



# University of Connecticut

## Applets in Java using NetBeans as an IDE Creating a form of Browser using JEditorPane (Part 2)

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### The Next Step:

We have several alternatives now, which we need to address. Here is a list of them:

1. How to get HTML interpreted correctly.

We start with reading a URL and displaying the text therein. The title of this applet is a dead giveaway that the method didn't quite work correctly, but we will fix that in the future (part 3). For the time being, let's just focus on getting a page to load. This code is partially lifted from the SUN tutorial pages, so I'm not to be credited for them.

The program consists of prototypical numerical input fields such as previously described, and a scrolling editor pane which will receive the text from the WWW.

```
/*
 * wontclicktoonelink.java
 *
 * Created on October 28, 2005, 3:30 PM
 */

/**
 *
 * @author c. david
 */
import javax.swing.*;
import java.net.*;
import java.io.*;
import java.beans.ExceptionListener;//added to get Hyperlink going
```

```

import javax.swing.event.*;

import javax.swing.JEditorPane.*;
import javax.swing.text.html.*;
import java.beans.ExceptionListener;
import java.awt.*;
import java.awt.event.*;

import javax.swing.*;
import java.math.*;
import java.util.Formatter;
import javax.swing.event.*;
import java.net.URL;
import javax.swing.event.HyperlinkEvent;
public class wontclicktonewlink extends javax.swing.JApplet {

    /**
     * Initializes the applet wontclicktonewlink
     */
    public void init() {
        try {
            java.awt.EventQueue.invokeAndWait(new Runnable() {
                public void run() {
                    initComponents();
                    URL ourURL = null;
                    try {
                        ourURL = new URL("http://web.uconn.edu/~cdavid/");
                    } catch (MalformedURLException ex) {

                        ex.printStackTrace();
                    }
                    try {
                        in = new BufferedReader(new
InputStreamReader(ourURL.openStream()));
                    } catch (IOException ex) {
                        ex.printStackTrace();
                    }
                    String inputLine;
                    String outLine = "";
                    try {
                        while ((inputLine = in.readLine())!= null)
                            outLine = outLine + inputLine;
                        System.out.println(outLine);
                    } catch (IOException ex) {
                        ex.printStackTrace();
                    }
                }
            });
        }
    }
}

```

```

        try {
            in.close();
        } catch (IOException ex) {
            ex.printStackTrace();
        }
        cwdEditorPane.setText(outLine);
    }
}
);
} catch (Exception ex) {
    ex.printStackTrace();
}
}
}

```

```

/** This method is called from within the init() method to
 * initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is
 * always regenerated by the Form Editor.
 */
// <editor-fold defaultstate="collapsed" desc=" Generated Code ">
private void initComponents() {
    javax.swing.JComboBox jComboBox1;
    javax.swing.JComboBox jComboBox2;
    javax.swing.JEditorPane jEditorPane1;
    javax.swing.JScrollPane jScrollPane1;

    jComboBox1 = new javax.swing.JComboBox();
    jComboBox2 = new javax.swing.JComboBox();
    jScrollPane1 = new javax.swing.JScrollPane();
    jEditorPane1 = new javax.swing.JEditorPane();

    jComboBox1.setModel(new javax.swing.DefaultComboBoxModel(new String[]
{ "+", "-" }));

    jComboBox2.setModel(new javax.swing.DefaultComboBoxModel(new String[]
{ "1", "2", "3", "4", "5", "6", "7", "8", "9" }));

    jEditorPane1.setEditable(false);
    cwdEditorPane = jEditorPane1;
    jEditorPane1.setContentType("text/html");
    jEditorPane1.addHyperlinkListener(new javax.swing.event.HyperlinkListener() {
        public void hyperlinkUpdate(javax.swing.event.HyperlinkEvent evt) {
            jEditorPane1HyperlinkUpdate(evt);
        }
    });

    jScrollPane1.setViewportView(jEditorPane1);

```

```

    org.jdesktop.layout.GroupLayout layout = new
org.jdesktop.layout.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(org.jdesktop.layout.GroupLayout.LEADING)
            .add(org.jdesktop.layout.GroupLayout.LEADING,
layout.createSequentialGroup()
                .add(layout.createParallelGroup(org.jdesktop.layout.GroupLayout.LEADING)
                    .add(org.jdesktop.layout.GroupLayout.LEADING,
layout.createSequentialGroup()
                        .add(97, 97, 97)
                        .add(jComboBox1,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE,
org.jdesktop.layout.GroupLayout.DEFAULT_SIZE,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE)
                            .add(15, 15, 15)
                            .add(jComboBox2,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE,
org.jdesktop.layout.GroupLayout.DEFAULT_SIZE,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE))
                                .add(org.jdesktop.layout.GroupLayout.LEADING,
layout.createSequentialGroup()
                                    .addContainerGap()
                                    .add(jScrollPane1, org.jdesktop.layout.GroupLayout.PREFERRED_SIZE,
380, org.jdesktop.layout.GroupLayout.PREFERRED_SIZE)))
                                        .addContainerGap(org.jdesktop.layout.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                    );
    layout.setVerticalGroup(
        layout.createParallelGroup(org.jdesktop.layout.GroupLayout.LEADING)
            .add(org.jdesktop.layout.GroupLayout.TRAILING,
layout.createSequentialGroup()
                .addContainerGap()
                .add(jScrollPane1, org.jdesktop.layout.GroupLayout.DEFAULT_SIZE, 199,
Short.MAX_VALUE)
                .addPreferredGap(org.jdesktop.layout.LayoutStyle.RELATED)
                .add(layout.createParallelGroup(org.jdesktop.layout.GroupLayout.BASELINE)
                    .add(jComboBox1, org.jdesktop.layout.GroupLayout.PREFERRED_SIZE,
org.jdesktop.layout.GroupLayout.DEFAULT_SIZE,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE)
                    .add(jComboBox2, org.jdesktop.layout.GroupLayout.PREFERRED_SIZE,
org.jdesktop.layout.GroupLayout.DEFAULT_SIZE,
org.jdesktop.layout.GroupLayout.PREFERRED_SIZE))
                        .add(62, 62, 62))
                    );
    }

```

```

// </editor-fold>

private void jEditorPane1HyperlinkUpdate(javax.swing.event.HyperlinkEvent evt) {
// TODO add your handling code here:
//from Sun page http://javaalmanac.com/egs/javax.swing.event/Hyperlink.html
// FAILED, with invalid URL's
/*
if (evt.getEventType() == HyperlinkEvent.EventType.ACTIVATED) {
    JEditorPane pane = (JEditorPane)evt.getSource();
    try {
        // Show the new page in the editor pane.
        pane.setPage(evt.getURL());
    } catch (IOException e) {
        e.printStackTrace();
    }
}
*/

// @author Santhosh Kumar T - santhosh@in.fiorano.com
//also fails with invalid URL NOT CLEAR WHEN!
if(evt.getEventType()==HyperlinkEvent.EventType.ACTIVATED){
    try{
        URL current = evt.getURL();
        System.out.println("");
        System.out.println("URL + "+current.toString());
        ((JEditorPane)evt.getSource()).setPage(evt.getURL());
        System.out.println("");
        System.out.println("URL + "+current.toString());
    } catch(Exception ex){
        ex.printStackTrace();
    }
}

}

// Variables declaration - do not modify
// End of variables declaration
JEditorPane cwdEditorPane;
BufferedReader in;
}

```

The text is delimited with various colors to help in understanding which is my code, which is code that failed (red background) and which is code that succeeded (green) (up to a point).

This code loads the WWW document, but doesn't respond to mouse clicks properly. In the blue section, you will see code that has been added by me using the Design window and the Properties to get post-initialization code installed.

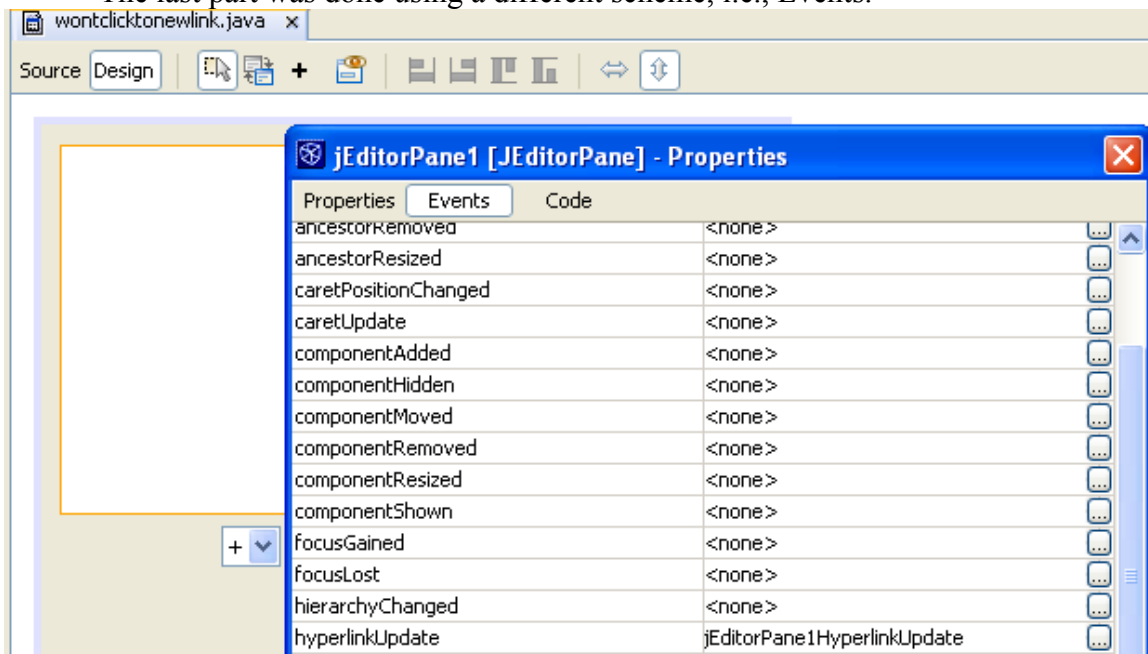
We also need to point out that the try-catch routines have been inserted by NetBeans (on our request), which is very, very handy!

Note the following text:

```
jEditorPane1.setEditable(false);
cwdEditorPane = jEditorPane1;
jEditorPane1.setContentType("text/html");
jEditorPane1.addHyperlinkListener(new javax.swing.event.HyperlinkListener() {
    public void hyperlinkUpdate(javax.swing.event.HyperlinkEvent evt) {
        jEditorPane1HyperlinkUpdate(evt);
    }
});
```

which was done with the post-initialization code.

The last part was done using a different scheme, i.e., Events.



What we have here is the hyperlinkUpdate item clicked in the Events page of the Properties for the jEditorPane. Wow! This creates the shell, into which we inserted the code shown in green, above.