| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ButtonGroup.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/swing/BoxLayout.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/ButtonModel.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/ButtonGroup.html)    [**NO FRAMES**](http://docs.google.com/ButtonGroup.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

## **javax.swing**

Class ButtonGroup

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.swing.ButtonGroup**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html)

public class **ButtonGroup**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Serializable](http://docs.google.com/java/io/Serializable.html)

This class is used to create a multiple-exclusion scope for a set of buttons. Creating a set of buttons with the same ButtonGroup object means that turning "on" one of those buttons turns off all other buttons in the group.

A ButtonGroup can be used with any set of objects that inherit from AbstractButton. Typically a button group contains instances of JRadioButton, JRadioButtonMenuItem, or JToggleButton. It wouldn't make sense to put an instance of JButton or JMenuItem in a button group because JButton and JMenuItem don't implement the selected state.

Initially, all buttons in the group are unselected.

For examples and further information on using button groups see [How to Use Radio Buttons](http://java.sun.com/docs/books/tutorial/uiswing/components/button.html#radiobutton), a section in *The Java Tutorial*.

**Warning:** Serialized objects of this class will not be compatible with future Swing releases. The current serialization support is appropriate for short term storage or RMI between applications running the same version of Swing. As of 1.4, support for long term storage of all JavaBeansTM has been added to the java.beans package. Please see [XMLEncoder](http://docs.google.com/java/beans/XMLEncoder.html).

| **Field Summary** | |
| --- | --- |
| protected  [Vector](http://docs.google.com/java/util/Vector.html)<[AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html)> | [**buttons**](http://docs.google.com/javax/swing/ButtonGroup.html#buttons) |

| **Constructor Summary** | |
| --- | --- |
| [**ButtonGroup**](http://docs.google.com/javax/swing/ButtonGroup.html#ButtonGroup())()            Creates a new ButtonGroup. |

| **Method Summary** | |
| --- | --- |
| void | [**add**](http://docs.google.com/javax/swing/ButtonGroup.html#add(javax.swing.AbstractButton))([AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html) b)            Adds the button to the group. |
| void | [**clearSelection**](http://docs.google.com/javax/swing/ButtonGroup.html#clearSelection())()            Clears the selection such that none of the buttons in the ButtonGroup are selected. |
| int | [**getButtonCount**](http://docs.google.com/javax/swing/ButtonGroup.html#getButtonCount())()            Returns the number of buttons in the group. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html)> | [**getElements**](http://docs.google.com/javax/swing/ButtonGroup.html#getElements())()            Returns all the buttons that are participating in this group. |
| [ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) | [**getSelection**](http://docs.google.com/javax/swing/ButtonGroup.html#getSelection())()            Returns the model of the selected button. |
| boolean | [**isSelected**](http://docs.google.com/javax/swing/ButtonGroup.html#isSelected(javax.swing.ButtonModel))([ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) m)            Returns whether a ButtonModel is selected. |
| void | [**remove**](http://docs.google.com/javax/swing/ButtonGroup.html#remove(javax.swing.AbstractButton))([AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html) b)            Removes the button from the group. |
| void | [**setSelected**](http://docs.google.com/javax/swing/ButtonGroup.html#setSelected(javax.swing.ButtonModel,%20boolean))([ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) m, boolean b)            Sets the selected value for the ButtonModel. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Field Detail** |
| --- |

### buttons

protected [Vector](http://docs.google.com/java/util/Vector.html)<[AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html)> **buttons**

| **Constructor Detail** |
| --- |

### ButtonGroup

public **ButtonGroup**()

Creates a new ButtonGroup.

| **Method Detail** |
| --- |

### add

public void **add**([AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html) b)

Adds the button to the group.

**Parameters:**b - the button to be added

### remove

public void **remove**([AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html) b)

Removes the button from the group.

**Parameters:**b - the button to be removed

### clearSelection

public void **clearSelection**()

Clears the selection such that none of the buttons in the ButtonGroup are selected.

**Since:** 1.6

### getElements

public [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[AbstractButton](http://docs.google.com/javax/swing/AbstractButton.html)> **getElements**()

Returns all the buttons that are participating in this group.

**Returns:**an Enumeration of the buttons in this group

### getSelection

public [ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) **getSelection**()

Returns the model of the selected button.

**Returns:**the selected button model

### setSelected

public void **setSelected**([ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) m,  
 boolean b)

Sets the selected value for the ButtonModel. Only one button in the group may be selected at a time.

**Parameters:**m - the ButtonModelb - true if this button is to be selected, otherwise false

### isSelected

public boolean **isSelected**([ButtonModel](http://docs.google.com/javax/swing/ButtonModel.html) m)

Returns whether a ButtonModel is selected.

**Returns:**true if the button is selected, otherwise returns false

### getButtonCount

public int **getButtonCount**()

Returns the number of buttons in the group.

**Returns:**the button count**Since:** 1.3

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ButtonGroup.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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