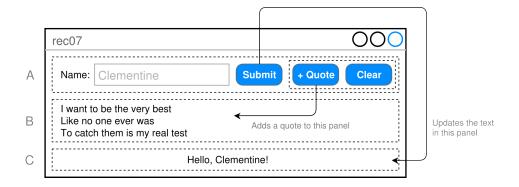
Introduction to GUIs and Java Swing

This recitation will introduce you to several design patterns common within GUI applications and teach you some basics of Java Swing. Specifically, you will learn how to use Swing action listeners, layout managers, and how to retrieve information from text input fields. Your task is to complete the very simple Swing application described below.

A Swing quote generator

You will complete a Swing application that can greet the user and generate quotes from a quote database. When you are done your application should look like:



This application contains three main panels which are named namePanel (A), quotePanel (B), and statusPanel (C). There are three buttons in the namePanel:

- The **Submit** button changes the text in **statusPanel** to "Hello, [name]!", where [name] refers to the text entered in the text field.
- The +Quote button adds a new quote to the bottom of quotePanel.
- The Clear button removes all quotes from quotePanel.

We have provided a demonstration solution in the recitation/07/ directory. You can run this program by double-clicking the rec07-sols.jar file or executing 'java -jar rec07-sols.jar' on a command-line.

Your task: complete the Swing quote generator

We have provided some starter code in the 'rec07' project. To run the program, execute 'ant run' in your terminal from the recitation/07 directory. To complete the program you should:

1. Add the text label, text field, and the **Submit** button to NamePanel.

- 2. Add an ActionListener to the **Submit** button that changes the text in statusPanel when the button is clicked.
- 3. Change the layout of quotePanel to make each quote appear below the previous quote. (See hint #1.)

Additional hints

1. There are many different layout managers in Java Swing. To see a selection of them, check out A Visual Guide to Layout Managers on the Oracle website. In particular, you may want to look at BoxLayout.