Bluegrass Community and Technical College CIT 149: Java I Graphical User Interfaces



Refer back to your Week 6 Groupon assignment.

Your programming assignment for this week is to create a GUI version of that assignment solution, with a few modifications.

This will allow you to focus on learning GUIs in Java and less on the other processing. *I would strongly suggest starting the program from scratch again but referring to your previous code as needed for calculations and string manipulation.*

For this week's assignment, you will:

- Use **JTextField** objects to collect the user information:
 - o the full name of the customer (first and last name together)
 - o the date the Groupon is purchased (in the format of mm/dd/yyyy)
 - o the number of jewelry items purchased
 - o a Groupon code (Sterling2017, SILVER2017, or blank)
- Use **JLabel** objects to display
 - The number of items paid for by a Groupon code (0 if a Groupon was not used or if the Groupon was invalid). Hint: Sterling2017 prepaid for 1 item and SILVER2017 prepaid for 2 items.
 - The number of items to be paid for <u>now</u> to the vendor at the fall festival (not including the prepaid items by the Groupon).
 - o The amount due <u>now</u> to the vendor (do not include the Groupon items prepaid).
- Use a **JButton** object to cause the calculations to be performed and the answer displayed in the **JLabel** objects you create. This will allow the user to change any of the "input" fields and can click on the button when they are ready to process the form.

NOTE: For this assignment, DO NOT use listeners for JTextField objects – Use a listener for the buttons.

• Create a second **JButton** object to clear the screen (all **JTextFields** and **JLabel** objects). Put the focus back to the first **JTextField**.

NOTE: Like the LeftRightPanel example in the chapter, multiple buttons can share the same listener.

Requirements:

- Use the same model for developing GUIs as are used in the textbook in Chapter 6 of the Lewis textbook. This helps reinforces using and creating classes. This means you should
 - o create a **ONE** new panel class which extends JPanel
 - o create a driver which creates a frame, an instance of the panel class you create, and adds that panel to the ContentPane.
 - o DO NOT USE A LAYOUT MANAGER FOR THIS ASSIGNMENT. I want you to concentrate on the basics this week and to see why a layout manager might help in future assignments.
 - There are several samples in the textbook which will help:
 - **LeftRight.java** and **LeftRightPanel.java** illustrates using 2 buttons who share an ActionListener.
 - **FahrenheitPanel.java** illustrates how to take input from a JTextField, perform a calculation, and display the answer in a JLabel.

Hints: Think of JTextfield objects as input areas and JLabel objects as output areas (or headings, etc.)

Zip all Java files and submit for grading.