

Unit-1

AWT & Applet Interface

A component is an object with a graphical representation that can be displayed on the screen and that can interact with the user. The `Component` class is the abstract parent of the non-menu-related AWT components.

Labels :- Allow us to add a text description to a point on the applet or application. This component is member of `java.awt.Label` class.

Syntax:-

```
Label lbl=new Label("Text Message for Applet");
```

Example:-

```
java.applet.Applet;  
  
java.awt.*;  
  
public class MyLabel extends Applet{  
  
Label lbl;  
  
public void init()  
  
{  
  
lbl=new Label("Hello Label in Applet");  
  
add(lbl);  
  
}  
  
}
```

TextField :-Allow us to add a text box to a point on the applet or application. This component is member of `java.awt.TextField` class.

Syntax:-

```
TextField txt=new TextField();  
  
TextFiled txt1=new TextField(width);
```

getText() :-This method is used to receive the text from label,textfield.

setText() :-This method is used to put the text on label,textfiled.

Example:-

```
java.applet.Applet;
java.awt.*;
public class MyTextField extends Applet{
    TextField txt;
    public void init()
    {
        txt=new TextField();
        add(txt);
    }
}
```

Button :- Allow us to add a button for event in applet or application. This component is member of java.awt.Button class.

Syntax:-

Example:-

```
java.applet.Applet;
java.awt.*;
java.awt.event.*
public class MyButton extends Applet implements ActionListener{
    Button btn;
    public void init()
```

```
{  
btn=new Button("Hello");  
add(btn);  
btn.addActionListener(new actionPerformed(ActionEvent e){  
//required action code here  
});  
}  
}
```

CheckBox:- This component add multiple check box to select more than one choices same time. It is member of java.awt.Checkbox class.

Syntax:-

```
Checkbox c1=new Checkbox("Choice info");  
add(c1);  
Checkbox c2=new Checkbox("Choice info");  
add(c2);
```

RadioButton Creation in Applet:- This component is selection button in which only one option we can select at a time. CheckboxGroup Class of awt components create a selection button.

Syntax:-

```
CheckboxGroup ckg=new CheckboxGroup();  
Checkbox c1=new Checkbox("Info",ckg,false/true);
```

Example:

```
CheckboxGroup ckg=new CheckboxGroup();  
Checkbox c1=new Checkbox("Male",ckg,true);  
Checkbox c2=new Checkbox("Female",ckg,false);
```

```
add(c1);
```

```
add(c2);
```

DropDown List : A component which view list of information when click on drop down button. It is member of java.awt.Choice class.

Syntax:-

```
Choice c=new Choice();
```

```
c.add("MCA-1");
```

```
c.add("MCA-2");
```

```
c.add("MCA-3");
```

```
add(c);
```

Example:- WAP in applet to take a number in Text box and check even/odd with event button click.

```
import java.applet.Applet;
```

```
import java.awt.Color;
```

```
import java.awt.Graphics;
```

```
import java.awt.*;
```

```
import java.awt.event.*;
```

```
public class NewApplet extends Applet implements ActionListener {
```

```
    Label l1,l2;
```

```
    TextField t1;
```

```
    Button btn;
```

```
    public void init() {
```

```
        // TODO start asynchronous download of heavy resources
```

```
        l1=new Label("Enter Number");
```

```
        l2=new Label("Result");
```

```
        t1=new TextField();
```

```
        btn=new Button("Check");
```

```
add(l1);
add(t1);
add(btn);
add(l2);
btn.addActionListener(this);
}
public void actionPerformed(ActionEvent e){
    if(e.getSource() == btn){
        if(Integer.parseInt(t1.getText())%2==0){
            l2.setText(t1.getText()+" is even");
        }
        else
        {
            l2.setText(t1.getText()+" is Odd");
        }
    }
}
}
```