

Object Oriented Programming

Graphical User Interface



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Using Components Example

1. JButton
2. JSlider
3. JCheckBox
4. JTextField
5. JComboBox
6. JRadioButton
7. JPasswordField
8. JTextArea
9. JLabel
10. JList
11. JScrollBar
12. JMenuBar

Layout Managers



Layout Management

How to glue it all together????

The Layout Management

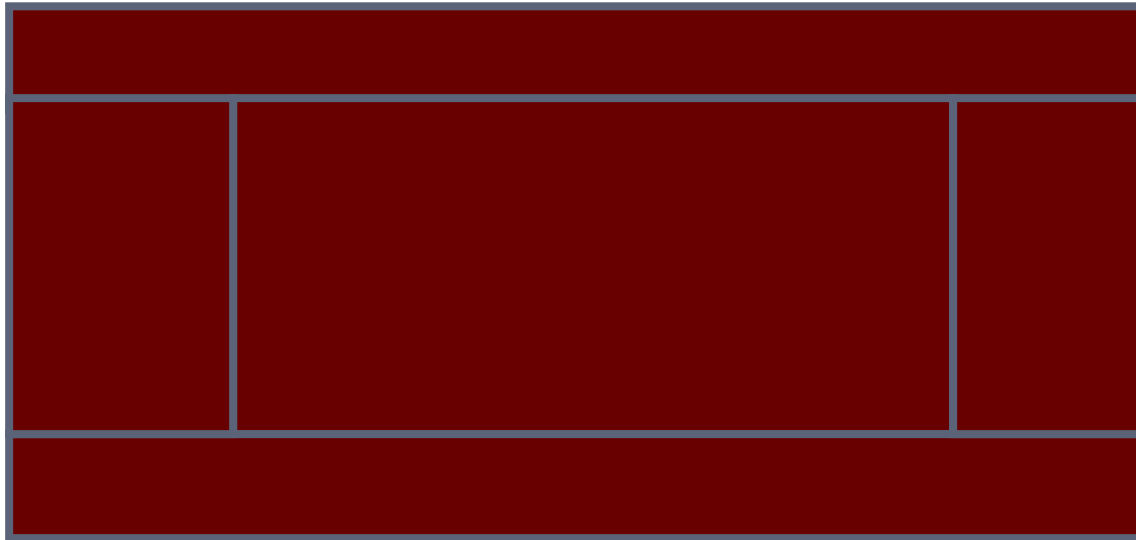
Layout Management

- The process of determining the size and position of components
- A layout manager is an object that performs layout management for the components within the container.

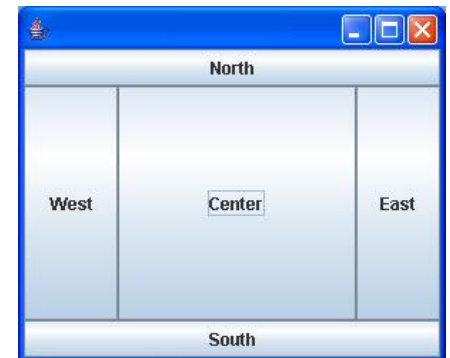
Layout Management

- Java supplies few commonly used layout managers:
 1. BorderLayout
 2. BoxLayout
 3. FlowLayout
 4. GridLayout

Border Layout

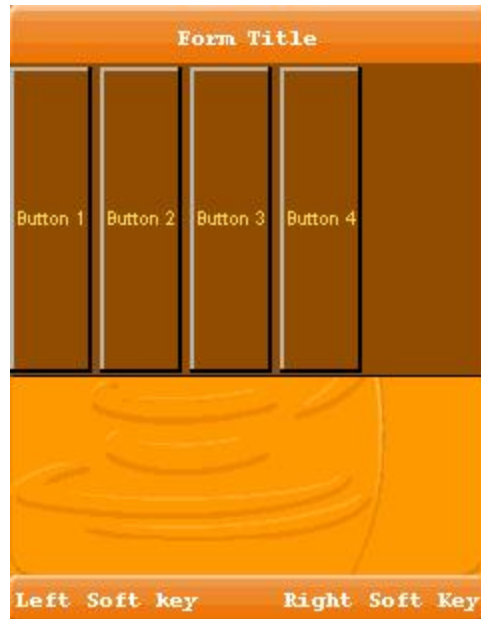
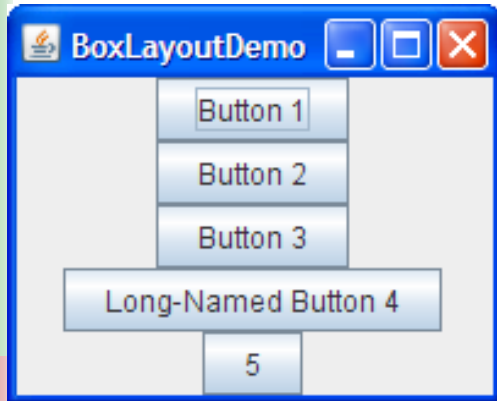


Position must be specified, e.g. add ("North", myComponent)



Box Layout

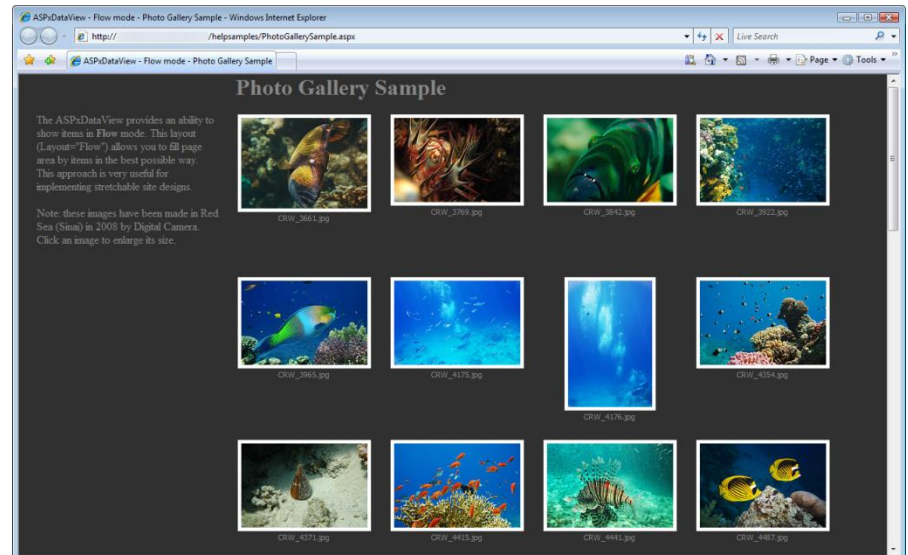
The BoxLayout class puts components in a single column or single row.



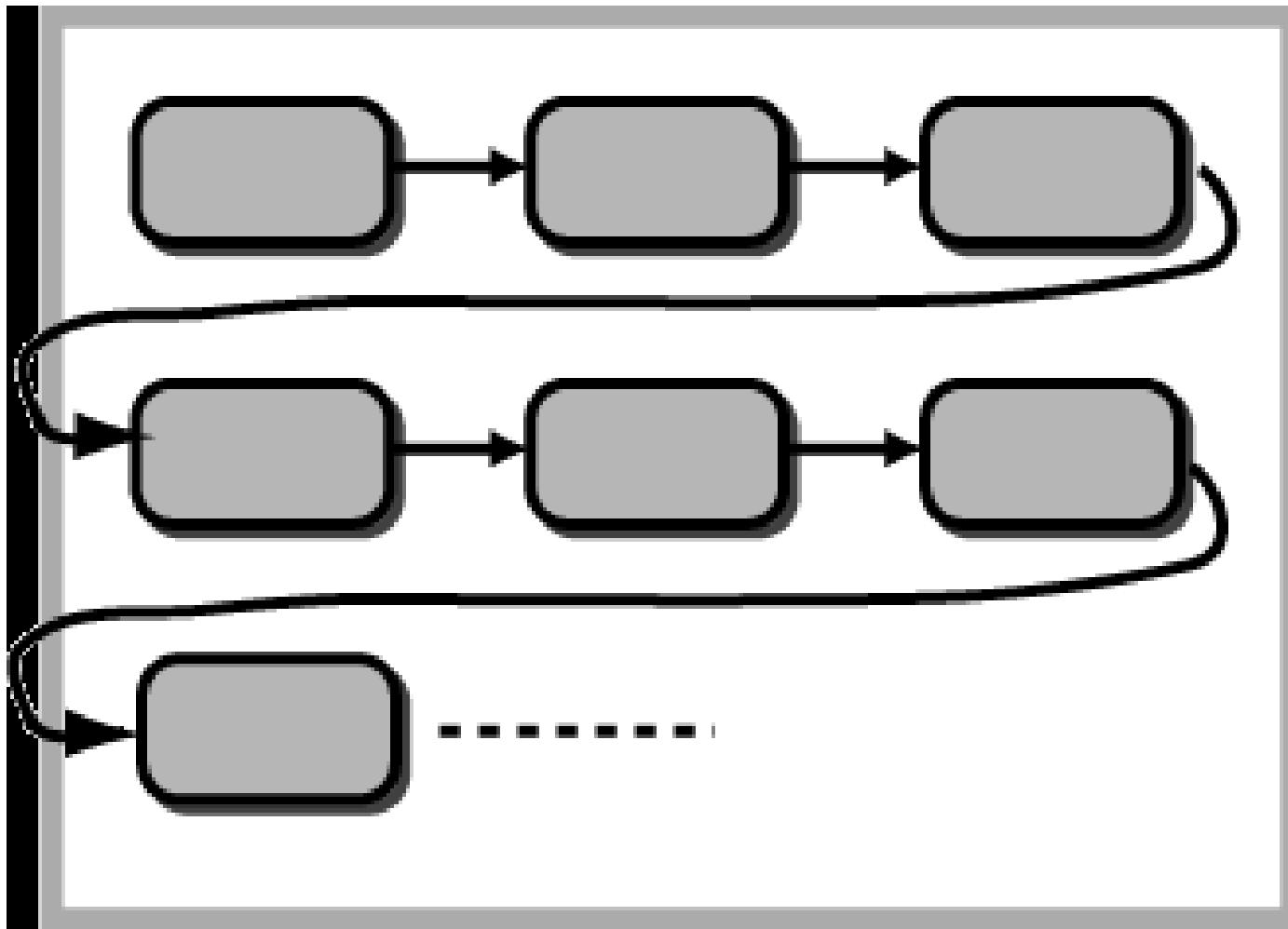
Flow Layout



FlowLayout is the default layout manager for every JPanel. It simply lays out components from left to right, starting new rows if necessary



FlowLayout

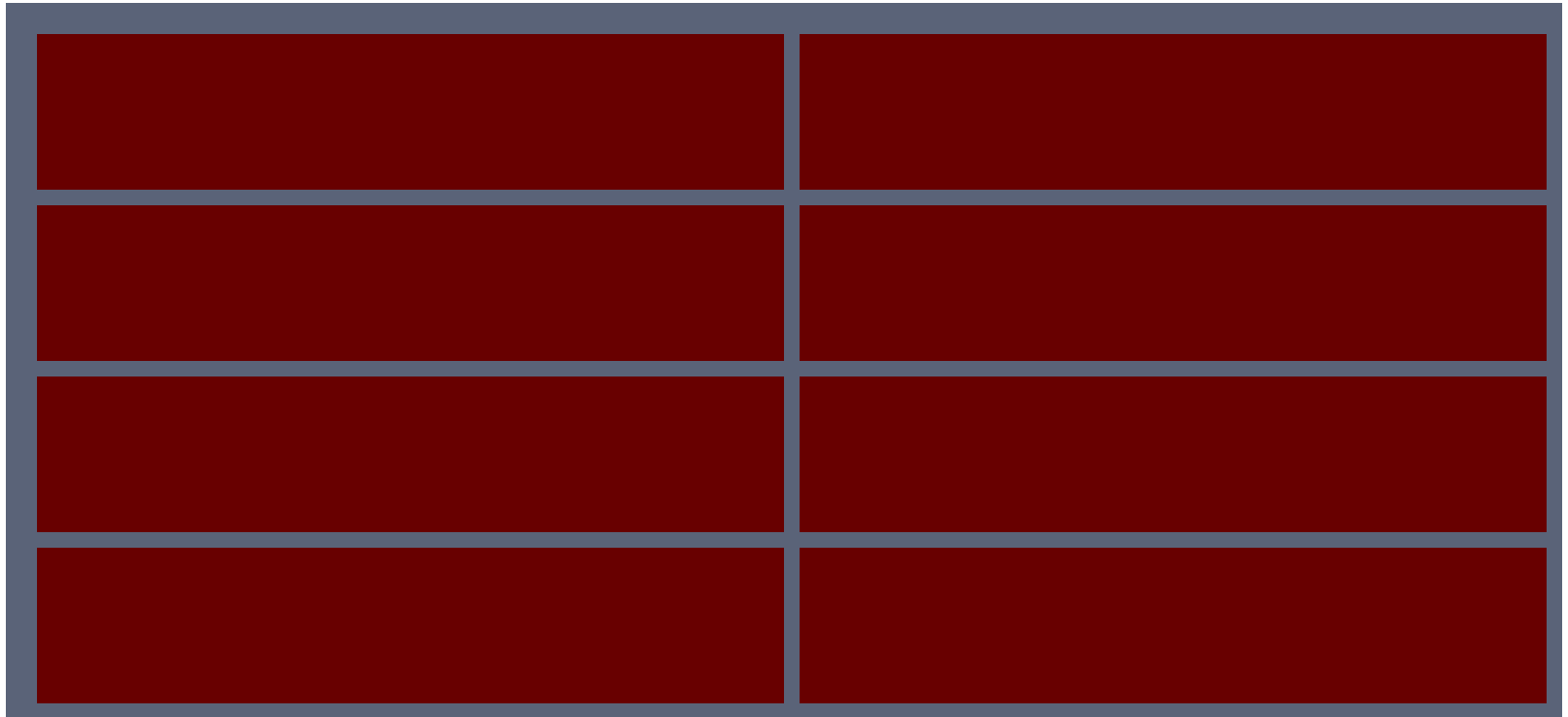


Components Added by FlowLayout

Fields of FlowLayout class

- LEFT
- RIGHT
- CENTER
- LEADING

GridLayout



GridLayout simply makes a bunch of components equal in size and displays them in the requested number of rows and columns .



GridLayoutDemo



Button 1

Button 2

Button 3

Long-Named Button 4

5

Horizontal gap: Vertical gap:

0



0



Apply gaps



- Visit this site for complete demo of swing

<http://docs.oracle.com/javase/tutorial/uiswing/components/index.html>

Your Turn

- JSlider
- JToggleButton

Questions

