JobDuniya

Technical Papers Java Questions: AWT Controls Layout Managers and Menus

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1. What is meant by Controls and what are different types of controls? Ans: Controls are componenets that allow a user to interact with your application. The AWT supports the following types of controls:

   - Labels

   - Push buttons

   - Check boxes

   - Choice lists

   - Lists

   - Scroll bars

   - Text components

   These controls are subclasses of Component.

2. You want to construct a text area that is 80 character-widths wide and 10 character-heights tall. What code do you use? new TextArea (80,10) new TextArea (10,80) Ans: b.

3. A text field has a variable-width font. It is constructed by calling new TextField ("iiiii") . What happens if you change the contents of the text field to "wwwww" (Bear in mind that is one of the narrowest characters, and w is one of the widest.) ? The text field becomes wider. The text field becomes narrower. The text field stays the same width; to see the entire contents you will have to scroll by using the and keys. The text field stays the same width; to see the entire contents you will have to scroll by using the text field's horizontal scroll bar. Ans: c.

4. The CheckboxGroup class is a subclass of the Component class. True False Ans: b.

5. What are the immediate super classes of the following classes?

   a. Container class

   b. MenuComponent class

   c. Dialog class

   d. Applet class

   e. Menu class

Ans: Container-Component, MenuComponent-Object, Dialog-Window, Applet-Panel and Menu-MenuItem

6. What are the SubClass of Textcomponent Class? Ans: TextField and TextArea

7. Which method of the component class is used to set the position and the size of a component? Ans: SetBounds ()

8. Which TextComponent method is used to set a TextComponent to the read-only state? Ans: SetEditable ()

9. How can the Checkbox class be used to create a radio button? Ans: By associating Checkbox objects with a CheckboxGroup.

10. What Checkbox method allows you to tell if a Checkbox is checked? Ans: GetState ()

11. Which Component method is used to access a component's immediate Container? getVisible () getImmediate getParent () getContainer Ans: c.

12. What methods are used to get and set the text label displayed by a Button object? Ans: GetLabel () and setLabel ()

13. What is the difference between a Choice and a List? Ans: A Choice is displayed in a compact form that requires you to pull it down to see the list of available choices. Only one item may be selected from a Choice. A List may be displayed in such a way that several List items are visible. A List supports the selection of one or more List items.

14. Which Container method is used to cause a container to be laid out and redisplayed? Ans: Validate ()

15. What is the difference between a Scollbar and a Scrollpane? Ans: A Scrollbar is a Component, but not a Container. A Scrollpane is a Container and handles its own events and performs its own scrolling.

16. Which Component subclass is used for drawing and painting? Ans: Canvas.

17. Which of the following are direct or indirect subclasses of Component? Button Label CheckboxMenuItem Toolbar Frame Ans: a, b and e.

18. Which of the following are direct or indirect subclasses of Container? Frame TextArea MenuBar FileDialog Applet Ans: a, d and e.

19. Which method is used to set the text of a Label object? setText () setLabel () setTextLabel () setLabelText () Ans: a.

20. Which constructor creates a TextArea with 10 rows and 20 columns? new TextArea (10,20) new TextArea (20,10) new TextArea new Rows (10) , new columns (20) new TextArea (200) Ans: a. Usage is TextArea (rows, columns)

21. Which of the following creates a List with 5 visible items and multiple selection enabled? new List (5, true) new List (true, 5) new List (5, false) new List (false, 5) Ans:

    a. [Usage is List (rows, multipleMode)]

22. Which are true about the Container class? The validate () method is used to cause a Container to be laid out and redisplayed. The add () method is used to add a Component to a Container. The getBorder () method returns information about a Container's insets. The getComponent () method is used to access a Component that is contained in a Container. Ans: a, b and d.

23. Suppose a Panel is added to a Frame and a Button is added to the Panel. If the Frame's font is set to 12-point TimesRoman, the Panel's font is set to 10-point TimesRoman, and the Button's font is not set, what font will be used to dispaly the Button's label? 12-point TimesRoman 11-point TimesRoman 10-point TimesRoman 9-point TimesRoman Ans: c.

24. A Frame's background color is set to Color. Yellow, and a Button's background color is to Color. Blue. Suppose the Button is added to a Panel, which is added to the Frame. What background color will be used with the Panel? Colr. Yellow Color. Blue Color. Green Color. White Ans: a.

25. Which method will cause a Frame to be displayed? show () setVisible () display () displayFrame () Ans: a and b.

26. All the componenet classes and container classes are derived from _____ class. Ans: Object.

27. Which method of the container class can be used to add components to a Panel. Ans: Add () method.

28. What are the subclasses of the Container class? Ans: The Container class has three major subclasses. They are: Window Panel ScrollPane

29. The Choice component allows multiple selection. True. False. Ans: b.

30. The List component does not generate any events. True. False. Ans: b.

31. Which components are used to get text input from the user. Ans: TextField and TextArea.

32. Which object is needed to group Checkboxes to make them exclusive? Ans: CheckboxGroup.

33. Which of the following components allow multiple selections? Non-exclusive Checkboxes. Radio buttons. Choice. List. Ans: a and d.

34. What are the types of Checkboxes and what is the difference between them? Ans: Java supports two types of Checkboxes. They are: Exclusive and Non-exclusive. In case of exclusive Checkboxes, only one among a group of items can be selected at a time. I f an item from the group is selected, the checkbox currently checked is deselected and the new selection is highlighted. The exclusive Checkboxes are also called as Radio

buttons. The non-exclusive checkboxes are not grouped together and each one can be selected independent of the other.

35. What is a Layout Manager and what are the different Layout Managers available in java. Awt and what is the default Layout manager for the panal and the panal subclasses? Ans: A layout Manager is an object that is used to organize components in a container. The different layouts available in java. Awt are: FlowLayout, BorderLayout, CardLayout, GridLayout and GridBag Layout. The default Layout Manager of Panal and Panal sub classes is FlowLayout.

36. Can I exert control over the size and placement of components in my interface? Ans: Yes. MyPanal. SetLayout (null) ; myPanal. Setbounds (20, 20,200, 200)

37. Can I add the same component to more than one container? Ans: No. Adding a component to a container automatically removes it from any previous parent (container) .

38. How do I specify where a window is to be placed? Ans: Use setBounds, setSize, or setLocation methods to implement this. SetBounds (int x, int y, int width, int height) setBounds (Rectangle r) setSize (int width, int height) setSize (Dimension d) setLocation (int x, int y) setLocation (Point p)

39. How can we create a borderless window? Ans: Create an instance of the Window class, give it a size, and show it on the screen. Eg. Frame aFrame = _____ Window aWindow = new Window (aFrame) ; aWindow. SetLayout (new FlowLayout ()) ; aWindow. Add (new Button ("Press Me")) ; aWindow. GetBounds (50, 50,200, 200) ; aWindow. Show ()

40. Can I create a non-resizable windows? If so, how? Ans: Yes. By using setResizable () method in class Frame.

41. What is the default Layout Manager for the Window and Window subclasses (Frame, Dialog) ? Ans: BorderLayout () .

42. How are the elements of different layouts organized? Ans: FlowLayout: The elements of a FlowLayout are organized in a top to bottom, left to right fashion. BorderLayout: The elements of a BorderLayout are organized at the borders (North, South, East and West) and the center of a container. CardLayout: The elements of a CardLayout are stacked, one on top of the other, like a deck of cards. GridLayout: The elements of a GridLayout are of equal size and are laid out using the square of a grid. GridBagLayout: The elements of a GridBagLayout are organized according to a grid. However, the elements are of different sizes and may occupy more than one row or column of the grid. In addition, the rows and columns may have different sizes.

43. Which containers use a BorderLayout as their default layout? Ans: The Window, Frame and Dialog classes use a BorderLayout as their default layout.

44. Which containers use a FlowLayout as their default layout? Ans: The Panel and the Applet classes use the FlowLayout as their default layout.

45. What is the preferred size of a component? Ans: The preferred size of a component size that will allow the component to display normally.

46. Which method is method to set the layout of a container? startLayout () initLayout () layoutContainer () setLayout () Ans: d.

47. Which method returns the preferred size of a component? getPreferredSize () getPreferred () getRequiredSize () getLayout () Ans: a.

48. Which layout should you use to organize the components of a container in a tabular form? CardLayout BorederLayout FlowLayout GridLayout Ans: d.

49. An application has a frame that uses a Border layout manager. Why is it probably not a good idea to put a vertical scroll bar at North in the frame? The scroll bar's height would be its preferred height, which is not likely to be enough. The scroll bar's width would be the entire width of the frame, which would be much wider than necessary. Both a and b. Neither a nor b. There is no problem with the layout as described. Ans: c.

50. What is the default layouts for a applet, a frame and a panel? Ans: For an applet and a panel, Flow layout is the default layout, whereas Border layout is default layout for a frame.

51. If a frame uses a Grid layout manager and does not contain any panels, then all the components within the frame are the same width and height. True False. Ans: a.

52. If a frame uses its default layout manager and does not contain any panels, then all the components within the frame are the same width and height. True False. Ans: b.

53. With a Border layout manager, the component at Center gets all the space that is left over, after the components at North and South have been considered. True False Ans: b.

54. An Applet has its Layout Manager set to the default of FlowLayout. What code would be the correct to change to another Layout Manager? setLayoutManager (new GridLayout ()) ; setLayout (new GridLayout (2,2)) ; setGridLayout (2,2,) setBorderLayout () ; Ans: b.

55. How do you indicate where a component will be positioned using Flowlayout?

   a. North, South, East, West

   b. Assign a row/column grid reference

   c. Pass a X/Y percentage parameter to the add method

   d. Do nothing, the FlowLayout will position the component

   Ans: d.

56. How do you change the current layout manager for a container?

   a. Use the setLayout method

   b. Once created you cannot change the current layout manager of a component

   c. Use the setLayoutManager method

   d. Use the updateLayout method

   Ans: a.

57. When using the GridBagLayout manager, each new component requires a new instance of the GridBagConstraints class. Is this statement true or false?

   a. true

   b. false

   Ans: b.

58. Which of the following statements are true?

   a. The default layout manager for an Applet is FlowLayout

   b. The default layout manager for an application is FlowLayout

   c. A layout manager must be assigned to an Applet before the setSize method is called

   d. The FlowLayout manager attempts to honor the preferred size of any components

   Ans: a and d.

59. Which method does display the messages whenever there is an item selection or deselection of the CheckboxMenuItem menu? Ans: ItemStateChanged method.

60. Which is a dual state menu item? Ans: CheckboxMenuItem.

61. Which method can be used to enable/diable a checkbox menu item? Ans: SetState (boolean) .

62. Which of the following may a menu contain? A separator A check box A menu A button A panel Ans: a and c.

63. Which of the following may contain a menu bar? A panel A frame An applet A menu bar A menu Ans: b

64. What is the difference between a MenuItem and a CheckboxMenuItem? Ans: The CheckboxMenuItem class extends the MenuItem class to support a menu item that may be checked or unchecked.

65. Which of the following are true?

A Dialog can have a MenuBar.

MenuItem extends Menu.

A MenuItem can be added to a Menu.

A Menu can be added to a Menu.

Ans: c and d.