

Applet - In J2SE the GUI Interface which is used to run any Java programme is known as applet. To include applet programming to package are required

- i) Java.applet.*;
- ii) Java.awt.*;

AWT - Abstract window toolkit

To run any Java applet programming through applet viewer AWT package is required. Three function is there to run the applet programming

- i) init(),
- ii) start(),
- iii) paint(),

The above mentioned three function are required to run any applet programme. After the execution of the applet programme to terminate the applet programme to function is there-

- i) stop() ii) destroy()

i) init () - initialize. This is the first method in applet programming, to initialize any variable value as well as define any function property. This function is called (only once) at the lifetime of applet programming.

2) start () - This method is called after init method. It is also called to restart an applet after it has

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- i) stop() ii) destroy()

i) init () - Initialize. This is the first method in applet programming, to initialize any variable value as well as define any function property. This function is called (only once) at the lifetime of applet programming.

2) start () - This method is called after init method. It is also called to restart an applet after it has

been stopped, init method is called only once. That means at the time of applet loading at the ~~begining~~ ^{begining} of the programme. But start method will automatically called, applet's html document is displayed on the screen.

3) Paint () - Paint method is called each time our applet program output must be redrawn. That means to display anything on the applet window. Paint method is also called repeated number of times. It will take one parameter as an argument that is graphics class object, to draw or display anything on the screen.

4) Stop () - this method is called when the ~~to~~ browser takes the HTML document, we have to call the stop method so that the applet program is not run at the ~~back~~ end of the program ~~automatically~~.

5) destroy () - this method is automatically called to clear the memory space. This method is allocated for the applet programme.

~~Compile~~

for compile - javac filename.java

for run - appletviewer filename.java

What is event handling?

⇒ In Java the package java.awt.event.* is used to implement any listener interface.

There are many listeners present in applet or awt package.

i) ActionListener - with in ActionListener interface. actionPerformed() is a function which has to be implemented in our program. with in actionPerformed() function's parameters we have to pass a class object namely ActionEvent. with in ActionEvent class getActionCommand() is a function which will get input from the button.

NOTE - to work with any listener interface we have to add the listener object within init method by using add ActionListener().

ii) ItemListener - It is an interface with in java. awt.event. & package) It is used for implementing check box and radio button. with in this interface itemStateChanged() is a method to call any check box radio buttons value repeated number of times. It will take one parameter as an argument, that is the object of ItemEvent class.

NOTE - to add this ItemListeners we have to call add ItemListener() function with in init method.

iii) MouseListener - This is an interface with in java awt.event. package) which is used to implement any mouse event in our program.

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iii) Mouse Listener - This is an interface with in Java awt.event.* package) which is used to implement any mouse event in our program.

with in Mouse listener interface there are few function which has to be implement in our applet program so that mouse event can be implemented in the applet window.

- 1) Mouse Entered()
- 2) Mouse Pressed()
- 3) mouse clicked()
- 4) mouse Released()
- 5) mouse Exited()
- 6) mouse Dragged()

1) mouse Entered() - This function will work when we want to enter into the applet page. #2

It will take one parameter as an argument that is object of Mouse Event class.

2) mouse Pressed - This function will work when we press the applet window. #2

3) mouse clicked - This function will work when we click on any object with in the applet window. #3.

4) mouse Released - This function will only work after pressing the mouse pressed event in applet window. It will work when the mouse has been released. #2

5) mouse Exited - This function will work when the mouse leave the applet page. #2

6) mouse Dragged - This function will ~~no~~ work when we want to drag any object or element with in the applet Page. *2

NOTE - To add this mouse Listener we have to call add mouse listener () function with limit method.

iv) Adjustment Listener - *, this listener interface is used for implementing vertical and horizontal scroll adjustment value changed () which is used to control the adjustment of any scroll bar.

i) adjustment value changed () - It will take one parameter as an argument. That is the object of Adjustment Event class.

NOTE - To add this Adjustment Listener ---- init method

v) Mouse Motion Listener - *1. This listener class which is used for any mouse dragged and movement event. It has two function.

1) mouse Dragged () -

2) mouse moved () -

1) mouse Dragged () - This function will only work to get the x and y coordinate of any applet window *3 (It will take one parameter as an argument that is an object of mouse event class.

2) mouse moved - This function is used to control the coordinate movement of any applet Program. *3

NOTE — to add mouse motion listener () we have to call add mouse motion listener() function with in init method.