

Java Swing

Swing is a set of Windows components that can be used to make a GUI in the same way as the standard AWT widgets. Both sets could be used on the same applet or application but they have a different look and feel so are best not mixed.

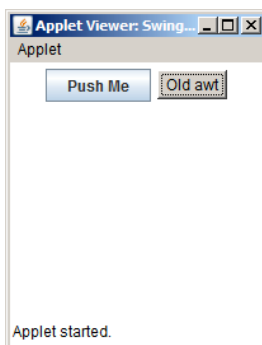
This a variant of the first applet from the applet sheet modified to use swing. Swing components usually start with the letter 'j'. The bold text shows the changes from the basic awt code.

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

public class SwingObjects extends Applet implements ActionListener{
    private static final long serialVersionUID = 1L;
    private JButton push;

    public void init()
    {
        push = new JButton("Push Me");
        add(push);
        push.addActionListener(this);
    }

    public void actionPerformed(ActionEvent event)
    {
        if(event.getSource()==push)
            push.setBackground(Color.blue);
    }
}
```



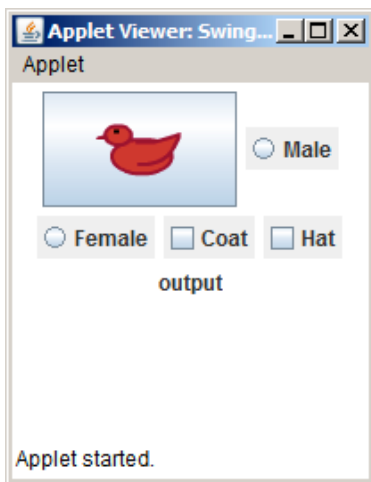
The original and swing button formats are shown side by side here.

This shows a selection of swing widgets



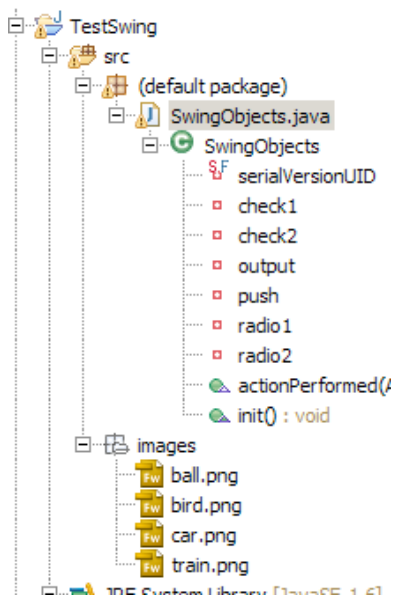
This is the init() part of the code. The JRadioButtons have been put in a group so that only 1 of a set can be selected

```
check1 = new JCheckBox("Coat");
check2 = new JCheckBox("Hat");
ButtonGroup group = new ButtonGroup();
radio1 = new JRadioButton("Male");
radio2 = new JRadioButton("Female");
add(radio1);
add(radio2);
add(check1); add(check2);
group.add(radio1); group.add(radio2);
output = new JLabel("output");
add(output);
```



Swing components offer a number of new features such as adding an image to a component

```
ImageIcon bird = new ImageIcon("images/bird.png");
push = new JButton(bird);
```



The image has to be put where Java can find it. Here an images folder has been created inside the src folder.