## temps.java Example of a JApplet

//  
// [temps.java](http://www.bernstein-plus-sons.com/.dowling/CSC1024F11/temps.java)  
//   
//  
// Created by Herbert J. Bernstein on 10/2/11.  
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//  
// A demonstration applet for temperature conversions  
//  
// This will be set up to run both as an applet and  
// as an application  
//  
// The basic structure is based on the tutorial by  
// William Wilson at  
//  
// http://www.dreamincode.net/forums/topic/28410-application-to-japplet-and-reverse/  
// with some useful tidbits from  
// http://leepoint.net/notes-java/deployment/applications\_and\_applets/70applets.html  
//  
  
  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
import java.awt.\*;  
import javax.swing.\*;  
  
public class temps extends JApplet   
{  
   
 appPanel apppanel;  
 JTextField tempF;  
 JTextField tempC;  
 double FahrenheitTemp;  
 double CentigradeTemp;  
  
   
 public temps() //default constructor  
 {  
 System.out.println("creating temperature conversion object");  
 }  
   
 public void init() // to call on load (once)  
 {  
 // System.out.println("initializing temperature conversion applet");  
 Container outerpane=getContentPane(); // The ContentPane is the  
 // place where we add all the  
 // components of the applet  
 apppanel = new appPanel(); // starting with a panel   
 // that has within it eveything  
 // we will draw  
 outerpane.add(apppanel);  
 }  
   
 public void start() // to call after load  
 {  
 // System.out.println("temperature conversion applet starting");  
   
 }  
   
 public void stop() // to call at the end  
 {  
 // System.out.println("temperature conversion applet stopping");  
 }  
   
 public void destroy() // to call on exit  
 {  
 }  
   
 public class appPanel extends JPanel // this is where we really do  
 // the drawing for the applet  
 {  
 public appPanel() //applet panel object  
 {  
 // System.out.println("temperature conversion panel created");  
 this.setBackground(Color.yellow);  
 this.setLayout(new FlowLayout());  
 this.add(new JLabel("Enter Fahrenheit Temp here:"));  
 tempF = new JTextField("?",20);  
 this.add(tempF);  
 this.add(new JLabel("Enter Centigrade Temp here:"));  
 tempC = new JTextField("?",20);  
 this.add(tempC);  
 // When changes are made to tempF compute tempC  
 tempF.addActionListener(new ActionListener() {  
 public void actionPerformed(ActionEvent e){  
 String FahrenheitText = tempF.getText();  
 try {  
 FahrenheitTemp = Double.parseDouble(FahrenheitText);  
 CentigradeTemp = (FahrenheitTemp-32.)\*5./9.;  
 tempC.setText(Double.toString(CentigradeTemp));  
 }catch (NumberFormatException nfe) {  
 tempF.setText("Please enter a valid number: " + nfe.getMessage());  
 }  
 }  
 });  
 // When changes are made to tempC compute tempF  
 tempC.addActionListener(new ActionListener() {  
 public void actionPerformed(ActionEvent e){  
 String CentigradeText = tempC.getText();  
 try {  
 CentigradeTemp = Double.parseDouble(CentigradeText);  
 FahrenheitTemp = 32.+ CentigradeTemp\*9./5.;  
 tempF.setText(Double.toString(FahrenheitTemp));  
 }catch (NumberFormatException nfe) {  
 tempC.setText("Please enter a valid number: " + nfe.getMessage());  
 }  
 }  
 });  
 }  
 }  
   
 // This is the main program to convert the applet to  
 // an application  
   
 public static void main(String args[]) {  
 JFrame DrawingFrame = new JFrame("Temperature Conversions"); //Make the frame  
 DrawingFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE); //Be sure is closes on exit  
 temps applet = new temps(); //Make an applet instance  
 DrawingFrame.setContentPane(applet); //Give this frame to the applet  
 applet.init(); //Initialize the applet  
 DrawingFrame.setSize(350,200); //Set the frame size  
 DrawingFrame.setVisible(true); //Make the frame visible  
 applet.start(); //If the applet has start logic  
 //run it  
   
 }  
  
}