Practical Sheet

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Title: _Creating button, text field and radio button using setBounds() method._

Introduction:

The setBounds() method is used to set the size and position of a graphical component, such as a 'JButton', 'JTextfield' or any other swing component. The setBounds() method takes four parameters: x-coordinate, y-coordinate, width and height.

Some of the components in Java Swing:

- Text Field : A text field is a GUI component that allows the user to input a single line of text.

- Button : A button is a common GUI component used to trigger actions when clicked.

- Label : A label is a non-editable text component used to display a descriptive text or image.

- Radio Button: A radio button is a graphical component that allows the user to select one option from a group of options.

Code:

```java
import javax.swing.*;
public class setbound {
    public static void main (String args[])
    {
        JFrame frame= new JFrame("set bound method");
        frame. setSize (375,250);
        frame. setLayout (null);
        JButton button = new JButton ("hello");
        button .setBounds (80,30,120, 40);
        frame. add(button);
        frame. setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
        frame. setLocationRelativeTo (null);
        frame. setVisible (true);
    }
}
```
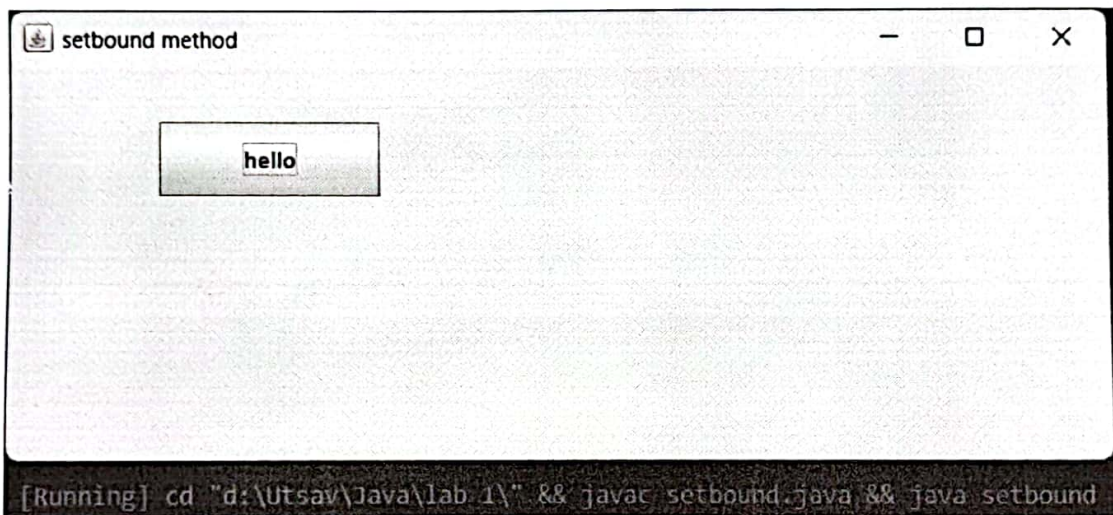
setbound method

hello

Code:

```java
import javax.swing.*;
public class fields{
    public static void main(String arg[]){
        JFrame frame = new JFrame ("SetBounds Method Test");
        frame.setSize (375,250);
        frame.setLayout (null);

        // creating textfield and radio button
        JTextField textField = new JTextField (null,null,0);
        JRadioButton r1Button = new JRadioButton ("A) Male ");
        JRadioButton r2Button = new JRadioButton ("B) Female");
        ButtonGroup bGroup = new ButtonGroup();

        bGroup.add (r1Button);
        bGroup.add (r2Button);

        // setting positions and sizes
        textField.setBounds (40,60, 150, 20);
        r1Button.setBounds (40, 90,100, 20);
        r2Button.setBounds (40, 110, 100,20);
        JButton button = new JButton ("Submit ");
        button.setBounds (100,140, 100,40);

        // adding components to the frame
        frame.add (textField);
        frame.add( r1Button);
        frame.add (r2Button);
        frame.add ( button);
        frame.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
        frame.setLocationRelativeTo (null);
        frame.setVisible (true);
```

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SetBounds Method Test

Utsav

- ⦿ A) Male
- ○ B) Female

Submit

```java
Code:
import javax.swing.*;
import javax.swing.event.ChangeEvent;
import javax.swing.event.ChangeListener;
public class work {
    public static void main (String [] args){
        JFrame frame = new JFrame("Swing Components Example");
        frame.setSize(400,400);
        frame.setLayout(null);

        JTextField textField = new JTextField();
        textField.setBounds(40,20,150,20);

        JPasswordField passwordField = new JPasswordField();
        passwordField.setBounds(40,50,150,20);

        JCheckBox checkBox = new JCheckBox("Accept Terms and Conditions");
        checkBox.setBounds(40,80,200,20);

        String[] options = {"Male", "Female"};
        JComboBox<String> comboBox = new JComboBox<>(options);
        comboBox.setBounds(40,110,150,20);

        JSlider slider = new JSlider(JSlider.HORIZONTAL,0,100,50);
        slider.setBounds(40,140,150,20);
        slider.addChangeListener(new ChangeListener(){
            @Override
            public void stateChanged(ChangeEvent e){
                //Handle slider value here
            }
        });
```
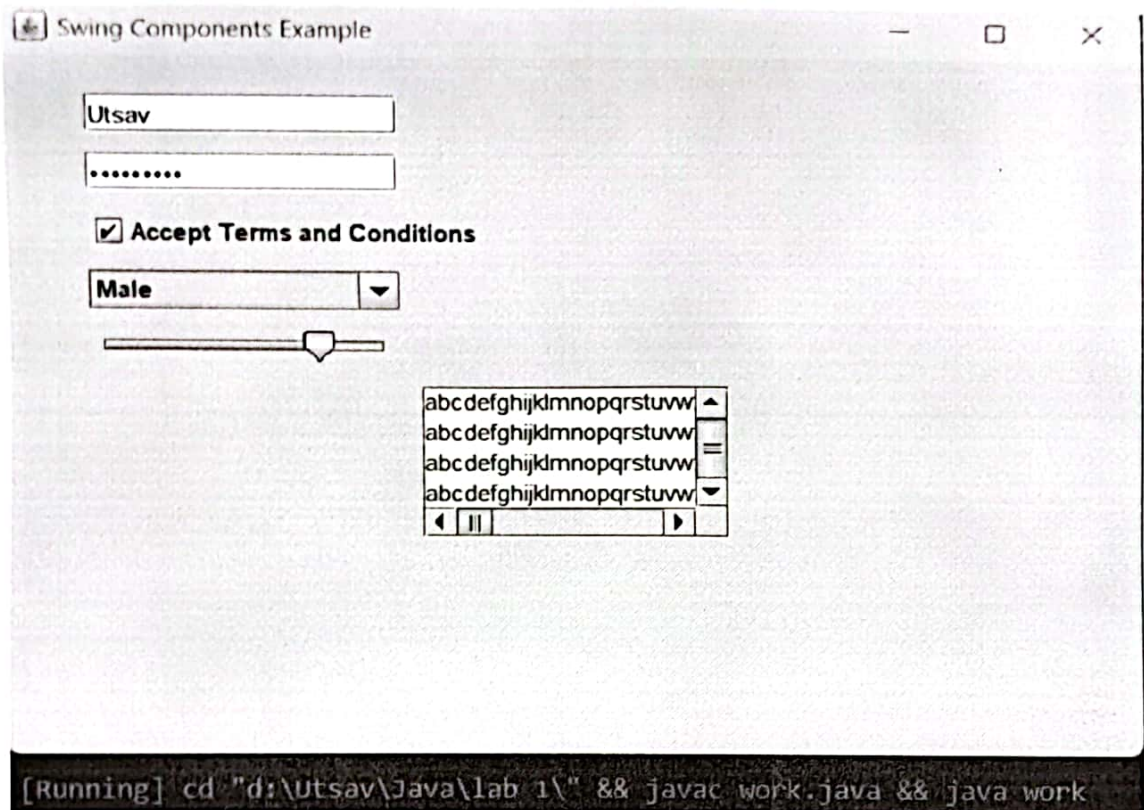
```java
JTextArea textArea = new JTextArea();
textArea.setBounds(40, 170, 150, 80);

JScrollPane scrollPane = new JScrollPane(textArea);
scrollPane.setBounds(200, 170, 150, 80);

frame.add(textField);
frame.add(passwordField);
frame.add(checkBox);
frame.add(comboBox);
frame.add(slider);
frame.add(scrollPane);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
frame.setLocationRelativeTo(null);
frame.setVisible(true);
```

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Swing Components Example — □ ✕

Utsav

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☑ **Accept Terms and Conditions**

Male ▼

abcdefghijklmnopqrstuvw ▲
abcdefghijklmnopqrstuvw ▬
abcdefghijklmnopqrstuvw
abcdefghijklmnopqrstuvw ▼
◄ ‖ ►