ECAP615

Programming in Java

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Learning Outcomes

After this lecture, you will be able to

- learn the basic concept of JButton class and its various Constructors

- understand the working of JRadioButton class and its various implementation methods

JButton class

- The JButton class is used to create a labeled button that has platform independent implementation.

- The application result in some action when the button is pushed.

- It inherits AbstractButton class.

JButton class

- In order to handle a button click event, the ActionListener interface should be implemented.

- JButton is a *component* which extends the JComponent class and it can be added to a *container*.

Declaration JButton class

- public class JButton extends AbstractButton implements Accessible

Commonly used Constructors

The following are the types of constructors commonly used in JButton Class:

JButton()

JButton (string text)

JButton (Icon img)

JButton (string text, icon img)

JRadioButton Class

- We use the JRadioButton class to create a radio button.

- Radio button is used to select one option from multiple options.

- We add radio buttons to a ButtonGroup so that we can select only one radio button at a time.

- We use the "ButtonGroup" class to create a ButtonGroup and add radio buttons to a group.

Methods Used in JRadioButton

- JRadioButton()

Example:

JRadioButton j1 = new JRadioButton()

- JButton(String s)

Example:

JButton b1 = new JButton("Button")

- JLabel(String s)

Example:

JLabel L = new JLabel("Label 1")

Methods Used in JRadioButton

- JRadioButton()

Example:

JRadioButton j1 = new JRadioButton()

- JButton(String s)

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Methods Used in JRadioButton

- JRadioButton()

Example:

JRadioButton j1 = new JRadioButton()

- JButton(String s)

Example:

JButton b1 = new JButton("Button")

- JLabel(String s)

Example:

JLabel L = new JLabel("Label 1")

Methods Used in JRadioButton

ButtonGroup()

- Steps to Group the radio buttons together.

  ✓ Create a ButtonGroup instance by using "ButtonGroup()" Method.

  ✓ ButtonGroup G = new ButtonGroup()

  ✓ Now add buttons in a Group "G", with the help of "add()" Method.

Methods Used in JRadioButton

ButtonGroup()

Example:

G.add(Button1);

G.add(Button2);

Methods Used in JRadioButton

isSelected()

Example:

JRadioButton.isSelected()

- Set(…) and Get(…) Methods :

  i. Set and get are used to replace directly accessing member variables from external classes.

  ii. Instead of accessing class member variables directly, you define get methods to access these variables, and set methods to modify them.

Methods Used in JRadioButton

isSelected()

Example:

JRadioButton.isSelected()

- Set(…) and Get(…) Methods :

    i.   Set and get are used to replace directly accessing member variables from external classes.

    ii.   Instead of accessing class member variables directly, you define get methods to access these variables, and set methods to modify them.

Implementation of RadioButton Class

The RadioButton class can be implemented by one of the following:

✓Using ActionListener

✓Without using ActionListener.

That's all for now...