



Lab 8

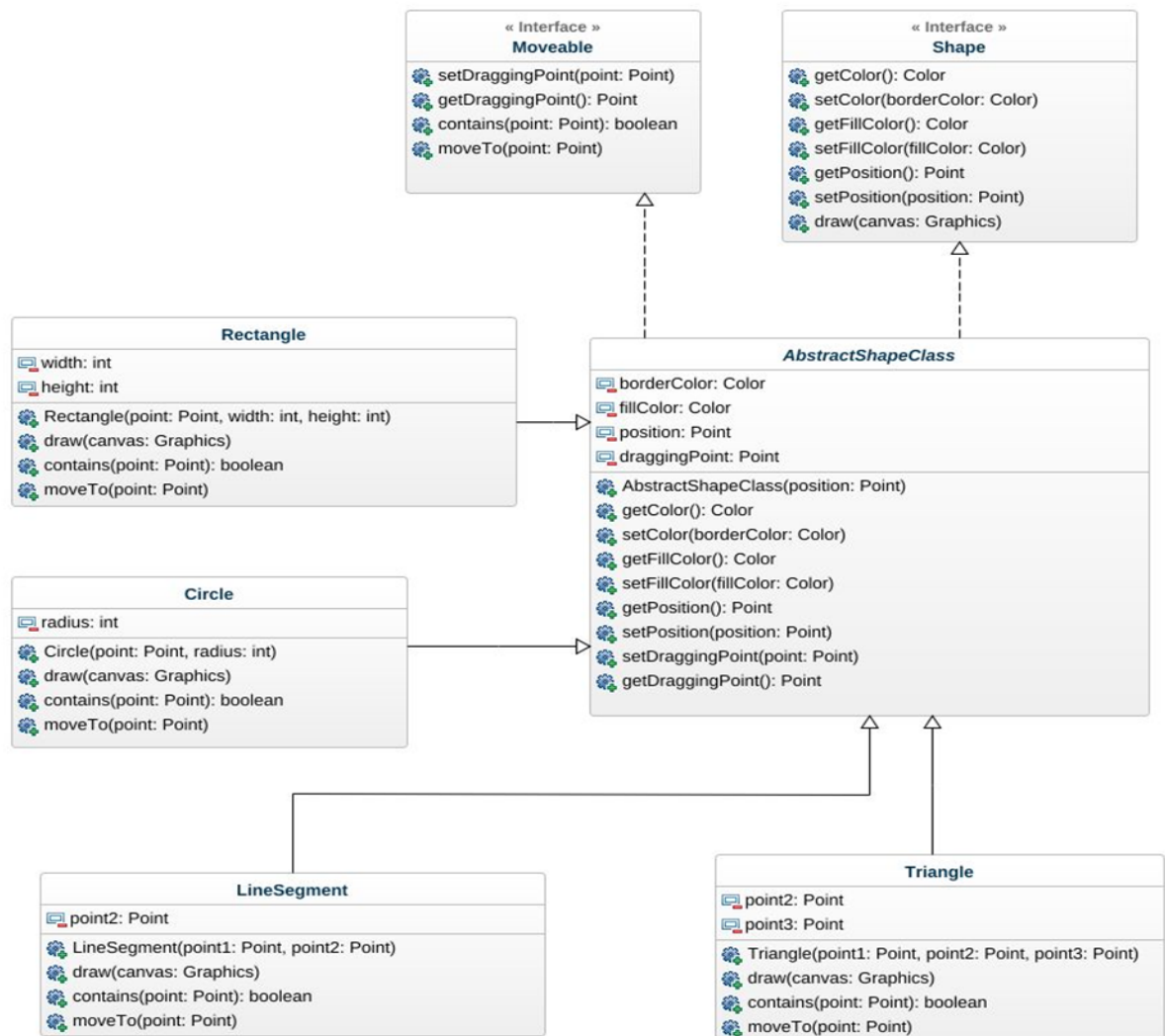
Paint phase #2

This assignment is the phase two of the Paint application you have started to develop in Lab 7. There will be phase three and may be also phase 4. In this assignment, you are supposed to extend your paint application so that

- The user should select any shape not only through the combo box but also by clicking on it using the mouse. When the user clicks on a shape, the index of the combo box should be updated to match the index of the selected object.
- The user can move any shape using the mouse from any point to any point as demonstrated in this link [Clicking and Dragging](#).

In order to accomplish the requirements above, you need to carry out the following tasks:

1. First, you should modify the part of your code that is responsible for the shapes' classes to implement the design depicted in the following figure.



You are allowed to modify the design by adding new attributes and methods to any class if the existing methods and attributes aren't enough to implement your logic. You may lose grades during the discussion in case that your modifications weren't necessary.



2. Second, you should place these classes and interfaces in one package named shapes. Most students have already followed the design above. The differences are the Movable interface and Triangle class. The Movable interface specifies the necessary methods for implementing the movement feature of your application.
3. Third, regarding the application windows, you should make a window for each shape that accepts its data. Instead of writing a long description for each window, you can download this [Jar file](#) and your application should contain the same windows and provide the same functionality. **The navigation between the windows should be handled in the same way as Lab 6.** Again, most of you have made their GUI very similar to this Jar file. Some of you have used JOptionPane.showInputDialog to prompt the user for input the shapes' data. **It is not acceptable anymore and there will be a significant loss of mark if you use this technique instead of adding windows.**

Required

1. You are required to deliver these features in your lab time this week. A discussion is made with you on what you have delivered.

Policies:

- You should work in groups of **two**, same groups as lab 7.
- Delivering a copy will be severely penalized for both parties, so delivering nothing is so much better than delivering a copy.
- No late submission is allowed