

Java Server Pages(2) Directive dan Action Pemrograman Lanjut

Praktikum 1.

Contoh penggunaan page directives

```
<% @ page language="Java" import="java.util.*"
    session="true" buffer="12kb" autoFlush="true"
    errorPage="error.jsp" isThreadSafe="false"
%>

<HTML>
<HEAD>
  <TITLE>Contoh Page Directive pada JSP</TITLE>
</HEAD>
<BODY>
  <H1>
    Contoh Page Directive pada JSP
  </H1>
</BODY>
</HTML>
```

Praktikum 2.

Contoh include directive.

IncludeDirective.jsp

```
<HTML>
<HEAD>
  <TITLE>Contoh Include Directive pada JSP</TITLE>
</HEAD>
<BODY>
  <H1>
    <% @ include file="IncludeDirective.html" %>
  </H1>
  <% @ include file="Date.jsp" %>
</BODY>
</HTML>
```

IncludeDirective.html

```
<HTML>
<HEAD>
  <TITLE></TITLE>
</HEAD>
<BODY>
  <P> Contoh Include Directive pada JSP </P> <BR>
</BODY>
</HTML>
```

```

<HTML>
<HEAD>
  <TITLE></TITLE>
</HEAD>
<BODY>
<% @ page import="java.util.Date" %>
<%= "Tanggal hari ini : " + new Date() %>
</BODY>
</HTML>

```

Panggil IncludeDirective.jsp di browser.

Praktikum 3.

Contoh penggunaan <jsp:include>.

WhatsNew.jsp

```

<HTML>
<HEAD>
<TITLE>What's New at JspNews.com</TITLE>
<LINK REL=STYLESHEET
  HREF="JSP-Styles.css"
  TYPE="text/css">
</HEAD>

<BODY>
<TABLE BORDER=5 ALIGN="CENTER">
  <TR><TH CLASS="TITLE">
    What's New at JspNews.com</TH></TR>
</TABLE>
<P>
Here is a summary of our three most recent news stories:
<OL>
  <LI><jsp:include page="Item1.html" flush="true" />
  <LI><jsp:include page="Item2.html" flush="true" />
  <LI><jsp:include page="Item3.html" flush="true" />
</OL>
</BODY>
</HTML>

```

Item1.html

```

<B>Bill Gates acts humble.</B> In a startling and unexpected
development, Microsoft big wig Bill Gates put on an open act of
humility yesterday.
<A HREF="http://www.microsoft.com/Never.html">More details...</A>

```

Item2.html

```

<B>Scott McNealy acts serious.</B> In an unexpected twist,
wisecracking Sun head Scott McNealy was sober and subdued at
yesterday's meeting.
<A HREF="http://www.sun.com/Imposter.html">More details...</A>

```

```
<B>Larry Ellison acts conciliatory.</B> Catching his competitors  
off guard yesterday, Oracle prez Larry Ellison referred to his  
rivals in friendly and respectful terms.  
<A HREF="http://www.oracle.com/Mistake.html">More details...</A>
```

Praktikum4.

Contoh penggunaan <jsp:forward>
Forward.jsp

```
<HTML>  
<HEAD>  
  <TITLE>Contoh jsp:forward</TITLE>  
</HEAD>  
<BODY>  
<jsp:forward page="WhatsNew.jsp"/>  
</BODY>  
</HTML>
```

Perhatikan bahwa yang ditampilkan adalah hasil dari WhatsNew.jsp tetapi alamat pada address bar adalah tetap Forward.jsp !.

Praktikum 5.

Contoh penggunaan contentType. Simpan sebagai JSP.

```
First  Last  Email Address  
Marty Hall  hall@corewebprogramming.com  
Larry Brown brown@corewebprogramming.com  
Bill Gates gates@sun.com  
Larry Ellison ellison@microsoft.com  
<% @ page contentType="application/vnd.ms-excel" %>  
<%-- There are tabs, not spaces, between columns. --%>
```

Praktikum 6.

Contoh penggunaan Plug-In Applet. Taruh semua file.java di folder process/classes.
(jangan lupa compile dgn javac).

PluginApplet.java

```
import javax.swing.*;  
  
/** An applet that uses Swing and Java 2D and thus requires  
 * the Java Plug-In.  
 */  
  
public class PluginApplet extends JApplet {  
  public void init() {  
    WindowUtilities.setNativeLookAndFeel();  
    setContentPane(new JPanel());  
  }  
}
```

TextPanel.java

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

/** JPanel that places a panel with text drawn at various angles
 * in the top part of the window and a JComboBox containing
 * font choices in the bottom part.
 */

public class TextPanel extends JPanel
    implements ActionListener {
    private JComboBox fontBox;
    private DrawingPanel drawingPanel;

    public TextPanel() {
        GraphicsEnvironment env =
            GraphicsEnvironment.getLocalGraphicsEnvironment();
        String[] fontNames = env.getAvailableFontFamilyNames();
        fontBox = new JComboBox(fontNames);
        setLayout(new BorderLayout());
        JPanel fontPanel = new JPanel();
        fontPanel.add(new JLabel("Font:"));
        fontPanel.add(fontBox);
        JButton drawButton = new JButton("Draw");
        drawButton.addActionListener(this);
        fontPanel.add(drawButton);
        add(fontPanel, BorderLayout.SOUTH);
        drawingPanel = new DrawingPanel();
        fontBox.setSelectedItem("Serif");
        drawingPanel.setFontName("Serif");
        add(drawingPanel, BorderLayout.CENTER);
    }

    public void actionPerformed(ActionEvent e) {
        drawingPanel.setFontName((String)fontBox.getSelectedItem());
        drawingPanel.repaint();
    }
}
```

WindowUtilities.java

```
import javax.swing.*;
import java.awt.*;

/** A few utilities that simplify using windows in Swing.
 */

public class WindowUtilities {

    /** Tell system to use native look and feel, as in previous
     * releases. Metal (Java) LAF is the default otherwise.
     */
}
```

```

public static void setNativeLookAndFeel() {
    try {
        UIManager.setLookAndFeel
            (UIManager.getSystemLookAndFeelClassName());
    } catch(Exception e) {
        System.out.println("Error setting native LAF: " + e);
    }
}

public static void setJavaLookAndFeel() {
    try {
        UIManager.setLookAndFeel
            (UIManager.getCrossPlatformLookAndFeelClassName());
    } catch(Exception e) {
        System.out.println("Error setting Java LAF: " + e);
    }
}

public static void setMotifLookAndFeel() {
    try {
        UIManager.setLookAndFeel
            ("com.sun.java.swing.plaf.motif.MotifLookAndFeel");
    } catch(Exception e) {
        System.out.println("Error setting Motif LAF: " + e);
    }
}

/** A simplified way to see a JPanel or other Container.
 * Pops up a JFrame with specified Container
 * as the content pane.
 */

public static JFrame openInJFrame(Container content,
                                int width,
                                int height,
                                String title,
                                Color bgColor) {
    JFrame frame = new JFrame(title);
    frame.setBackground(bgColor);
    content.setBackground(bgColor);
    frame.setSize(width, height);
    frame.setContentPane(content);
    //frame.addWindowListener(new ExitListener());
    frame.setVisible(true);
    return(frame);
}

```

```

/** Uses Color.white as the background color. */

public static JFrame openInJFrame(Container content,
                                   int width,
                                   int height,
                                   String title) {
    return(openInJFrame(content, width, height, title, Color.white));
}

/** Uses Color.white as the background color, and the
 * name of the Container's class as the JFrame title.
 */
public static JFrame openInJFrame(Container content,
                                   int width,
                                   int height) {
    return(openInJFrame(content, width, height,
                        content.getClass().getName(),
                        Color.white));
}
}

```

PluginApplet.jsp

```

<!-- Example of using jsp:plugin for an applet that uses Java 2. -->
<HTML>
<HEAD>
<TITLE>Using jsp:plugin</TITLE>
<LINK REL=STYLESHEET
      HREF="JSP-Styles.css"
      TYPE="text/css">
</HEAD>

<BODY>

<TABLE BORDER=5 ALIGN="CENTER">
  <TR><TH CLASS="TITLE">
    Using jsp:plugin</TH>
</TR>
</TABLE>
<P>
<CENTER>
<jsp:plugin type="applet"
            code="PluginApplet.class"
            width="370" height="420">
</jsp:plugin>
</CENTER>

</BODY>
</HTML>

```

DrawingPanel.java

```
import java.awt.*;
import java.awt.geom.*;
import javax.swing.*;

/** A window with text drawn at an angle. The font is
 * set by means of the setFontName method.
 */

class DrawingPanel extends JPanel {
    private Ellipse2D.Double circle =
        new Ellipse2D.Double(10, 10, 350, 350);
    private GradientPaint gradient =
        new GradientPaint(0, 0, Color.red, 180, 180, Color.yellow,
            true); // true means to repeat pattern
    private Color[] colors = { Color.white, Color.black };

    public void paintComponent(Graphics g) {
        super.paintComponent(g);
        Graphics2D g2d = (Graphics2D)g;
        g2d.setPaint(gradient);
        g2d.fill(circle);
        g2d.translate(185, 185);
        for (int i=0; i<16; i++) {
            g2d.rotate(Math.PI/8.0);
            g2d.setPaint(colors[i%2]);
            g2d.drawString("jsp:plugin", 0, 0);
        }
    }

    public void setFontName(String fontName) {
        setFont(new Font(fontName, Font.BOLD, 35));
    }
}
```

Praktikum 7. Contoh penggunaan contentType. Simpan sebagai JSP.

```
<HTML>
<HEAD>
<TITLE>Mengakses Excel</TITLE>
</HEAD>
<BODY>
<% @ page contentType="application/vnd.ms-excel" %>
<B>DAFTAR PENJUALAN PRODUK A</B>
<TABLE BORDER="1">
<TR><TH>Kota</TH><TH>2002</TH><TH>2003</TH></TR>
<TR><TD>Semarang</TD><TD>500</TD><TD>403</TD></TR>
<TR><TD>Solo</TD><TD>400</TD><TD>410</TD></TR>
<TR><TD>Kudus</TD><TD>200</TD><TD>230</TD></TR>
<TR><TD>Pati</TD><TD>150</TD><TD>167</TD></TR>
</TABLE>
</BODY>
</HTML >
```

Praktikum 8. Penggunaan atribut isErrorPage. errorPage.jsp

```
<HTML>
<HEAD>
<TITLE>Tes Atribut errorPage</TITLE>
</HEAD>
<BODY>

<% @ page errorPage="pesan.jsp" %>

<%
String strBilA = request.getParameter("bila");
String strBilB = request.getParameter("bilb");

float bilA = Float.valueOf(strBilA).floatValue();
float bilB = Float.valueOf(strBilB).floatValue();

out.println(bilA + "/" + bilB + " = " + bilA / bilB);
%>

</BODY>
</HTML>
```

pesan.jsp

```
<HTML>
<HEAD>
<TITLE>Halaman Pesan Kesalahan</TITLE>
</HEAD>
<BODY>

<% @ page isErrorPage="true" %>

Pesan kesalahan ini berasal dari<BR>
dokumen errorpage.jsp karena ada<BR>
kesalahan berikut:<BR>
<B><%= exception %></B><BR>

</BODY>
</HTML>
```

Jalankan program dengan cara sebagai berikut:

<http://localhost:8080/process/errorPage.jsp?bila=23&bilb=2>

<http://localhost:8080/process/errorPage.jsp?bila=23&bilb=b>

Praktikum 9. Contoh penggunaan <jsp:forward> yang melibatkan <jsp:param> forward2.jsp

```
<HTML>
<HEAD>
<TITLE>Contoh jsp:forward</TITLE>
</HEAD>
<BODY>
<jsp:forward page="hitung.jsp">
  <jsp:param name="bila" value="10" />
  <jsp:param name="bilb" value="20" />
</jsp:forward>
</BODY>
</HTML>
```

hitung.jsp

```
<HTML>
<HEAD>
<TITLE>Contoh Dokumen di-forward</TITLE>
</HEAD>
<BODY>

<%
    String StrBilA = request.getParameter("bila");
    String StrBilB = request.getParameter("bilb");

    int bilA = Integer.valueOf(StrBilA).intValue();
    int bilB = Integer.valueOf(StrBilB).intValue();

    out.println(bilA + " + " + bilB + " = " +
        (bilA + bilB));
%>

</BODY>
</HTML>
```