

## Lab Assignment 2

### Fall 2015

### Creating a Simple Swing GUI

Create a GUI application consisting of the following Swing components: two JTextField components, two JLabel components, and two JButton components, arranged around the main container using FlowLayout manager. The main container must be an instance of a class that extends JFrame, and must have a title bar. The background color should be Blue or Green. Your program must terminate when the main window is closed by the user.

Each JTextField has a label: “Host” or “Port” as shown below. When the user types in one of the text fields, then presses *Enter*, the application must display a message dialog box containing the text the user typed. Each JButton has a label (“Open” or “Send”) that must appear on the face of that button. When the user presses on a button, the application must display a message dialog box containing the label of the button. You can use the JOptionPane facility (class) to display the message dialog box. You are going to develop two versions of this GUI application that are slightly different from each other. In the first version, all events must be handled by a single instance of the event handling class that you will implement as a “private inner” class in your application code. In the second version, each event (from each source) must be handled by a particular instance of the event handling class registered with that GUI source. For each version, try to use GridLayout manager instead of the FlowLayout manager, and try to resize your main window to see the difference between the two layout managers. Note that with the GridLayout manager the container is divided into a grid where all components occupy equal-sized rectangles. For example, if you want to lay out the GUI components into 5 rows and 2 columns, you would use the container method `setLayout(new GridLayout(5,2,n,m))` where the first two arguments of GridLayout constructor describe the number of rows and columns of the layout, and the last two arguments describe the distances (spaces) between every two adjacent grids, to be  $n$  pixels in the horizontal and  $m$  pixels in the vertical directions.

