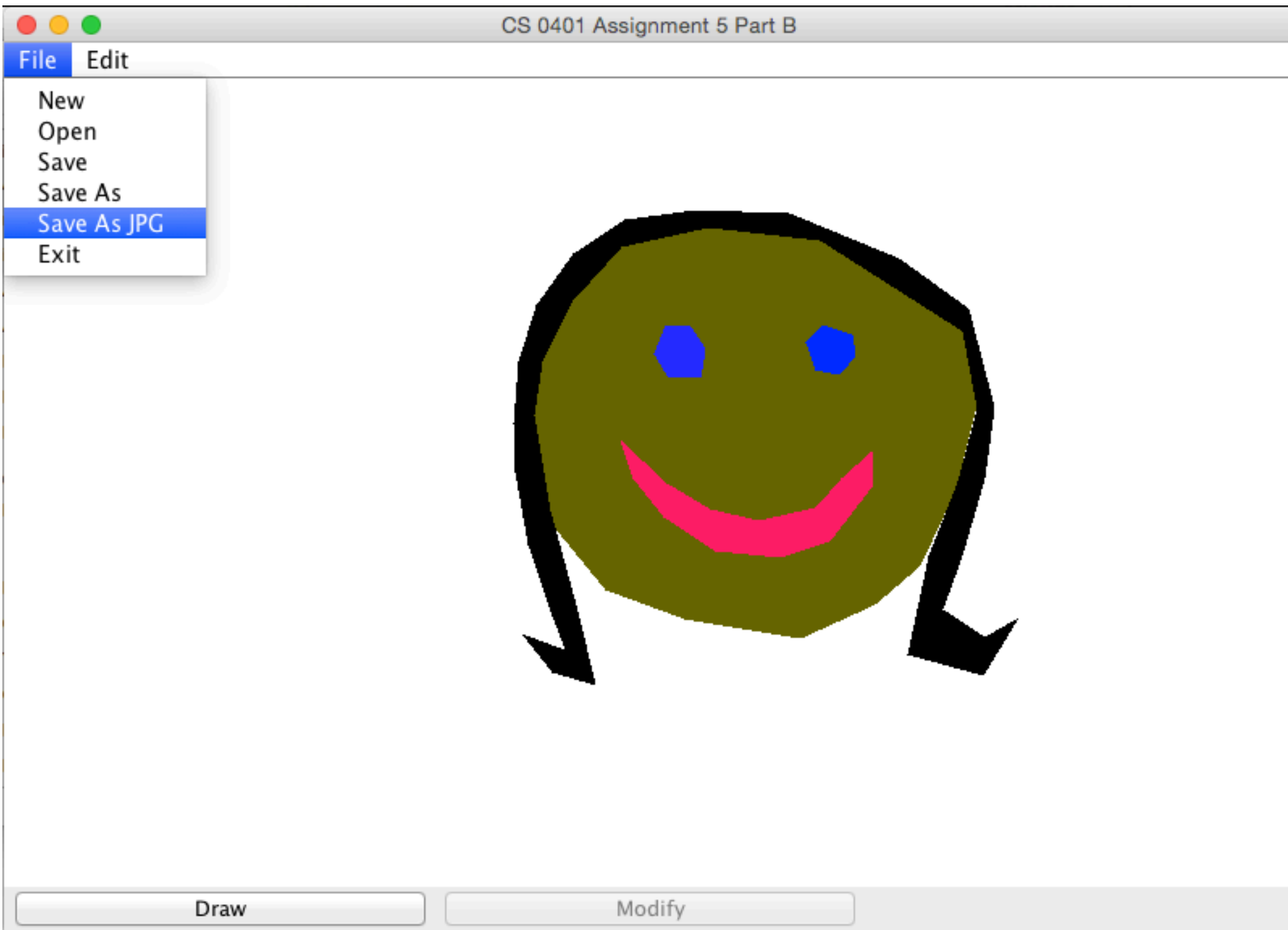
Requirement not shown in images: When selecting a point to delete from within a MyPoly, it can be difficult to see if the mouse is actually within one of the small circles that indicate the points. To help the user with this, during the Modify process for a MyPoly, when the mouse is moved to within one of the points of the MyPoly, the point should be displayed as a filled in circle rather than simply an outline.

This will allow the user to more easily see that the mouse is within the point so that the point can be deleted. I cannot demonstrate this because in order to take a snapshot of the screen I need to move the mouse and thus the circle would no longer be highlighted. However, I can demonstrate this in lecture.

Note that in order to implement this requirement you will need to do some coding in both the Assig5B.java program and in the MyPoly class. Hint: You will want to add a method to the MyMouser class.

Extra Credit Option

There are several extra credit options listed on the Assignment 5 sheet. One of those is demonstrated here with the Save As JPG menu option. This will save the scene as a JPG image in a file that can then be opened or printed or used in any way you would use a JPG.



Since the file exists, the Save as JPG option will make a file with the same name as the text file but with .jpg appended as an extension. To do this you must do a little research into Java images and how to save them (which is why it is extra credit). The resulting .jpg file is shown below.

