

Section Fifteen – Absolute Layouts



In this section the Developer will learn...

- How to create Absolute Layouts for Component display in a JFrame

Absolute Layouts - Introduction



The next section will introduce the Developer to the use of Layouts which allow the positioning of Components within Containers achieving a standard design.

This section examines the use of Absolute Layouts which can be used when only a simple output is required.

The principle method used in the first example is the use of `setBounds()` which is relative to the Container in which the Component resides, in previous examples `setBounds()` was used to place the `JFrame` on the screen.



Absolute Layouts – `setBounds()`

Here the Developer is creating output based on a `JFrame`, `JPanel` and three `JLabels`, in order to make this work the Developer must specify that the `JPanel` doesn't use a layout (layouts are normally added to mid-level containers) ...

```
pane.setLayout(null);
```

The `JPanel` will be added to a `JFrame` which has had its size set ...

```
frame.setSize(300, 200);
```

The `JLabel` components will have their positions set relevant to the outside edge of the `JFrame` ...



Absolute Layouts – setBounds()

```
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;

public class absolute {

    static JPanel pane = new JPanel();
    static JLabel label1 = new JLabel("First");
    static JLabel label2 = new JLabel("Second");
    static JLabel label3 = new JLabel("Third");

    public static void main(String[] args) {

        JFrame frame = new JFrame();
        frame.setSize(300, 200);
        pane.setLayout(null);
        pane.add(label1);
        pane.add(label2);
        pane.add(label3);
```



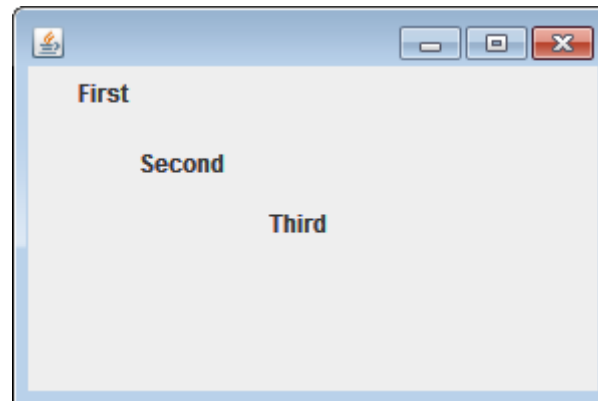
Absolute Layouts – setBounds()

```
label1.setBounds(25, 5, 30, 16); // from the left, from the top, width, height  
label2.setBounds(55, 40, 60, 16);  
label3.setBounds(120, 70, 30, 16);
```

```
frame.getContentPane().add(pane);  
frame.setVisible(true);
```

```
}
```

```
}
```



Absolute Layouts – setBounds()



In this example the Developer is using a JTextField which will be introduced later in the course to align JLabels with their input fields ...

```
label1.setBounds(25, 5, 30, 16); // from the left, from the top, width, height  
field1.setBounds(60, 5, 60, 16); // Ordering of the setBounds() is not significant  
label2.setBounds(55, 40, 60, 16);  
field2.setBounds(110, 40, 60, 16);  
label3.setBounds(120, 70, 60, 16);  
field3.setBounds(160, 70, 60, 16);
```

