Lab #6

Notes

Folder organization for solutions on the student's account:

```
z:\
|
|--Programming02
|----Lab01Problem01
|----Lab01Problem02
|----…
|----Lab02Problem01
|----…
|--Programming01
```

(Source code: 2016-2017 Programming II Lab/Source)

Task #1: (source: Lab06Problem01) (0.5%)

Write a simple version of a graphical editor. It has to have the following functionality:

• Key "1" adds a random rectangle, key "2" adds a random circle to the program.
• A mouse click on a figure shows its properties in a dialog window.

You have to use an abstract class Figure (or Shape) to implement parts common to all figures (drawing, testing for mouse clicks); represent concrete figures (Rectangle, Circle,...) with subclasses of this class.

Task #2: (source: Lab06Problem02) (1%)

Write a version of a graphical editor from the previous task where a user can select a figure by clicking on it and delete a figure by pressing the "Delete" key. Note that the user can only select one figure at a time.

Task #3: (source: Lab06Problem03) (1%)

Add the following functionality to the previous version:

• The user can drag and drop figures with a mouse.

Bonus (source: Lab06Bonus) (2.5%)

Write a version of the graphical editor with the following features

• The user can draw a figure by clicking the left mouse button and moving the cursor.
• The user can undo actions by pressing the CTRL+Z combination.
• The user can save the current list of figures into a file and restore the data from it.

Home Reading: Liang Introduction to Java Programming 8th ed. Chapters 10 - 17.