The class **CardLayout** arranges each component in the container as a card.

**constructors**

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| **S.N.** | **Constructor & Description** |
| 1 | **CardLayout()**  Creates a new card layout with gaps of size zero. |
| 2 | **CardLayout(int hgap, int vgap)**  Creates a new card layout with the specified horizontal and vertical gaps. |

**Class methods**

|  |  |
| --- | --- |
| **S.N.** | **Method & Description** |
| 1 | **void addLayoutComponent(Component comp, Object constraints)**  Adds the specified component to this card layout's internal table of names. |
| 2 | **void addLayoutComponent(String name, Component comp)**  If the layout manager uses a per-component string, adds the component comp to the layout, associating it with the string specified by name. |
| 3 | **void first(Container parent)**  Flips to the first card of the container. |
| 4 | **int getHgap()**  Gets the horizontal gap between components. |
| 5 | **float getLayoutAlignmentX(Container parent)**  Returns the alignment along the x axis. |

import java.awt.\*;

import java.awt.event.\*;

public class AwtLayoutDemo {

private Frame mainFrame;

private Label headerLabel;

private Label statusLabel;

private Panel controlPanel;

private Label msglabel;

public AwtLayoutDemo(){

prepareGUI();

}

public static void main(String[] args){

AwtLayoutDemo awtLayoutDemo = new AwtLayoutDemo();

awtLayoutDemo.showCardLayoutDemo();

}

private void prepareGUI(){

mainFrame = new Frame("Java AWT Examples");

mainFrame.setSize(400,400);

mainFrame.setLayout(new GridLayout(3, 1));

mainFrame.addWindowListener(new WindowAdapter() {

public void windowClosing(WindowEvent windowEvent){

System.exit(0);

}

});

headerLabel = new Label();

headerLabel.setAlignment(Label.CENTER);

statusLabel = new Label();

statusLabel.setAlignment(Label.CENTER);

statusLabel.setSize(350,100);

msglabel = new Label();

msglabel.setAlignment(Label.CENTER);

msglabel.setText("Welcome to CDAC Jaipur”);

controlPanel = new Panel();

controlPanel.setLayout(new FlowLayout());

mainFrame.add(headerLabel);

mainFrame.add(controlPanel);

mainFrame.add(statusLabel);

mainFrame.setVisible(true);

}

private void showCardLayoutDemo(){

headerLabel.setText("Layout in action: CardLayout");

final Panel panel = new Panel();

panel.setBackground(Color.CYAN);

panel.setSize(300,300);

CardLayout layout = new CardLayout();

layout.setHgap(10);

layout.setVgap(10);

panel.setLayout(layout);

Panel buttonPanel = new Panel(new FlowLayout());

buttonPanel.add(new Button("OK"));

buttonPanel.add(new Button("Cancel"));

Panel textBoxPanel = new Panel(new FlowLayout());

textBoxPanel.add(new Label("Name:"));

textBoxPanel.add(new TextField(20));

panel.add("Button", buttonPanel);

panel.add("Text", textBoxPanel);

Choice choice = new Choice();

choice.add("Button");

choice.add("Text");

choice.addItemListener(new ItemListener() {

public void itemStateChanged(ItemEvent e) {

CardLayout cardLayout = (CardLayout)(panel.getLayout());

cardLayout.show(panel, (String)e.getItem());

}

});

controlPanel.add(choice);

controlPanel.add(panel);

mainFrame.setVisible(true);

}

}

