

1. PROGRAM 7 INSTRUCTIONS, CS102, PROF. LOFTIN

Write the code for a Java applet which modifies the `StyleOptions` applet we discussed in class (and also in section 5 of Lewis & Loftus) to allow the user to specify the size of the font. Use a text field to obtain the size.

You should use the given versions of `StyleOptions.java` and `testStyle.html`, essentially the same as those discussed in class. You only need to modify the `StyleOptionsPanel.java` class.

2. THE LISTENER CLASSES

You should implement two separate listener classes: As in the Lewis & Loftus's version of `StyleOptionsPanel.java`, implement one listener class

```
private class StyleListener implements ItemListener
```

for a listener attached to the two checkboxes. In addition, implement a separate listener class

```
private class EnterFontListener implements ActionListener
```

attached to the text field for entering the font size. (The reason for coding two separate listener classes is that checkboxes and text fields implement two different interfaces `ItemListener` and `ActionListener` respectively.)

It should be helpful to have global `int` variables of the `StyleOptionsPanel` class:

```
private int fontSize, style;
```

The variable `style` should replace the local variable in the `itemStateChanged` method, and should refer to the style (including italic or bold) of the font. It should be initialized to `Font.PLAIN` in the panel constructor.

The `fontSize` variable should perform a similar function for the font size, and should be initialized to be 36.

3. DUE DATE: NOVEMBER 2, 2009

4. HOW TO TURN IT IN

Send your modified version of `StyleOptionsPanel.java` as an email attachment to `loftin@rutgers.edu`.

5. MY VERSION OF THE APPLETT

<http://andromeda.rutgers.edu/~loftin/cs102fal09/testStyle.html>

6. BONUS

You may notice in my version of the applet, that if the font size becomes small, one or more of the checkboxes, or even the label for the text field, will move to the same line as the message.

Implement your applet, still within the class `StyleOptionsPanel`, so that

- the two checkboxes cannot be separated on different lines
- the label of the text field and the text field itself cannot be separated on different lines

(Hint: Group them into panels.)