

Program 7: Swinging Users

CS 617 Winter 2013

1 Goals.

1. To build a GUI controller and viewer for the Logon application.
2. To reuse your own code in a new context.
3. To introduce events and event handling.

2 Building your First GUI

This program will use much but not all of the code you wrote for P5. In addition, the user interaction will be through a GUI interface, not through the console window. This will be a 2-phase project (programs 7 and 8). Both phases will start with the file of User data that was created in P5.

Instructions for Program 7. Re-implement part of P5 using a Swing interface. Use the Tab-Demo code from Week 8 as an example.

- Define three classes: Main, User, and Admin. User is the same as P5, Main is almost the same.
- Derive the Admin class from JFrame.
- Your MODEL is the same ArrayList, current user, current ID as for P5. Put this in the Admin class.¹
- Encryption, files, and password validation are same as P5.
- In your GUI class, Admin, create panels, buttons, and handlers for NewUser and Quit. (We will add the other parts later.)
- In the new-user panel, use two sub-panels. On the left, create text fields (laid out vertically) to enter the full name, logon name, password and repeated password. On the right, display scrollable text area that shows the complete list of current users.
- To get the user data into the text area:
 - Create a StringBuilder named S. Initialize S with the heading you want on your user list.
 - Use a for-each loop to walk through your ArrayList of Users. Call toString() for each User in the list, and add that user's data to the end of S.
 - Call the `setText(toString(S));` to put the user data into the text area.
- Be sure the main function writes the output file and terminates when you close the window.

3 Due March 8

Hand in a zipped project, including some screen shots and your output file.

¹In P8, this will be pulled out into a separate class called AdminModel.