

# Concept: Controls and Indicators

## Goal

Create a front panel with controls and indicators using a variety of different styles and types of controls and indicators, and modify their properties, appearance, and layout.

## Description

In this exercise, you begin with a blank front panel and create two controls and an indicator, then adjust their properties. This task gives you experience using controls and indicators.

## Implementation

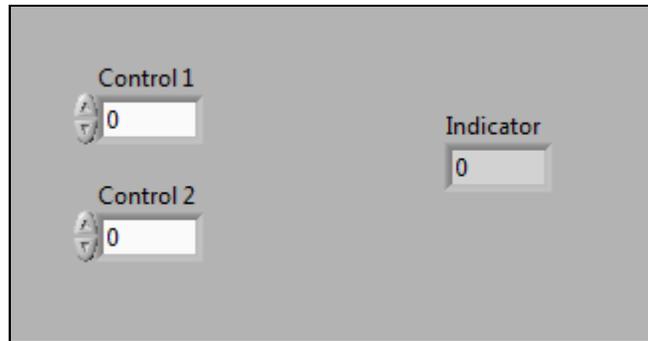
The files that you need to complete this exercise are here:

<NI eLearning>\LV Core 1\Documenting Code\Exercise.

1. Open a new VI.
  - Open LabVIEW.
  - Select **File»New VI**.
2. Add two Numeric Controls onto the front panel.
  - Select **View»Controls Palette**.
  - Select the **Numeric** category.
  - Select and drag the **Numeric Control** onto the front panel.
  - Repeat for a second **Numeric Control**.
3. Rename the first numeric control `Control 1`.
  - Double-click the label above the control.
  - Enter the text `Control 1`.
4. Rename the second numeric control `Control 2` in the same way.
5. Add a Numeric Indicator onto the front panel.
  - Select and drag the **Numeric Indicator** onto the front panel.

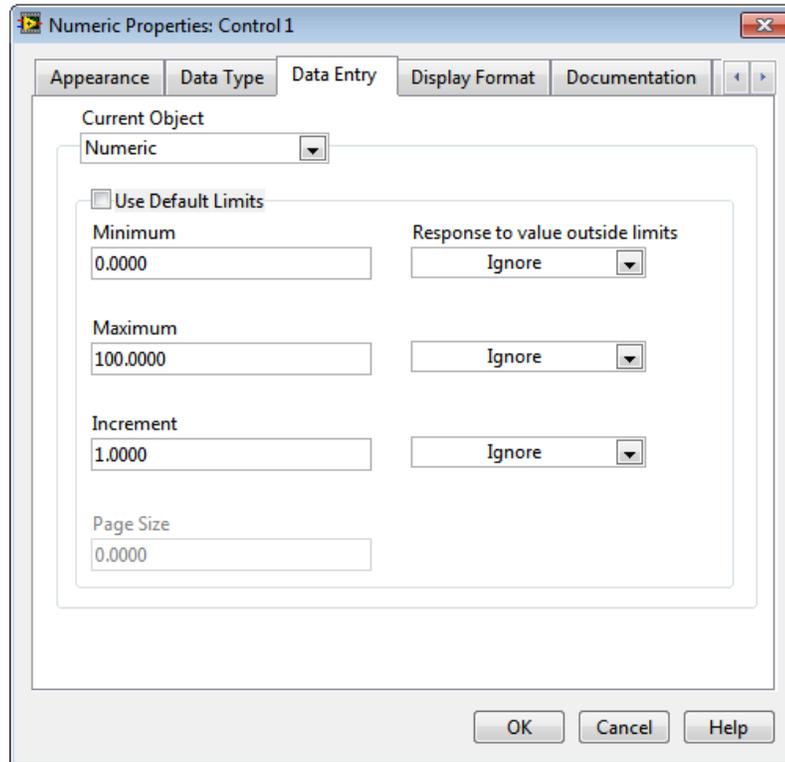


6. Rename the Numeric Indicator Indicator.
  - Double-click the label above the indicator.
  - Enter the text Indicator.



**Figure 1.** Numeric Controls and Indicators Front Panel

7. Change the range of the numeric controls.
  - Right-click the first numeric control and select **Properties**.
  - Click **Data Entry**.
  - Uncheck **Use Default Limits**.
  - Change the Minimum value to 0.
  - Change the Maximum value to 100.
  - Change the increment to 1.
  - Repeat this process for the second numeric control.



**Figure 2.** Properties Page of a Numeric Control

8. Save the VI.
  - Select **File»Save**.
  - Save the VI as `Numeric Controls and Indicators.vi` in the `<Exercise>` directory.
9. Close the VI.
10. Open a new VI.
  - Select **File»New VI**.
11. Add a Vertical Toggle Switch control to the front panel.
  - Select the **Boolean** category.
  - Select and drag the **Vertical Toggle Switch** onto the front panel.
12. Add a Boolean indicator onto the front panel.
  - Select and drag the **Round LED** indicator onto the front panel.



13. Rename the Boolean control `Control`.

- Double-click the label above the control.
- Enter the text `Control`.

14. Rename the Boolean indicator `Indicator`.

- Double-click the label above the indicator.
- Enter the text `Indicator`.

15. Add a String Control onto the front panel.

- Collapse the **Boolean** category by selecting **Programming** on the **Controls** palette.
- Select the **String & Path** category.



- Select and drag the **String Control** to the front panel.

16. Add a String Indicator onto the front panel



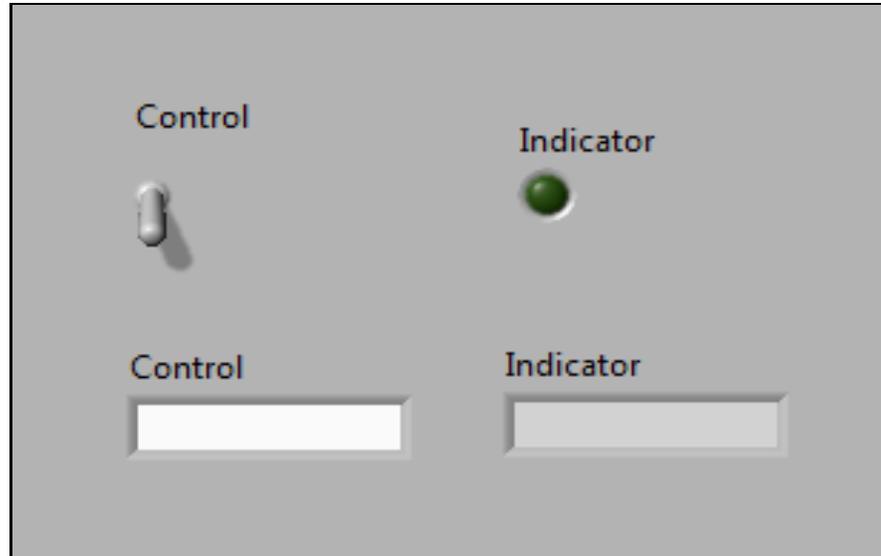
- Select and drag the **String Indicator** to the front panel.

17. Rename the string control `Control`.

- Double-click the label above the control.
- Enter the text `Control`.

18. Rename the string indicator `Indicator`.

- Double-click the label above the indicator.
- Enter the text `Indicator`.



**Figure 3.** Controls and Indicators Front Panel

19. In the string control, type a phrase, then change the display type of the string control to backslash codes.

- Click inside the text field of the string control.
- Type `Hello World`.
- Right-click the string control and select **\ Codes Display**.
- Observe how the text is displayed now.



20. Save the VI as `Controls and Indicators.vi`.

- Select **File>Save**.
- Save the VI as `Controls and Indicators.vi` in the `<Exercise>` directory.

21. Compare your VI to the provided solution VI.

22. Close the VI when you are finished.

## End of Exercise

# Notes

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