

# Course API Comparison

## Chapter C7: A Java Browser Application

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### Preliminaries

- 1) Install Eclipse Platform 3.4.2.
- 2) Start Eclipse → File → New → Java Project → Project name: JavaApplet → Finish.
- 3) Main menu of Eclipse → File → New → Class → Name: JavaApplet → Finish.
- 4) Minimize the Welcome-tab of Eclipse and remove any default code from JavaApplet.java.

### JavaApplet.java

Copy the following 64 lines of code into the empty JavaApplet.java:

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

public class JavaApplet extends Applet implements ActionListener
{ private static final long serialVersionUID = 1L;
  private JButton button1 = new JButton( "Talk!" );
  private JButton button2 = new JButton( "Clear" );
  private String empty = new String( new char[20] );
  private JLabel label = new JLabel( empty );
  public void stop() {}
  public void init()
  { setSize( 600, 80 );
    JPanel panel = new JPanel( new BorderLayout() );
    Border border = BorderFactory.createLineBorder( Color.BLACK, 3 );
    Border margin = new EmptyBorder( 3,3,3,3 );
    panel.setBorder( new CompoundBorder( border, margin ) );
    panel.add( button1, BorderLayout.WEST );
    panel.add( button2, BorderLayout.EAST );
    panel.add( label, BorderLayout.CENTER );
    label.setOpaque( true );
    label.setBackground( Color.GRAY );
    label.setHorizontalAlignment( SwingConstants.CENTER );
    add( panel );
    addComponentListener( resize );
    button1.addActionListener( this );
    button2.addActionListener( this );
  }
}
```

```
public void actionPerformed((ActionEvent e)
{ if ( (JButton)e.getSource() == button1 )
  { label.setText( "Java Applet. Resize!" ); }
  else label.setText( empty );
  repaint();
}
ComponentListener resize = new ComponentListener()
{ public void componentResized( ComponentEvent e )
  { Component c = (Component)e.getSource();
    double w = (c.getSize()).getWidth();
    Font font = new Font( "Arial", Font.BOLD, (int)(w/25) );
    button1.setFont( font );
    label .setFont( font );
    button2.setFont( font );
    repaint();
  }
  public void componentMoved ( ComponentEvent e ) {}
  public void componentShown ( ComponentEvent e ) {}
  public void componentHidden( ComponentEvent e ) {}
};
}
```

Main menu of Eclipse → Run → Run → Save and Launch →  
Check this CheckBox: Always save resources before launching → OK.