

Differences between GUI Applications and Applets

- GUI applications are created by creating a class that extends JFrame (javax.swing). Applets are created by creating a class that extends JApplet (javax.swing).
- A GUI application has a *constructor*; an applet has an *init* method that performs the same tasks as a constructor.
- A GUI application has a main method to start the application; applets are started by the web browser which creates an instance of the class automatically.
- A GUI application has a window and applicable methods (*setTitle*, *setSize*, *setVisible*, *setDefaultCloseOperation* etc.) for the window; applets don't have windows, since they run within the browser.
- Other methods in the Applet class include *paint*, *repaint*, *start*, *stop* and *destroy*.

[TemperatureCalc.java](#)

```
import javax.swing.*;

public class TemperatureCalc extends JApplet {
    JTextField fahrenheit, celsius;

    public void init(){
    }
}
```

[Applet.html](#)

```
<HTML><HEAD><TITLE>Celsius to Fahrenheit Converter</TITLE></HEAD>
<BODY style="background-color:yellow"><b>Fahrenheit=(9.0/5.0)*celsius+32.0</b><br>
<applet code="TemperatureCalc.class" width="200" height="150">Install Java Plugin from
Oracle</applet>
</BODY></HTML>
```

[TemperatureCalcApp.java](#)

```
import javax.swing.*;

public class TemperatureCalcApp extends JFrame {
    JTextField fahrenheit, celsius;

    public TemperatureCalcApp(){
    }

    public static void main(String[] args){
        TemperatureCalcApp app = new TemperatureCalcApp();
        app.setTitle("Temp Converter App");
        app.setSize(new Dimension(470, 480));
        app.pack();
        app.setResizable(false);
        app.setVisible(true);
    }
}
```