

Unit Three: Lecture Two - Using GUI's on an Applet

(not tested on the AP exam)

`JOptionPane.showInputDialog` and `JOptionPane.showMessageDialog` are used exactly in the same manner whether you are creating an application or an applet. However, if you want to display your output directly on the applet, you must use the following techniques.

- 1) Set up your class to inherit the characteristics of `Applet` or `JApplet`.

```
public class myExample extends JApplet
// requires import javax.swing.JApplet;
```

- 2) Set up instance variables (fields) that will be used for both input and output.

```
private String input;
```

- 3) Set up your `init()` method. In it you should acquire the values of your instance variables and set the background color of your applet.

```
public void init()
{
    input = JOptionPane.showInputDialog("Enter data: ");
    // requires import javax.swing.JOptionPane;
    .
    .
    .
    setBackground(Color.yellow);
    // requires import java.awt.Color;
}
```

- 4) Set up your `paint` method. In it you should set your foreground color, set your font, and draw your output.

```
public void paint(Graphics g) // requires java.awt.Graphics;
{
    g.setColor(Color.blue);
    // requires import java.awt.Color;
    Font myFont = new Font("Monospaced", Font.BOLD, 16);
    g.setFont(myFont);
    // requires import java.awt.Font;
    g.drawString(input, 25, 50);
    // requires import java.awt.Graphics;
}
```

Format method of the String class

The format method of the String class is similar to the printf method. However, it returns a String instead of producing output. This String can then become a parameter in the drawString method.

example:

```
double value = 252.7;
String amount = String.format("%7.2f", value);
g.drawString("Answer = $" + amount, 50, 100);
```

output:

```
Answer = $ 252.70      // over 50, down 100 on the applet
```

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