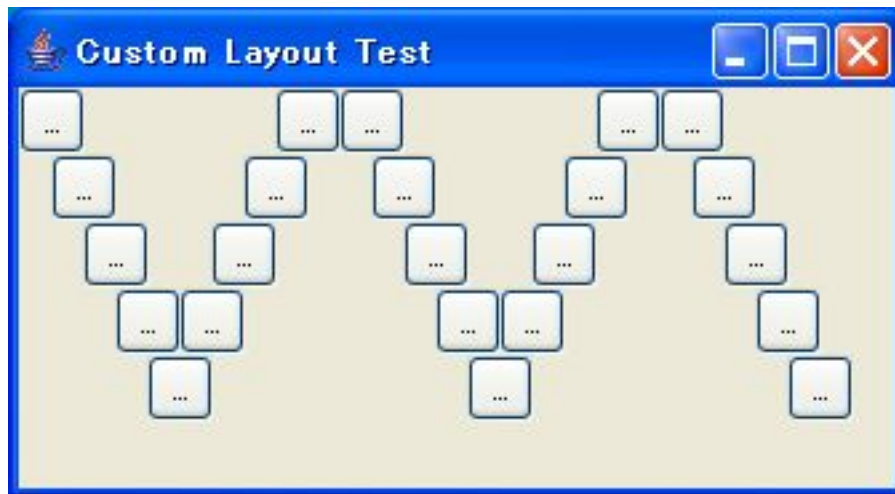


# Swing レイアウト 3

[Swing]

## LayoutManager のカスタマイズ



## ソースコード

```
import java.awt.Component;
import java.awt.Container;
import java.awt.Dimension;
import java.awt.LayoutManager;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

import javax.swing.BoxLayout;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.SwingUtilities;
import javax.swing.UIManager;

@SuppressWarnings("serial")
public class LayoutTest3 extends JFrame {
    /**
     * Custom layout test
     * @see http://java.sun.com/docs/books/tutorial/uiswing/layout/custom.html
     */
    public void testCustomLayout() {
        JFrame frame = new JFrame("Custom Layout Test");

        Container pane = frame.getContentPane();
        pane.setLayout(new ZigzagLayout());

        for (int i=0; i<25; i++) {
            pane.add(new JButton(String.valueOf(i)));
        }
        frame.pack();
        frame.setVisible(true);
    }

    /**
     * カスタマイズした、LayoutManager
     */
    class ZigzagLayout implements LayoutManager {

        public void addLayoutComponent(String name, Component comp) {}
        public void removeLayoutComponent(Component comp) {}
        public Dimension minimumLayoutSize(Container parent) {
            return new Dimension(300,150);
        }
        public Dimension preferredLayoutSize(Container parent) {
            return new Dimension(300,150);
        }
    }
}
```

```

public void layoutContainer(Container parent) {
    int compCnt = parent.getComponentCount();

    int x = 0;
    int y = 0;
    int width = 25;
    int height = 25;
    boolean isDown = true;
    for (int i=0; i<compCnt; i++) {
        Component c = parent.getComponent(i);
        if (c.isVisible()) {
            if (i > 0) {
                if (i % 5 == 0) {
                    isDown = !isDown;
                }
                if (isDown) {
                    y += height;
                } else {
                    y -= height;
                }
                x += width / 2;
            }
            c.setBounds(x, y, width, height);
        }
    }
}

/* ***** 以下メニュー用 ***** */
public LayoutTest3() {
    setTitle("Layout Test 2");

    JButton btn1 = new JButton("custom");
    btn1.addActionListener(new MyActionListener("custom"));

    JPanel pane = new JPanel();
    pane.setLayout(new BoxLayout(pane, BoxLayout.Y_AXIS));

    pane.add(btn1);
    getContentPane().add(pane);

    pack();
}

class MyActionListener implements ActionListener {
    private String type = null;
    public MyActionListener(String type) {
        this.type = type;
    }
    public void actionPerformed(ActionEvent e) {
        if ("custom".equals(this.type)) {
            testCustomLayout();
        }
    }
}

public static void main(String[] args) {
    try {
        UIManager.setLookAndFeel("com.sun.java.swing.plaf.windows.WindowsLookAndFeel");
        // UIManager.setLookAndFeel("javax.swing.plaf.metal.MetalLookAndFeel");
    } catch (Exception e) {
        e.printStackTrace();
    }
    SwingUtilities.invokeLater(
        new Runnable() {
            public void run() {
                LayoutTest3 lt = new LayoutTest3();
                lt.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                lt.setVisible(true);
            }
        }
    );
}
}

```