# **Advanced Java**

Lab Project: 05

Points Possible: 125

Due Date: Nov. 02, 2016 (11:59pm) NOTE: 1 WEEK!

# **Objective:**

Create a program that utilizes Java's new Graphic User Interface library FX.

### **Grading Table:**

Task	Points
Programming Guidelines are followed and Documentation report is created	25
Program has a FX TextField for user input	25
Program has a FX Button that triggers validation of a password	25
Program uses a regular expression to validate the password	25
Program shows/hides FX Labels indicating status of password	25
TOTAL (Points Possible)	125

#### Instructions:

The goal of this project is to demonstrate basic FX GUI programming. The program needs to accept a password from the user and determine if it meets the specifications listed below. The user interface should consist of a TextField for the user to enter their password, a Button that triggers validation of the password and finally a Label that appears after the button is pressed showing either success or listing the tests the password failed on. The Label should be initially hidden.

The password needs to have:

- at least 1 lowercase letter
- at least 1 uppercase letter
- at least 1 digit (0-9)
- at least 1 of the following special characters: !@\$#%?

Note: For credit this project needs to use the FX libraries. Completing the project with AWT and Swing components will result in **zero** credit.

# **Turn In:**

- 1. Create a jar file as demonstrated in class (see the class Blackboard site for notes) that contains your source code and class files named "project05LastName.jar"
- 2. Create a short documentation report (doc, docx, or pdf) containing screen shots that either demonstrate your program meeting the specifications in the above grading table or show the error messages that might occur when attempting to compile or execute your program. Include a brief description (1 paragraph is fine) documenting your work and describing the functionality of your program. If there are errors, discuss them (what is your best guess as to what is going wrong). In the report, include the version of your Java Compiler (at the command line run "javac –version") and any other development tools you used.
- 3. Submit the resulting jar file and documentation report to Blackboard

If you have any questions email me early and often at: george.patterson@tulsacc.edu