

# Programming Fundamentals II Sec. 601

## Lab Assignment #3

### Style Panel

Due date: 9/16/20 at 11:59 pm

**Purpose:** The lab this week focuses on applying style to some text based on the user's selection of checkboxes. You should be familiar with the concepts of CSS and CheckBox controls.

**Task:** Create a project called `StylePanel_FirstName_LastName` or `Lab3_FirstName_LastName`. Remember to include comments summarizing the program.

1. Make sure you have imported all of the classes necessary for this application. This program will require `Application`, `Stage`, `Scene`, `CheckBox`, `Label`, `VBox`, `EventHandler`, `ActionEvent` and may require `Pos` and `Insets` (depending on how you approach customizing the interface). Prepare the program to be executed as a JavaFX application.
2. In the global scope of the class, declare the variables for the controls used in this application. This program will consist of three `CheckBox` controls and a `Label` control. The `CheckBox` controls should indicate bold, italicize, and underline. The `Label` should have any text of your choosing.
3. In the global scope of the class, declare a `String` variable that will hold the style rules currently being applied to the `Label`. The `String` is initially empty.
4. In the start method, place the controls into the `VBox`. The recommended order, from top to bottom, is the bold `CheckBox`, the italicize `CheckBox`, the underline `CheckBox`, and the `Label`. You may also need to either add padding or set the alignment to better position the `VBox`.
5. Create a private inner class for the `EventHandler` that will handle any of the three `CheckBox` controls being clicked.
6. In the handle method, set the `String` for the style rules back to an empty `String`. Then check which `CheckBox` controls are currently selected. Use `String` concatenation to add the following rules to that `String` if the corresponding `CheckBox` is selected:

If the bold `CheckBox` is selected: `-fx-font-weight: bold;`

If the italicize `CheckBox` is selected: `-fx-font-style: italic;`

If the underline `CheckBox` is selected: `-fx-underline: true;`

Then set the style of the label using the `String` that holds the current style rules.

7. Register this event handler to all three `CheckBox` controls.

**Criteria:** The comment summarizing the program is worth 5 points. The declarations of the controls and the String variable in the global scope are worth 5 points each (25 points total). Adding the controls to the VBox is worth 5 points. Creating and implementing the EventHandler as a private inner class is worth 50 points. The event registrations to the three CheckBox controls are worth 5 points each (15 points total).