Chapter 13

Section 13.1

13.1 Q1: Which of the following is not a specific GUI component (control or widget)?
   a. String.
   b. Label.
   c. Menu.
   d. List.

Section 13.2

13.2 Q2: Which of the following is not a benefit of using Swing GUI components?
   a. Most Swing components are heavyweight.
   b. Most Swing components are written completely in Java.
   c. Swing components allow the user to specify a uniform look and feel across all platforms.
   d. Swing components allow the user to change the look and feel while the program is running.
ANS: a. Most Swing components are heavyweight.

13.2 Q2: Which pair of words does not complete the sentence below correctly?
   A _______ is a ________.
   b. JComponent/Container.
   c. Component/Object.

Section 13.3

13.3 Q1: Which of the following is not a valid constructor for a JLabel?
   a. JLabel( int, horizontalAlignment, Icon image );
   b. JLabel( Icon image );
   c. JLabel( String text, Icon image, int horizontalAlignment );
   d. JLabel( String text, int horizontalAlignment, Icon image );
ANS: a. JLabel( int, horizontalAlignment, Icon image );

13.3 Q2: Which of the following steps is not required to use a JLabel as a GUI component?
   a. Declare a reference to a JLabel.
   b. Add to the contentPane().
   c. Instantiate the JLabel.
   d. Initialize the JLabel text.
ANS: d. Initialize the JLabel text.

Section 13.4

13.4 Q1: Which of the following generate GUI events?
   A. Typing in a text field.
   B. Selecting an item from a menu.
   C. Calling an itemListener.
   D. Calling an adjustmentListener.
      a. A and B.
      b. B and C.
      c. C and D.
      d. A and D.
ANS: a. A and B.

13.4 Q2: Which of the following completes the sentence below correctly?
   A(n) _______ is a(n) __________.
   a. InputEvent/MouseEvent.

b. ActionEvent/AdjustmentEvent.
c. FocusEvent/WindowEvent.


13.4 Q3: Which of the following is not necessary to use the event delegation model?
   a. An event listener must be registered.
   b. An event handler must be implemented.
   c. The appropriate interface must be implemented.
   d. The appropriate interface must be registered.

ANS: d. The appropriate interface must be registered.

Section 13.5

13.5 Q1: Which of the following statements about JTextFields and JPasswordField is not true?
   a. A JTextField is a JTextComponent.
   b. A JTextField is a JPasswordField.
   c. JPasswordField(String text, int columns) is a valid constructor.
   d. JTextField(String text, int columns) is a valid constructor.

ANS: b. A JTextField is a JPasswordField.

13.5 Q2: JTextField and JPasswordField events are handled using which interfaces?
   a. Both use the ActionListener interface.
   b. Both use the TextFieldListener interface.
   c. Both use the TextComponentListener interface.
   d. They use TextFieldListener and ActionListener interfaces respectively.

ANS: d. Both use the ActionListener interface.

Section 13.6

None

Section 13.7

13.7 Q1: Which of the following choices completes the sentence correctly?
   A ____ is a(n) ____
   a. ToggleButton/JCheckBox.
   b. ToggleButton/JRadioButton.
   c. JButton/ToggleButton.
   d. JButton/AbstractButton.

ANS: d. JButton/AbstractButton.

13.7 Q2: The method setRolloverIcon is used to:
   a. Handle a mouse event.
   b. Change the button text.
   c. Change the button icon.
   d. All of the above.

ANS: c. Change the button icon.

Section 13.8

13.8 Q1: Which of the following is stateless?
   a. JRadioButton.
   b. JButton.
   c. JCheckBox.
   d. JButton.
ANS: d. JButton.

13.8 Q2: Which of the following does not generate an item event when pressed?
   a. JRadioButton.
   b. JToggleButton.
   c. JCheckBox.
   d. JButton.
ANS: d. JButton.

Section 13.9

13.9 Q1: When a JComboBox is clicked on:
   a. An ItemEvent is generated.
   b. A scrollbar is always generated.
   c. An ActionEvent is generated.
   d. The JComboBox expands to a list.
ANS: d. The JComboBox expands to a list.

13.9 Q2: The setMaximumRowCount method is used for:
   a. JButton.
   b. JComboBox.
   c. JRadioButton.
   d. JToggleButton.
ANS: b. JComboBox.

Section 13.10

13.10 Q1: A JScrollPane is provided for which of the following:
   a. JToggleButton.
   b. JRadioButton.
   c. JList.
   d. None of the above.
ANS: d. None of the above.

13.10 Q2: Selecting a JList item creates:
   a. An ActionEvent.
   b. A ItemEvent.
   c. A ListSelectionEvent.
   d. A ListActionEvent.
ANS: c. A ListSelectionEvent.

Section 13.11

13.11 Q1: Consider the list below:
   January
   February
   March
   April
   May
   June
   July
   August
   September
   November
   December
What type of JList selection mode would allow the user to select March, June, and July in one step.
   a. SINGLE_SELECTION.
b. SINGLE_INTERVAL_SELECTION.
c. MULTIPLE_INTERVAL_SELECTION.
d. All of the above.
ANS: c. MULTIPLE_INTERVAL_SELECTION.

Section 13.12

13.12 Q1: Which of the following objects can not trap mouse events?
   a. JTextField.
   c. JButton.
   d. JComponent.

13.12 Q2: Which of the following is a MouseMotionListener method?
   a. mousePressed.
   b. mouseExited.
   c. mouseDragged.
   d. mouseClicked.
ANS: c. mouseDragged.

Section 13.13

13.13 Q1: Which of the following statements about adapters is false?
   a. An adapter class implements an interface.
   b. Programmers provide a default (empty) implementation of every method in the interface.
   c. Programmers override selected adapter methods.
   d. A ComponentAdaptor is a ComponentListener.
ANS: b. Programmers provide a default (empty) implementation of every method in the interface.

13.13 Q2: A one-button mouse can simulate pushing the middle button on a three-button mouse by:
   a. Holding the alt-key while clicking the mouse button.
   b. Holding the meta-key while clicking the mouse button.
   c. Holding the ctrl-key while clicking the mouse button.
   d. Holding the shift-key while clicking the mouse button.
ANS: a. Holding the alt-key while clicking the mouse button.

Section 13.14

13.14 Q1: Which of the following is not a KeyListener method?
   a. keyPressed.
   b. keyRelease.
   c. keyClicked.
   d. keyTyped.
ANS: c. keyClicked.

13.14 Q2: The Shift key is a ________ key.
   a. Modifier.
   b. Action.
   c. Output.
   d. None of the above.

Section 13.15

13.15 Q1: Which layout manager is the default for JFrame?
   a. FlowLayout.
Section 13.15.1

13.15.1 Q2: The layout manager that allows alignment to be controlled is:
   a. FlowLayout.
   b. BorderLayout.
   c. GridLayout.
   d. None of the above.

Section 13.15.2

13.15.2 Q1: BorderLayout implements interface:
   a. ActionListener.
   b. FlowLayout.
   c. Layout.
   d. LayoutManager2.
ANS: d. LayoutManager2.

13.15.2 Q2: The BorderLayout layout manager:
   a. Divides an area into five regions: NORTH, SOUTH, EAST, WEST, and CENTER.
   b. Divides an area into five regions: UP, DOWN, LEFT, RIGHT, and MIDDLE.
   c. Orders components vertically.
   d. Orders components horizontally.
ANS: a. Divides an area into five regions: NORTH, SOUTH, EAST, WEST, and CENTER.

Section 13.15.3

13.15.3 Q1: The class GridLayout constructs ________ to hold components.
   a. A horizontal grid with one row.
   b. A vertical grid with one column.
   c. A grid with \( m \) rows and \( n \) columns.
   d. A square grid with the same number of rows as columns.
ANS: c. A grid with \( m \) rows and \( n \) columns.

13.15.3 Q2: When components are added to a container with a GridLayout, the component:
   a. Fills the next spot in the row, continuing in the first position of the next row if the current row is full.
   b. Fills the next spot in a column, continuing in the first position of the next column if the column is full.
   c. Fills in row \( x \), column \( y \) if \( x \) and \( y \) are two integers passed to the Container method add.
   d. Fills in a random empty position in the grid.
ANS: a. Fills the next spot in the row, continuing in the first position of the next row if the current row is full.
13.16 Q1: Which of the following statements about JPanels is not true?
   a. A JPanel is a JComponent.
   b. A JPanel is a Container.
   c. Mouse events can be trapped for a JPanel.
   d. A JPanel has a fixed size.

ANS: d. A JPanel has a fixed size.