


BIRZEIT UNIVERSITY
COMP231 – Advanced Programming
Assignment # 4

Objectives:

1. To read data from a file using the **Scanner** classes.
2. To write a simple JavaFX program and understand the relationship among stages, scenes, and nodes.
3. To create user interfaces using panes and shapes.
4. To create colors using the Color class.

Specification

Submission: **Online through Ritaj.**

What to submit: Your **OWN** well-structured and well-commented JAVA files (.java) (compressed into a studentId_sec#.rar file, e.g. **1234567_sec1.rar**).

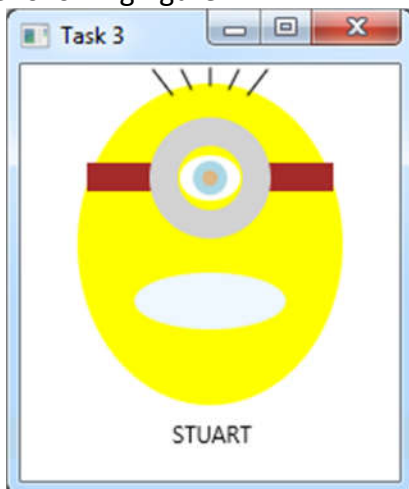
Deadline: **28/5/2016** by midnight. (The online submission will be disabled after this time).

Tasks

Task 1:

Step1: Create the following text file “**data.txt**” →

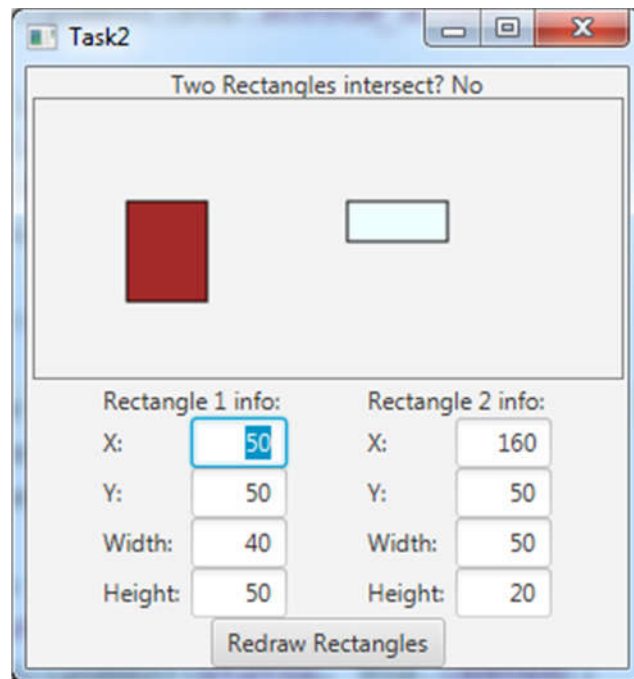
Step2: Write a Java program that open the data file that was created in step1 and read it line by line. Convert each line to a JavaFX shape object according to the first token (e.g. first line will be converted to and **Ellipse** object with centerX=100, centerY=95, radiusX=70, and radius=85 and setFill color to YELLOW) and so on. The output of your program should looks like the following figure:



```
Ellipse, 100, 95, 70,85, YELLOW
Rectangle, 35, 52, 130, 15, BROWN
Circle, 100, 60, 32, LIGHTGRAY
Circle, 100, 60, 17, YELLOW
Ellipse, 100, 60, 16, 12, WHITE
Circle, 100, 60, 9, LIGHTBLUE
Circle, 100, 60, 4, BURLYWOOD
Ellipse, 100, 125, 40,15, ALICEBLUE
Line, 100, 11, 100, 2
Line, 90, 13, 85, 3
Line, 110, 13, 115, 3
Line, 80, 16, 70, 3
Line, 120, 16, 130, 3
Text, 80, 200, STUART
```

Task 2:

Write a program that creates a GUI as shown in the following Figure:
Hint: you might need to use different panes to achieve this UI.



Good Luck!