**ECCS 1621 – Programming 2  
Pre-Lab 2 – Create the GUI**

**ECCS 1621 – Programming 2  
Lab 2 – Strings and ActionEvents**

1. Open your pre-lab 2. You will be using the GUI you created to complete this lab.

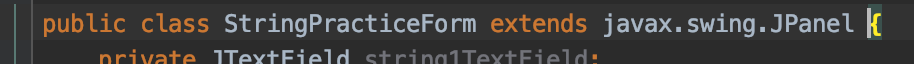
You should have a total of 8 JLabels, 2 JTextFields, and 5 JButtons on your GUI. Provide proper variable names for all of your components. Record the variable names chosen for the specified widgets on the labsheet.

1. Add the ActionListener for each of the button and for both text fields. If you have forgotten how to do this, refer to the instructions in lab 01. (Remember, you will need to chick on each button and create the ActionListener for each one…so it is something you will do 5 times for the buttons and 2 times for the text fields).

Text

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1. Go into the Source view, edit the class to extend the panel:



1. Add two variables of type String immediately after the class definition as shown:

public class StringPracticeForm extends javax.swing.JPanel {

String string1;

String string2;

1. Go to the event handling code for the ActionListener for the string1 text field, modify the following code **using your variable names** to retrieve the entered string from the text field and then display the length of that string in the JLabel below the text field:

string1 = string1TextField.getText(); length1Label.setText( "" + string1.length() );

Create a similar ActionEvent for the string2 text field.

1. Create ActionEvents for the five buttons; each button is to implement the specified string functionality as follows:
   1. compareTo: used to determine whether string1 comes lexicographically before or after (or is equal to)

string2 – use the first label below the button to display one of the following results:

* + 1. str1 < str2
    2. str1 > str2
    3. str1 == str2
  1. endsWith: used to determine if string2 is a suffix of string1 – use the second label below to display one of the following results:
     1. yes – if string2 is a suffix of string1
     2. no – if string2 is not a suffix of string1
  2. toLowerCase: used to convert all upper case characters in both string1 and string2 to lower case. Display string1 in first label and string 2 in second label.
  3. toUpperCase: used to convert all lower case characters in both string1 and string2 to upper case. Display string1 in first label and string 2 in second label.
  4. trim: used to remove both leading and trailing white space characters in both string1 and string2. Display string1 in first label and string 2 in second label.

8. Add you main (type psvm and press enter). You will add a similar main as before. It goes after the action listeners but before the ending }. I have provided a picture you can see where and the code.

Text

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9. Build, test, and debug your program. (See the other sheet for testing and submitting details). **Remember to press enter after typing the string into the textbox!!**