

## Unit : 03

### Event Handling

- 1) Which of these packages contains all the classes and methods required for even handling in Java?
  - a) java.applet
  - b) java.awt
  - c) java.event
  - d) java.awt.event**
  
- 2) What is an event in delegation event model used by Java programming language?
  - a) An event is an object that describes a state change in a source.**
  - b) An event is an object that describes a state change in processing.
  - c) An event is an object that describes any change by the user and system.
  - d) An event is a class used for defining object, to create events.
  
- 3) Which of these methods are used to register a keyboard event listener?
  - a) KeyListener()
  - b) addKistener()
  - c) addKeyListener()**
  - d) eventKeyboardListener()
  
- 4) Which of these methods are used to register a mouse motion listener?
  - a) addMouse()
  - b) addMouseListener()
  - c) addMouseMotionListner()**
  - d) eventMouseMotionListener()
  
- 5) Event class is defined in which of these libraries?
  - a) java.io
  - b) java.lang
  - c) java.net
  - d) java.util**
  
- 6) Which of these methods can be used to determine the type of event?
  - a) getID()**
  - b) getSource()
  - c) getEvent()
  - d) getEventObject()
  
- 7) Which of these class is super class of all the events?
  - a) EventClass
  - b) EventObject**
  - c) ActionEvent
  - d) ItemEvent
  
- 8) Which of these events will be notified if scroll bar is manipulated?
  - a) ActionEvent
  - b) ComponentEvent

- c) **AdjustmentEvent**
- d) WindowEvent

9) Which of these events will be generated if we close an applet's window?

- a) ActionEvent
- b) ComponentEvent
- c) AdjustmentEvent
- d) **WindowEvent**

10) The Following steps are required to perform

- 1) Implement the Listener interface and overrides its methods
- 2) Register the component with the Listener

- a) Exception Handling
- b) String Handling
- c) **Event Handling**
- d) None of the above

11) The following specifies the advantages of

It is lightweight.

It supports pluggable look and feel.

It follows MVC (Model View Controller) architecture.

- a) **Swing**
- b) AWT
- c) Both A & B
- d)None of the above

12) Which class header would be used to create an applet that accepts a click on a button?

- a)public class MyApplet extends Japplet implements Listener
- b)public class MyApplet extends Japplet implements ActionListener**
- c)public class MyAppletextends Japplet implements ActionEvent
- d)public class MyApplet extends Japplet implements Event

13) Select correct Listener from given option for \*\*\*\*\*.

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

```
public class JR extends JApplet implements *****  
{  
    Container c=getContentPane();  
    public void init()  
    {  
        c.setLayout(new FlowLayout());  
        JRadioButton b1=new JRadioButton("red");  
        b1.addActionListener(this);  
        c.add(b1);
```

```
JRadioButton b2=new JRadioButton("blue");
```

```

b2.addActionListener(this);
c.add(b2);

JRadioButton b3=new JRadioButton("green");
b3.addActionListener(this);
c.add(b3);

ButtonGroup bg=new ButtonGroup();
bg.add(b1);
bg.add(b2);
bg.add(b3);
}
public void actionPerformed(ActionEvent e)
{
String str;
str=e.getActionCommand();
if(str=="red")
c.setBackground(Color.red);
else if(str=="blue")
c.setBackground(Color.blue);
else if(str=="green")
c.setBackground(Color.green);
}
}

/*<applet code=JR width=200 height=200></applet>*/

```

- a) ItemListener
- b) **ActionListener**
- c) MouseListener
- d) WindowListener

14) Which of these methods will respond when you click any button by mouse?

- a) mouseClicked()
- b) mouseEntered()
- c) mousePressed()
- d) **All of the mentioned**

15) Which is the integer constants of TextEvent class?

- a) TEXT\_CHANGED
- b) TEXT\_FORMAT\_CHANGED
- c) **TEXT\_VALUE\_CHANGED**
- d) TEXT\_SIZE\_CHANGED

16) MouseEvent is subclass of which of these classes?

- a) ComponentEvent
- b) ContainerEvent
- c) ItemEvent
- d) **InputEvent**

- 17) An event is generated when the internal state of the event source is\_\_\_\_\_
- a) Not changed
  - b) Changed**
  - c) Either changed or not
  - d) None of these.

- 18) Consider the following output. Find the missing statement in the program.

```
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
import javax.swing.*;
/* <applet code="SimpleKey1" width=300 height=100> </applet> */
public class SimpleKey1 extends JApplet implements KeyListener
{
String msg = "";
int X = 10, Y = 20;
public void init()
{
addKeyListener(this);
requestFocus();
}
public void keyPressed(KeyEvent ke)
{
showStatus("Key Down");
}
public void keyReleased(KeyEvent ke)
{
showStatus("Key Up");
}
public void keyTyped(KeyEvent ke)
{
msg += ke.getKeyChar();
repaint(); }
public void paint(Graphics g)
{
g.drawString(msg, X, Y);
}
}
```

- a) Missing Semicolon
- b) Missing {
- c) Missing }**
- d) Missing ()

- 19) Which of the following are correct event handling methods?

- a) mousePressed(MouseEvent e){ }**
- b) MousePressed(MouseClick e){ }
- c) functionKey(KeyPress k){ }
- d) Added(ContainerEvent e){ }

- 20) Which methods are used to close the window?
- a) setVisible(false)
  - b) windowClosing()
  - c) stop()
  - d) **Both a and b**
- 21) To process scroll bar events, you need to implement \_\_\_\_\_ interface.
- a) adjustmentlistener
  - b) MouseListener
  - c) **AdjustmentListener**
  - d) KeyListener
- 22) KeyEvent is subclass of which of these classes?
- a) ComponentEvent
  - b) ContainerEvent
  - c) ItemEvent
  - d) **InputEvent**
- 23) \_\_\_\_\_ and \_\_\_\_\_ is a subclass of InputEvent.
- a) **MouseEvent, KeyEvent**
  - b) WindowEvent, ItemEvent
  - c) MouseMotionEvent, MouseWheelEvent
  - d) ActionEvent, AdjustmentEvent
- 24) \_\_\_\_\_ method returns a value that indicates which modifier key were pressed when the action event is generated.
- a) **getModifiers()**
  - b) setModifiers()
  - c) getActionCommand()
  - d) none of these
- 25) Complete the following signature:
- ```
void addTreeExpansionListener(_____ tel)
```
- a) Treeexpansion listener
  - b) **TreeExpansionListener**
  - c) TreeListener
  - d) treelistener
- 26) Constants for AdjustmentEvent class are:
- a) BLOCK\_INCREMENT
  - b) TRACK
  - c) UNIT\_DEVREMENT
  - d) **all of these**

- 27) Which of these events will be generated if we close an applet's window?
- a) ActionEvent
  - b) ComponentEvent
  - c) AdjustmentEvent
  - d) WindowEvent**
- 28) Which of the following is the highest class in the event delegation model?
- a) java.util.EventListener
  - b) java.util.EventObject**
  - c) java.awt.AWTEvent
  - d) java.awt.event.AWTEvent
- 29) \_\_\_\_\_ is an object that describes a state change in the source.
- a) **event**
  - b) Source
  - c) none of the above
  - d) all the above
- 30) Which of these methods can be used to change location of an event?
- a) changePoint()
  - b) translatePoint()**
  - c) ChangeCoordinates()
  - d) translateCoordinates()
- 31) Which of these methods can be used to obtain the coordinates of a mouse?
- a) getPoint()**
  - b) getCoordinates()
  - c) getMouseXY()
  - d) getMouseCoordinates()
- 32) Which of the following method is invoked when a window is changed from a normal to a minimized state?
- a) windowIconified()**
  - b) windowClosed()
  - c) windowDeactivated
  - d) windowOpened()
- 33) Which of these is a superclass of all Adapter classes?
- a) Panel
  - b) Applet**
  - c) Component
  - d) Event
- 34) Which of the following method does not belongs to WindowListener interface?
- a) windowActivated
  - b) windowReactivated**
  - c) windowDeiconified
  - d) windowClosed()
- 35) Which event is generating when checkable menu item is selected or deselected?
- a) KeyEvent
  - b) ListEvent

- c) **ItemEvent**
- d) MouseEvent

36) Which are two ways to create Java Anonymous inner class?

- a) **Class, Interface**
- b) Applet
- c) Panel, Frame
- d) Event

37) The \_\_\_\_\_ method returns a reference to the component that was added to or removed from the container.

- a) getParent()
- b) getComponent( )
- c) **getChild( )**
- d) geoReferenced()

38) Inner class can access all the members of outer class including \_\_\_\_\_ data members and methods.

- a) public
- b) Protected
- c) friend
- d) **private**

39) In case of \_\_\_\_\_ we can implement only required methods of any interface.

- a) **adapter classes**
- b) Event
- c) EventObject
- d) Listener

40) What is a listener in context to event handling?

- a) A listener is a variable that is notified when an event occurs.
- b) **A listener is a object that is notified when an event occurs.**
- c) A listener is a method that is notified when an event occurs.
- d) None of the mentioned

41) Which of the following are true?

- a) The event-inheritance model has replaced the event-delegation model.
- b) The event-inheritance model is more efficient than the event-delegation model.
- c) **The event-delegation model uses event listeners to define the methods of event-handling classes.**
- d) The event-delegation model uses the handleEvent( ) method to support event handling.

42) Which of the following components generate action events?

- a) **Buttons**
- b) Labels
- c) Check boxes
- d) Windows

43) What is the preferred way to handle an object's events in Java 2?

- a) Override the object's `handleEvent()` method.
- b) Add one or more event listeners to handle the events.**
- c) Have the object override its `processEvent()` methods.
- d) Have the object override its `dispatchEvent()` methods.

44) If a class `MyWindowAdapter` extends `WindowAdapter` and implements the `windowClosing()` method. How to register this class ?

- a) `this.addWindowListener(new MyWindowAdapter());`**
- b) `addWindowListener(new MyWindowAdapter());`
- c) `this.addListener(new MyWindowAdapter());`
- d) `addWindowListener(new MyAdapter());`

45) In the following code, what is the name of the inner class?

```
public class Periodical
{
    long ISBN;
    public class Book
    {
        public long getISBN()
        {
            return ISBN;
        }
    }
}
```

- a) Periodical
- b) book
- c) **Book****
- d) ISBN

46) What is the output of following code?

```
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
/*
<applet code="AdapterDemo" width=300 height=100> </applet>
*/
public class AdapterDemo extends Applet
{
    public void init()
    {
        addMouseListener(new MyMouseAdapter(this));
    }
}
class MyMouseAdapter extends MouseAdapter
{
    AdapterDemo adapterDemo;
    public MyMouseAdapter(AdapterDemo adapterDemo)
    {
        this.adapterDemo = adapterDemo;
    }
}
```



```

} // Handle mouse clicked.

public void mouseClicked(MouseEvent me)
{
    adapterDemo.showStatus("Mouse clicked");
}
}

```

- a) Mouse pressed
- b) Mouse clicked**
- c) Mouse dragged
- d) Mouse released

47) Consider following code segment-

```

public void mousePressed(MouseEvent event)
{
    System.out.println(event.getPoint());
}

```

Following code segment output is-

- a) event generated
- b) Print x co-ordinates
- c) Display y co-ordinates
- d) Print value of x and y co-ordinates**

48) A general form, event registration method-

- a) void addTypeListener (TypeListener el)
- b) public void addTypeListener (TypeListener el)**
- c) public TypeListener (TypeListener el)
- d) public void addTypeListener (el)

49) Identify correct methods in the place of blank space:

```

public class Test extends Applet implements _____
{
    String msg="";
    public void init()
    {
        addKeyListener(this);
    }
    public void keyPressed(_____ k)
    {
        showStatus("KeyPressed");
    }
    public void keyReleased(KeyEvent k)
    {
        showStatus("KeyReleased");
    }
    public void keyTyped(KeyEvent k)
    {
        msg = msg+k.getKeyChar();
    }
}

```

```

repaint();
}
public void paint(Graphics g)
{
    g.drawString(msg, 20, 40);
}
}

```

- a) **KeyListener, KeyEvent**
- b) **MouseListener, MouseEvent**
- c) **ActionListener, ActionEvent**
- d) **WindowListener, WindowEvent**

50) In the Delegation Event Model, a user interface element is able to delegate, the processing of an event.....

- a) class
- b) **a separate piece of code**
- c) interface
- d) listener

51) Listeners are created by implementing one or more of the defined by the.....

- a) **interfaces**
- b) class
- c) listener
- d) handler

52) The isPopupTrigger( ) methods returns-

- a) string
- b) integer
- c) **Boolean**
- d) long

53) The example of user interface elements that implement the ItemSelectable interface-

- a) checkbox and checkboxgroup
- b) textfield and textarea
- c) radiobutton and button
- d) **Lists and choices**

54) public void removeTypeListener(TypeListener el)

Here **Type** means-

- a) **name of the event**
- b) type of listener
- c) name of class
- d) name of object

55) The getActionCommand( ) method returns-

- a) **string**
- b) integer
- c) Boolean
- d) long

56) The getItem( ) method can be used.....

- a) name of the method
- b) type of listener
- c) name of class
- d) to obtain a reference to the item that changed**

57) The translatePoint( ) method-

- a) display x and y coordinates
- b) changes the location of the event**
- c) name of class
- d) to obtain a reference to the item that changed

58) The WindowEvent class, WINDOW\_DEACTIVATED, integer constants meaning-

- a) This window has lost the focus.**
- b) Restoring the window to its original size.
- c) Reducing the window from to minimized.
- d) Reducing the window from to maximized.

59) The WindowEvent class, WINDOW\_ICONIFIED, integer constants meaning-

- a) This window has lost the focus.
- b) Restoring the window to its original size.
- c) Reducing the window from to minimized.**
- d) Reducing the window from to maximized.

60) The WindowEvent class, WINDOW\_DEICONIFIED, integer constants meaning-

- a) This window has lost the focus.
- b) Restoring the window to its original size.**
- c) Reducing the window from to minimized.
- d) Reducing the window from to maximized.

61) Which are the not types of key events-

- a) KEY\_DOUBLE**
- b) KEY\_PRESSED
- c) KEY\_RELEASED
- d) KEY\_TYPED

62) MOUSE\_WHEEL integer constants is belong to \_\_\_\_\_- event.

- a) MouseMotionEvent
- b) MouseWheelEvent
- c)MouseEvent**
- d)all of these

63) MouseWheelEvent is a subclass of\_\_\_\_\_.

- a) KeyEvent
- b) MouseMotionEvent
- c) MouseEvent**
- d) MouseWheelEvent

64) WindowEvent is a subclass of\_\_\_\_\_.

- a) ComponentEvent**
- b) ContainerEvent
- c) ActionEvent
- d) AdjustmentEvent

- 65) Which one is not a method belong to ComponentListener Interface?  
 a) void componentResized(ComponentEvent ce)  
 b) void componentMoved(ComponentEvent ce)  
 c) **void componentOpened(ComponentEvent ce)**  
 d) void componentHidden(ComponentEvent ce)
- 66) ComponentAdded( ) and componentRemoved( ) are the methods of .....  
 a)ComponentListener  
 b) MouseMotionEvent  
 c) **ContainerListener**  
 d) MouseWheelListener
- 67) When a component loses \_\_\_\_\_ focus, **focusLost( )** is called.  
 a) **keyboard**  
 b)mouse  
 c>window  
 d) panel
- 68) Which method not use to obtain the coordinates of the mouse-  
 a) string getCode()  
 b) int GetKEY()  
 c) **int getKeyCode( )**  
 d) int getCode()
- 69) Which method used to capture ALT, CTRL, META OR SHIFT keys-  
 a) **getModifiers( )**  
 b) getMod( )  
 c) modifiers ( )  
 d) getAlt( )
- 70) Which top-level class provides methods to add and remove keyboard and mouse event listeners-  
 a) Container  
 b) Applet  
 c) Window  
 d) **Component**
- 71) Write the correct code at blank space:

```

public class ..... extends Frame implements WindowListener
{
WindowExample()
{
addWindowListener(this);
setSize(400,400);
setLayout(null);
setVisible(true);
}
public static void main(String[] args)
{

```

```
new WindowExample();  
}
```

- a) Frame
- b) Window
- c) **WindowExample**
- d) Example

72) Assuming we have a class which implements the ActionListener interface, which method should be used to register this with a Button?

- a) EnterActionListener(\*);
- b) addListener(\*);
- c) ActionListener(\*);
- d) **addActionListener(\*);**

73) Which of these interfaces define a method actionPerformed()?

- a) KeyListener
- b) ButtonListener
- c) InputListener
- d) **ActionListener**

74) keyPressed() is method of ..... interface.

- a) **KeyListener**
- b) ButtonListener
- c) InputListener
- d) ActionListener

75) keyReleased() is method of ..... interface.

- a) ActionListener
- b) ButtonListener
- c) InputListener
- d) **KeyListener**

76) keyTyped() is method of ..... interface.

- a) ActionListener
- b) ButtonListener
- c) InputListener
- d) **KeyListener**

77) mouseClicked() is method of ..... interface.

- a) **MouseListener**
- b) ButtonListener
- c) InputListener
- d) KeyListener

78) mouseEntered() is method of ..... interface.

- a) InputListener
- b) ButtonListener
- c) **MouseListener**
- d) KeyListener

79) mouseExited() is method of ..... interface.

- a) **MouseListener**
- b) ButtonListener
- c) InputListener
- d) KeyListener

80) mousePressed() is method of.....interface.

- a) InputListener
- b) ButtonListener
- c) **MouseListener**
- d) KeyListener

81) Identify correct general form of MouseClicked( ) method of Mouse Listener interface.

- a) void mouseClicked(me)
- b) void Clicked(MouseEvent me)
- c) **void mouseClicked(MouseEvent me)**
- d) void mouseClick(MouseEvent me)

82) Select the method of MouseMotionListener Interface.

- a) void mouseClicked(MouseEvent *me*)
- b) void mouseEntered(MouseEvent *me*)
- c) void mouseExited(MouseEvent *me*)
- d) **void mouseMoved(MouseEvent *me*)**

83) Select the method of MouseWheelListener Interface.

- a) void mouseClicked(MouseWheelEvent *me*)
- b) void mouseEntered(MouseWheelEvent *me*)
- c) **void mouseWheelMoved(MouseWheelEvent *mwe*)**
- d) void mouseExited(MouseWheelEvent *me*)

84) Which of these are methods of TextListener Interface?

- a) **textValueChanged()**
- b) setText()
- c) textChanged()
- d) getText()

85) Which of these method are used to register a keyboard event Listener ?

- a) addMouseListener()
- b) **addKeyListener()**
- c) KeyListener()
- d) addKey()

86) Which of these methods are used to register a mouse motion listener?

- a) **addMouseMotionListner()**
- b) addMouseListener()
- c) addMouseWheelListner()
- d) MouseMotionListner()

87) Which of these methods are used to register a Window listener?

- a) addMouseMotionListner()
- b) ComponentListner()

- c) WindowListener()
- d) addWindowListener()**

88) Which source generates adjustment events?

- a) **Scroll bar**
- b) Checkbox
- c) Radio Button
- d)List

89) WindowActivated() is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c) AdjustmentListener
- d)ContainerListener

90) windowClosed() is method of..... interface.

- a) KeyListener
- b) **WindowListener**
- c) AdjustmentListener
- d)ContainerListener

91) windowDeactivated() is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c) AdjustmentListener
- d)ContainerListener

92) windowDeiconified() () is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c)AdjustmentListener
- d)ContainerListener

93) windowGainedFocus() and windowLostFocus() methods are belongs to .....interface .

- a) WindowListener
- b) KeyListener
- c)AdjustmentListener
- d) WindowFocusListener**

94) **windowClosed()** is method of..... interface.

- a) KeyListener
- b) **WindowListener**
- c)AdjustmentListener
- d)ContainerListener

95) Identify the class which is not an adapter class?

- a)FocusAdapter
- b)KeyAdapter
- c)WindowAdapter
- d)ItemAdapter**

96) Following are the integer constants which does not belong to ComponentEvent class .

- a) COMPONENT\_HIDDEN
- b) COMPONENT\_MOVED
- c) COMPONENT\_RESIZED
- d) **COMPONENT\_ICONIFIED**

97) Identify correct adapter in following code:

```
import java.applet.*;
import java.awt.event.*;
/*
<applet code="AnonymousInnerClassDemo" width=200 height=100>
</applet>
*/
public class AnonymousInnerClassDemo extends Applet
{
public void init()
{
addMouseListener(new _____()
{
public void mousePressed(MouseEvent me)
{
showStatus("Mouse Pressed");
}
});
}
}
```

- a) **MouseAdapter**
- b) MouseMotion Adapter
- c) KeyAdapter
- d) mousepressed

98) An adapter class provides an .....implementation of all methods in an event listener interface.

- a) interface
- b) abstract
- c) **empty**
- d) runnable

99) Identify correct name of event:

```
public void adjustmentValueChanged(..... e)
{
Integer i =e.getValue();
frameLabel1.setText(i.toString());
}
```

- a) ScroolbarEvent
- b) **AdjustmentEvent**
- c) ActionEvent
- d) TextAreaEvent



100) Identify correct name of event:

```
public void mouseExited (_____ me)
{
// save coordinates
mouseX = 0;
mouseY = 10;
msg = "Mouse exited.";
repaint();
}
```

- a) InputEvent
- b) MouseMotionEvent
- c) KeyEvent
- d) MouseEvent**

101) Fill correct listener names:

```
public class MouseEvents extends Applet
implements MouseListener, MouseMotionListener
{
String msg = "";
int mouseX = 0, mouseY = 0; // coordinates of mouse
public void init()
{
_____ (this);
_____ (this);
}
...
}
```

- a) addListener, addMouseListener
- b) addMouseMotionListener, addKeyListener
- c) MouseListener , MotionListener
- d) addMouseListener, addMouseMotionListener**

102) Listeners are created by implementing one or more of the interfaces defined by the \_\_\_\_\_ package.

- a) java.awt.event**
- b) java.util.event
- c) java.lang.event
- d) java.awt.listener

103) Identify the name of method which is not belong to **WindowEvent**.

- a) int getOldState( )
- b) int getNewState( )
- c) Window OppositeWindow( )**
- d) Window getWindow( )

104) In List event source, generates \_\_\_\_\_ events when an item is double-clicked.

- a) action**
- b) item
- c) text

d>window

105) In List event source, generates \_\_\_\_\_ events when an item is selected or deselected.

- a) action
- b) item**
- c) text
- d) window

106) In Menu Item, generates \_\_\_\_\_ events when a menu item is selected.

- a) action**
- b) item
- c) text
- d) window

107) In Menu Item, generates \_\_\_\_\_ events when a checkable menu item is selected or deselected.

- a) action**
- b) item**
- c) text
- d) window

108) Identify the correct class name:

```
import java.awt.*;
import java.awt.event.*;
public class _____ extends KeyAdapter
{
    Label l;
    TextArea area;
    Frame f;
    KeyAdapterExample()
    {
        f=new Frame("Key Adapter");
        l=new Label();
        l.setBounds(20,50,200,20);
        area=new TextArea();
        area.setBounds(20,80,300, 300);
        area.addKeyListener(this);

        f.add(l);
        f.add(area);
        f.setSize(400,400);
        f.setLayout(null);
        f.setVisible(true);
    }
    public void keyReleased(KeyEvent e) {
        String text=area.getText();
        String words[]=text.split("\\s");
        l.setText("Words: "+words.length+" Characters:"+text.length());
    }
}

public static void main(String[] args)
```

```
{
    new KeyAdapterExample();
} }
```

- a) **KeyAdapterExample**
- b) KeyAdapter
- c) KeyExample
- d) AdapterExample

109) Identify the correct class name:

```
import java.awt.*;
import java.awt.event.*;
public class MouseAdapterExample extends MouseAdapter
{
    Frame f;
    MouseAdapterExample()
    {
        f=new Frame("Mouse Adapter");
        f.addMouseListener(this);
        f.setSize(300,300);
        f.setLayout(null);
        f.setVisible(true);
    }
    public void mouseClicked(MouseEvent e) {
        Graphics g=f.getGraphics();
        g.setColor(Color.BLUE);
        g.fillOval(e.getX(),e.getY(),30,30);
    }
    public static void main(String[] args) {
        new _____();
    }
}
```

- a) mousePressed
- b) **MouseAdapterExample**
- c) mouseClicked
- d) MouseAdapter

110) Which of these are integer constants defined in ActionEvent class?

- a) ALT\_MASK
- b) CTRL\_MASK
- c) SHIFT\_MASK
- d) **All of the mentioned**

111) When the size of component is changed, \_\_\_\_\_ event is generated.

- a) **ComponentEvent**
- b) ContainerEvent
- c) FocusEvent
- d) InputEvent

112) When the component is added or removed ? Which of these events is generated ?

- a) ComponentEvent
- b) ContainerEvent**
- c) FocusEvent
- d) InputEvent

113) FocusEvent is subclass of which of these classes?

- a) ComponentEvent**
- b) ContainerEvent
- c) FocusEvent
- d) InputEvent

114) Match the correct pairs-

- |                            |                                                 |
|----------------------------|-------------------------------------------------|
| a. getSource( )            | i. Determine the type of the event              |
| b. toString( )             | ii. Returns the source of the event             |
| c. getID( )                | iii- Constructor                                |
| d. EventObject(Object src) | iv- returns the string equivalent of the event. |

- a) a-ii b-iv c-i d-iii**
- b) a-i b-iv c-ii d-iii
- c) a-iii b-iv c-i d-ii
- d) a-iv b-ii c-i d-iii

115) Match the correct pairs-

- |                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| a. getKeyLocation()        | i. Set the keyCode value to indicate a physical key.                   |
| b. getKeyCode()            | ii. Returns the character associated with the key in this event.       |
| c. getKeyChar()            | iii. Returns the location of the key that originated this key event.   |
| d. setKeyCode(int keyCode) | iv. Returns the integer keyCode associated with the key in this event. |

- a) a-iii b-iv c-ii d-i**
- b) a-i b-iv c-ii d-iii
- c) a-ii b-iv c-iii d-i
- d) a-iv b-iii c-ii d-I

116) Consider following three statement

- 1) ActionListener Interface defines one method to receive action event
- 2) ItemListener Interface defines one method to recognize when the state of item change..
- 3) MouseListener interface defines mouseMoved() method

- a) Statement 1 and 2 are true**
- b) Statement 1 and 3 are true
- c) Statement 2 and 3 are true
- d) All are true

117) Which of the following are true?

- A) The MouseListener interface defines methods for handling mouse clicks.
- B) The MouseMotionListener interface defines methods for handling mouse clicks.
- C) The MouseClickListener interface defines methods for handling mouse clicks.
- D) The ActionListener interface defines methods for handling the clicking of a button.

- a) **Statement A and D true**
- b) Statement A and C true
- c) Statement B and D true
- d) Statement C and D true

118) Which of the following statements are false

- 1) WindowListener define seven method
- 2) MouseMotionListener define 2 method
- 3) ActionListener Interface defines three method to receive action event
- 4) KeyListener Interface define Three method

- a) Statement 2 is False
- b) **Statement 3 is False**
- c) Statement 1 is False
- d) Statement 1 and 4 are False

119) Consider the following code

```
import java.applet.*;
import java.awt.event.*;
/*
<applet code="InnerClassDemo" width=200 height=100>
</applet>
*/
public class InnerClassDemo extends Applet {
public void init() {
addMouseListener(new MyMouseAdapter());
}
class MyMouseAdapter extends MouseAdapter {
public void mousePressed(MouseEvent me) {
showStatus("Mouse Pressed");
}
}
}
}
```

- a) **output :Mouse Pressed**
- b) Error in code
- c) Syntax error
- d) Error in package

120) Fill in the blanks.

```
import java.applet.*;
import java.awt.event.*;
/*
<applet code="InnerClassDemo" width=200 height=100>
</applet>
*/
public class InnerClassDemo extends Applet {
public void init() {
_____ (new MyMouseAdapter());
```

```

}
class MyMouseListener extends _____
{
public void mouseClicked(MouseEvent me) {
showStatus("Mouse Clicked");
}
}
}
}
}

```

- a) **addMouseListener, MouseAdapter**
- b) addMouseListener, MouseAdapter
- c) addMouseListener, mouseAdapter
- d) addMouseListener, mouseadapter

121) Fill the proper name of class.

```

import java.awt.*;
import java.awt.event.*;
import java.applet.*;
/*<applet code="AdapterDemo" width=300 height=100>
</applet>
*/
public class AdapterDemo extends Applet
{
public void init()
{
addMouseListener(new MyMouseListener(this));
}
}
class MyMouseListener extends MouseAdapter
{
_____ adapterDemo;
public MyMouseListener(AdapterDemo adapterDemo)
{
this.adapterDemo = adapterDemo;
}
// Handle mouse clicked.
public void mouseClicked(MouseEvent me)
{
adapterDemo.showStatus("Mouse clicked");
}
}
}

```

- a) **AdapterDemo**
- b) adapterDemo
- c) adapterdemo
- d) Adapterdemo

122) The following code segment shows that a class MyWindowAdapter extends WindowAdapter and implements the windowClosing() method.

Identify the correct adapter name and event name.

```
class MyWindowAdapter extends _____  
{  
    public void windowClosing(_____ e)  
    {  
        System.exit(0);  
    }  
}
```

- a) **WindowAdapter, WindowEvent**
- b) MyWindowAdapter, WindowEvent
- c) WindowAdapter, windowEvent
- d) WindowEvent, WindowAdapter

123) Identify the correct adapter name and event name.

```
public class MyFocusListener extends _____  
{  
    public void focusGained(_____ fe)  
    {  
        Button button = (Button) fe.getSource();  
        label.setText(button.getLabel());  
    }  
}
```

- a) **FocusAdapter, FocusEvent**
- b) focusAdapter, FocusEvent
- c) focusadapter, FocusEvent
- d) FocusAdapter, Focusevent

124) Identify the class which is not adapter class?

- a) KeyAdapter
- b) FocusAdapter
- c) **ItemAdapter**
- d) MouseMotionAdapter

125) Identify the correct event class

```
public void componentRemoved(_____ e)  
{  
    displayMessage(" removed from ", e);  
}
```

- a) **ContainerEvent**
- b) ComponentEvent
- c) FocusEvent
- d) WindowEvent

126) Find error in given program

```
import java.awt.*;  
import java.awt.event.*;  
public class KeyListenerExample extends Frame implements KeyListener { Label MyLabel;  
    TextArea area;
```

```

KeyListenerExample()
{
    MyLabel=new Label();
    MyLabel.setBounds(20,50,100,20);
    area=new TextArea();
    area.setBounds(20,80,300, 300);
    area.addKeyListener(this);
    add(MyLabel);add(area);
    setSize(400,400);
    setLayout(null);
    setVisible(true);

}

public void keyPressed(KeyEvent e)
{
    MyLabel.setText("Key Pressed");
}

public void keyReleased(KeyEvent e)
{
    MyLabel.setText("Key Released");
}

public static void main(String[] args)
{
    new KeyListenerExample();
}
}

```

**a) All methods of Interface are not implemented**

- b) Package is wrong
- c) Code is correct
- d) Compile time error

127) What is the output of the following java program?

```

class Outer
{
    void outerMethod() {
        System.out.println("inside outerMethod");
        // Inner class is local to outerMethod()
        class Inner
        {
            void innerMethod() {
                System.out.println("inside innerMethod");
            }
        }
        Inner y = new Inner();
        y.innerMethod();
    }
}

```



```

}
class MethodDemo
{
    public static void main(String[] args) {
        Outer x = new Outer();
        x.outerMethod();
    }
}

```

- a) **inside outerMethod**  
**inside innerMethod**  
b) inside innerMethod  
inside outerMethod  
c) No output  
d) inside innerMethod

128) Identify the incorrect Integer constants for WindowEvent.

- a) WINDOW\_ACTIVATED  
b) WINDOW\_DEACTIVATED  
c) WINDOW\_LOST\_FOCUS  
**d) WINDOW\_GOT\_FOCUS**

129) Which source generates adjustment events?

- a) **Scroll bar**  
b) MenuItem  
c) Button  
d) List

130) Which of these are methods of TextListener Interface?

- a) textValueChanged()  
b) textvalueChanged()  
c) TextValuechanged()  
**d) textValuechanged()**

131) Generates \_\_\_\_\_ when the user enters a character.

- a) **TextEvent**  
b) KeyEvent  
c) MouseEvent  
d) ComponentEvent

132) Identify the class which is not an adapter class?

- a) MouseAdapter  
**b) ItemAdapter**  
c) WindowAdapter  
d) KeyAdapter

133) Can outer Java classes access inner class private members?

- a) **Yes**  
b) No

- 134) An \_\_\_\_\_ class listener interface and Event class Listener interface has same name.
- a) Main class
  - b) Adapter Class**
  - c) Event Class
  - d) Inner Class
- 135) An adapter class provides an \_\_\_\_\_ implementation of all methods in an event listener interface.
- a) Complete
  - b) Multiple
  - c) Empty**
  - d) None of above
- 136) Adapter classes are an \_\_\_\_\_ class for receiving various events.
- a) Abstract class**
  - b) Super class
  - c) Derived class
  - d) Base class
- 137) Which is the abstract adapter class for receiving keyboard focus events.
- a) ComponentAdapter
  - b) KeyAdapter
  - c) FocusAdapter**
  - d) MouseAdapter
- 138) An adapter class provides an empty implementation of all methods in an \_\_\_\_\_
- a) event listener interface**
  - b) KeyListenerInterface
  - c) MouseListenerInterface
  - d) None of above
- 139) How many method define in FocusListener interface.
- a) 3
  - b) 5
  - c) 4
  - d) 2**
- 140) How many method define in ContainerListener interface.
- a) 2**
  - b) 1
  - c) 4
  - d) 3
- 141) Fill in the blank: MouseListener interface define.....methods
- a) 1
  - b) 5**
  - c) 4
  - d) 7
- 142) Fill in the blank: MouseMotionListener interface define.....methods
- a) 3

- b) 4
- c) 1
- d) 2**

143) WindowEvent is a subclass of

- a) ComponentEvent**
- b) ContainerEvent
- c) KeyEvent
- d) InputEvent

144) Which method used to capture ALT, CTRL, META OR SHIFT keys-

- a) getModifiers()**
- b) getmodifiers()
- c) GetModifiers()
- d) Getmodifiers()

145) Suppose that you want to have an object eh handle the TextEvent of a TextArea object t. How should you add eh as the event handler for t?

- a) t.addTextListener(eh);**
- b) eh.addTextListener(t);
- c) addTextListener(eh.t);
- d) addTextListener(t,eh);