14.6 Passing Parameters to Applets

We can supply user-defined parameters to an applet using <PARAM> tag. Therefore, <PARAM> tag is used to pass the parameter value from HTML file to Applet code. Each <PARAM> tag has a name attribute such as fontname, and a value attribute such as Courier. Inside the applet code, the applet can refer to that parameter by name to find its value.

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We can define the init() method in the applet code to get hold of the parameters defined in the <PARAM> tags. To retrieve a parameter, we use the getParameter() method. It returns the value of the specified parameter in the form of a String object. Thus, for numeric and boolean values, it is required to convert the string representations into their internal formats.

Example

```
//Code of PARAM _Test.html
    <HTML>
        <applet code = "PARAM_Test.class"
        Width = 400
        Height = 200 >
        <PARAM NAME = "authorname" VALUE = "Sushil Goel">
       </Applet>
   </HTML>
//Code of PARAM _Test.java
   import java.applet.*;
  import java.awt.*;
  public class PARAM_Test extends Applet
      String str=null;
      public void init()
             str=getParameter("authorname");
     public void paint (Graphics g)
            g.drawString(str, 120, 120);
```

14.8 Getting Input from User

As you know that Applets works in Graphics environment where inputs are treated as Strings. So in order to get input from user, we need to create an area of screen in which user can type and edit input items. We can do this by using the TextField class of the Applet package.

Note that each Text Field contains items in string form. Therefore, each item need to be converted to the right form, before it is used in any calculation. The result is then converted back to string for display.

Example

In this example, we accept one number from user and display the square of this number.

```
//Code of user_input.java
  import java.applet.*;
  import java.awt.*;
  public class user_input extends Applet
      TextFieldt1:
     public void init()
             t1 = new TextField (6);
             add(t1);
             t1.setText("0");
    public void paint (Graphics g)
            int x=0, square=0;
           String s, s1;
           g.drawString("Enter a number", 10, 10);
           try
                   s1=t1.getText();
                   x=Integer.parseInt(s1);
```

```
catch (Exception e1) { }
               square=x*x;
               s=String.valueOf(square);
               g.drawString ("The square is:", 10, 100);
               g.drawString (s, 130, 100);
       public boolean action (Event ev, Object obj)
               repaint();
               return true;
//Code of user_input.html
   <html>
        <title>Input from User</title>
        <applet code="user_input.class"
        width=350
        height=200>
        </applet>
    </html>
Output:
             Applet Viewer: user_input.class
           Applet
            Enter a number
            The square is:
```

Applet started.

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In the applet code, we declare one TextField object as

TextField t1;

This object represent one text box. Next, add object to the applet's display area. In paint() method, one integer variable x is declared. Note that the number entered in the text box is in string form and therefore it is retrieved as strings using the getText() method and then it is converted to numerical values using the parseInt() method of Integer class.

After taking the value of x from user and converting the string value to integer number, the **paint()** method find the value of x * x. To display the answer, we must convert numerical value (i.e. x * x) to a string. This is done using the **Valueof()** method of **String** class.

Exercise