1. **Java界面的搭建**

* **These are three broad types of Swing widgets(javax.swing.\*):**
  + **atomic widgets(or components)：An atomic widget is one that corresponds to a basic GUI feature such as a button or label.**

**原子组件相关的类：**

* + **JButton;JCheckBox;JComboBox; JRadioButton;JList;JSlider;JTree**
  + **JLable;JProgressBar;JProgressMonitor;**
  + **JColorChooser, JFileChoose, JFileChooser, JTable, JTextArea，JTextField**
  + **intermediate containers：An intermediate container can contain and manage other widgets(atomic widgets or intermediate container)to form a composite widget.**
  + **JPanel;JScrollPane; JSplitPane; JTabbedPane; JToolBar; JLayeredPane; JDesktopPane; JInternalFrame; JRootPane**
  + **top-level containers：A top-level container holds intermediate containers and atomic widgets. 顶级容器不能被其它的容器包含。在构建桌面Java应用程序时，通常创建一个JFrame来容纳所需的组件，以提供期望的GUI外观和功能。**
* 界面所包含的容器上的布局管理器：
  + **BorderLayout**
  + **FlowLayout**
  + **GridLayout**

1. **Java界面的交互**

* **When we create a GUI component, it automatically has the ability to generate events whenever a user interacts with it---we need do nothing to get this phenomenon to occur.**
* **In order to handle events,we need to do two things when Programming a GUI:**
  1. **创建实现监听器XXXListener接口的类 A**
     + **对于某种类型的事件XXXEvent, 要想接收并处理这类事件，必须定义实现监听器接口XXXListener监听器类；**
  2. **调用被监听组件的addXXXListener(…)方法注册类A的对象，就可以监听该组件触发的XXXEvent。**

例如：buttonOne按钮被按下时，会触发ActionEvent事件，如果想处理该事件，实现与界面的交互，编程人员必须完成下述任务：

class ListenerOne implements ActionListener {//处理该事件的方法

public void actionPerformed(ActionEvent event) {

label.setText(buttonOne.getText());//此处代码是处理该事件的代码

}

}

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buttonOne.addActionListener(new ListenerOne());

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