## 实验 12

## 实验目的：

* 熟悉图形界面2

## 实验要求：

* 按照题目要求写代码，压缩，并上传到course.xmu.edu.cn

1. (Synchronizing a JSlider and a JTextField) Write a program that uses the paintComponent method to draw the current value of a JSlider on a subclass of JPanel. In addition, provide a JTextField where a specific value can be entered. The JTextField should display the current value of the JSlider at all times. Changing the value in the JTextField should also update the JSlider. A JLabel should be used to identify the JTextField. The JSlider methods setValue and getValue should be used. [Note: The setValue method is a public method that does not return a value and takes one integer argument, the JSlider value, which determines the position of the thumb.]
2. (Complete Drawing Application) Using the techniques developed in this chapter and Chapter 14, create a complete drawing application. The program should use the GUI components from Chapter 14 and Chapter 25 to enable the user to select the shape, color and fill characteristics. Each shape should be stored in an array of MyShape objects, where MyShape is the superclass in your hierarchy of shape classes. Use a JDesktopPaneand JInternalFrames to allow the user to create multiple separate drawings in separate child windows. Create the user interface as a separate child window containing all the GUI components that allow the user to determine the characteristics of the shape to be drawn. The user can then click in any JInternalFrame to draw the shape.
3. Write a complete file-matching accounts receivable program. Use the account number on each file as the record key for matching purposes. Assume that each file is a sequential text file with records stored in increasing account-number order.

a) Define class TransactionRecord. Objects of this class contain an account number and amount for the transaction. Provide methods to modify and retrieve these values.

b) Modify class AccountRecord in Fig. 17.4 to include method combine, which takes a TransactionRecord object and combines the balance of the AccountRecord object and the amount value of the TransactionRecord object.

c) Write a program to create data for testing the program. Use the sample account data in Figs. 17.22 and 17.23. Run the program to create the files trans.txt and oldmast.txt to be used by your file-matching program.



