ED

Rochester Institute of Technology
National Technical Institute for the Deaf
Information and Computing Studies Department

Name: Edward Riley Date: _____

NACA.161 Programming Fundamentals II

In-class Exercise #32 – Layout Managers

Overview

This exercise is designed to let you practice using layout managers.

1) Create a class called **MyFlowLayout** that contains a main method.
2) Create a frame with a title: "My FlowLayout Manager". Compile and run the program.
3) Add code to resize the frame so the entire title displays.
4) Create a label that says: "Enter text:"
5) Compile and run the program. Did the label display in the frame?

   Why not?

   I didn't add label

6) To fix the problem, add the label to the frame.
7) Compile and run your program. Now why doesn't the label appear?

   What code did you add to make the label appear in the frame?

   jf.add(jl);

8) Compile and run the program. If the entire label doesn't display, adjust the size of the frame in your code.
9) Create a button with a label: "OK". Compile and run the program.
10) Why does only the button appear?

I didn't setup a flow label.

11) To fix the problem, use a FlowLayout layout manager. Compile and run the program.

To which object did define the Layout Manager?

jf

How did you call the required method?

jf.setLayout(new FlowLayout());

12) Add a TextField and do all the steps required to make it appear in the frame.

What 2 steps did you need to do?

JTextField jtf = new TextField();

jf.add(jtf);

13) Notice that the TextField is very small. Change the call to its constructor so it will display 5 characters.

14) Notice that the button is between the label and the text field. Why did this happen?

it's not on the different line.

Fix the problem by making the label the first item, the text field the second item, and the button the last item

15) Now change your code so the button is below the other 2 components

How did you do this?

sort in order by making textfield first and button last

16) Manually adjust the size of the frame and observe its behavior.

17) Make a copy of the **MyFlowLayout.java** file and call the new file **MyGridLayout.java**

18) Compile the new file. Why didn't it compile?

?

Correct the class name and compile

19) Change the layout manager to a GridLayout with 2 rows and 2 columns.

Does the GUI look similar to the FlowLayout version? No.

20) Manually adjust the size of the frame and observe its behavior.

How does the behavior of this GUI differ from the FlowLayout version?

By utilizing different arrangement and positions

21) Make a copy of the **MyGridLayout.java** file and call the new file **MyBorderLayout.java**. Change the name of the class and make sure it compiles okay.

22) Change the layout manager to a BorderLayout. Compile and run the program.

Does the GUI look similar to the previous versions? **no** No.

Why?

default

23) To fix the problem, place each component in a different area in the layout manager. Try to make the GUI look similar to the above versions.

Where did you place the 3 components?

Label: East

Text Field: West

Button: South

24) How will you reduce the size of your window to the minimal size needed?

Use a pack

Signoff

When you complete all of the steps successfully and answer all of the questions, contact your instructor to check if your application(s) executes correctly and to review your code. We will initial the line below.

_____Successful execution of code

If you do not finish the program during the class period, contact your instructor to check to review your code and initial below.

_____Code not completed during lab time

You may then submit your work at the start of next class. You may not use the work period of the next class to complete this assignment. If you do not have a signature, then you cannot receive any points for this assignment.