

com._604robotics.robot2012.vision.config

Class **LinkedSlider**

java.lang.Object
 java.awt.Component
 java.awt.Container
 javax.swing.JComponent
 javax.swing.Box
 com._604robotics.robot2012.vision.config.LinkedSlider

All Implemented Interfaces:

java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible, javax.swing.event.ChangeListener

Direct Known Subclasses:

[LinkedSlider.DoubleLinkedSlider](#), [LinkedSlider.IntLinkedSlider](#)

public abstract class **LinkedSlider**
extends javax.swing.Box
implements javax.swing.event.ChangeListener

A JSlider that displays its current position and name in JLabels next to it

See Also:

[Serialized Form](#)

Nested Class Summary

Nested Classes

Modifier and Type	Class and Description
static class	LinkedSlider.DoubleLinkedSlider A LinkedSlider that can be set to floating-point values
static class	LinkedSlider.ExponentialLinkedSlider A LinkedSlider that has an exponential scale, so it is much easier to pick small values (close to zero) while still allowing a range up to 1
static class	LinkedSlider.IntLinkedSlider A LinkedSlider that can only be set to integers

Nested classes/interfaces inherited from class javax.swing.Box
javax.swing.Box.AccessibleBox, javax.swing.Box.Filler

Nested classes/interfaces inherited from class javax.swing.JComponent
javax.swing.JComponent.AccessibleJComponent

Nested classes/interfaces inherited from class java.awt.Container
java.awt.Container.AccessibleAWTContainer

Nested classes/interfaces inherited from class java.awt.Component
java.awt.Component.AccessibleAWTComponent, java.awt.Component.BaselineResizeBehavior, java.awt.Component.BltBufferStrategy, java.awt.Component.FlipBufferStrategy

Field Summary

Fields

Modifier and Type	Field and Description
protected int	max The maximum value on the slider (must be an integer)
protected int	min The minimum value on the slider (must be an integer)

protected double	mul A number to multiply all slider outputs by
javax.swing.JSlider	slider The slider that the user interacts with

Fields inherited from class javax.swing.JComponent

accessibleContext, listenerList, TOOL_TIP_TEXT_KEY, ui, UNDEFINED_CONDITION, WHEN_ANCESTOR_OF_FOCUSED_COMPONENT, WHEN_FOCUSED, WHEN_IN_FOCUSED_WINDOW

Fields inherited from class java.awt.Component

BOTTOM_ALIGNMENT, CENTER_ALIGNMENT, LEFT_ALIGNMENT, RIGHT_ALIGNMENT, TOP_ALIGNMENT

Fields inherited from interface java.awt.image.ImageObserver

ABORT, ALLBITS, ERROR, FRAMEBITS, HEIGHT, PROPERTIES, SOMEBITS, WIDTH

Constructor Summary

Constructors

Constructor and Description

LinkedSlider(java.lang.String name, int min, int max, int val)
A constructor for a LinkedSlider

Method Summary

Methods

Modifier and Type	Method and Description
java.lang.String	getValText () This method returns a human-readable formatted number suited for the type of LinkedSlider.
abstract double	getValue ()
abstract void	setValue (double val) A setter for the value of the slider
void	stateChanged (javax.swing.event.ChangeEvent e)
protected void	updateValLabel () This method updates the label on the right side that displays the current value

Methods inherited from class javax.swing.Box

createGlue, createHorizontalBox, createHorizontalGlue, createHorizontalStrut, createRigidArea, createVerticalBox, createVerticalGlue, createVerticalStrut, getAccessibleContext, paintComponent, setLayout

Methods inherited from class javax.swing.JComponent

addAncestorListener, addNotify, addVetoableChangeListener, computeVisibleRect, contains, createToolTip, disable, enable, firePropertyChange, firePropertyChange, firePropertyChange, fireVetoableChange, getActionForKeyStroke, getActionMap, getAlignmentX, getAlignmentY, getAncestorListeners, getAutoscrolls, getBaseline, getBaselineResizeBehavior, getBorder, getBounds, getClientProperty, getComponentGraphics, getComponentPopupMenu, getConditionForKeyStroke, getDebugGraphicsOptions, getDefaultLocale, getFontMetrics, getGraphics, getHeight, getInheritsPopupMenu, getInputMap, getInputMap, getInputVerifier, getInsets, getInsets, getListeners, getLocation, getMaximumSize, getMinimumSize, getNextFocusableComponent, getPopupLocation, getPreferredSize, getRegisteredKeyStrokes, getRootPane, getSize, getToolTipLocation, getToolTipText, getToolTipText, getTopLevelAncestor, getTransferHandler, getUIClassID, getVerifyInputWhenFocusTarget, getVetoableChangeListeners, getVisibleRect, getWidth, getX, getY, grabFocus, isDoubleBuffered, isLightweightComponent, isManagingFocus, isOpaque, isOptimizedDrawingEnabled, isPaintingForPrint, isPaintingOrigin, isPaintingTile, isRequestFocusEnabled, isValidRoot, paint, paintBorder, paintChildren, paintImmediately, paintImmediately, paramString, print, printAll, printBorder, printChildren, printComponent, processComponentKeyEvent, processKeyBinding, processKeyEvent, processMouseEvent, processMouseEventMotionEvent, putClientProperty, registerKeyboardAction, registerKeyboardAction, removeAncestorListener, removeNotify, removeVetoableChangeListener, repaint, repaint, requestDefaultFocus, requestFocus, requestFocusInWindow, requestFocusInWindow, resetKeyboardActions, reshape, revalidate, scrollRectToVisible, setActionMap, setAlignmentX, setAlignmentY, setAutoscrolls, setBackground, setBorder, setComponentPopupMenu, setDebugGraphicsOptions, setDefaultLocale, setDoubleBuffered, setEnabled, setFocusTraversalKeys, setFont, setForeground, setInheritsPopupMenu, setInputMap, setInputVerifier, setMaximumSize, setMinimumSize, setNextFocusableComponent, setOpaque, setPreferredSize, setRequestFocusEnabled, setToolTipText, setTransferHandler, setUI, setVerifyInputWhenFocusTarget, setVisible, unregisterKeyboardAction, update, updateUI

Methods inherited from class java.awt.Container

add, add, add, add, add, addContainerListener, addImpl, addPropertyChangeListener, addPropertyChangeListener,

applyComponentOrientation, areFocusTraversalKeysSet, countComponents, deliverEvent, doLayout, findComponentAt, findComponentAt, getComponent, getComponentAt, getComponentAt, getComponentCount, getComponents, getComponentZOrder, getContainerListeners, getFocusTraversalKeys, getFocusTraversalPolicy, getLayout, getMousePosition, insets, invalidate, isAncestorOf, isFocusCycleRoot, isFocusCycleRoot, isFocusTraversalPolicyProvider, isFocusTraversalPolicySet, layout, list, list, locate, minimumSize, paintComponents, preferredSize, printComponents, processContainerEvent, processEvent, remove, remove, removeAll, removeContainerListener, setComponentZOrder, setFocusCycleRoot, setFocusTraversalPolicy, setFocusTraversalPolicyProvider, transferFocusDownCycle, validate, validateTree

Methods inherited from class java.awt.Component

action, add, addComponentListener, addFocusListener, addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener, addKeyListener, addMouseListener, addMouseMotionListener, addMouseWheelListener, bounds, checkImage, checkImage, coalesceEvents, contains, createImage, createImage, createVolatileImage, createVolatileImage, disableEvents, dispatchEvent, enable, enableEvents, enableInputMethods, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getBackground, getBounds, getColorModel, getComponentListeners, getComponentOrientation, getCursor, getDropTarget, getFocusCycleRootAncestor, getFocusListeners, getFocusTraversalKeysEnabled, getFont, getForeground, getGraphicsConfiguration, getHierarchyBoundsListeners, getHierarchyListeners, getIgnoreRepaint, getInputContext, getInputMethodListeners, getInputMethodRequests, getKeyListeners, getLocale, getLocation, getLocationOnScreen, getMouseListeners, getMouseMotionListeners, getMousePosition, getMouseWheelListeners, getName, getParent, getPeer, getPropertyChangeListeners, getPropertyChangeListeners, getSize, getToolkit, getTreeLock, gotFocus, handleEvent, hasFocus, hide, imageUpdate, inside, isBackgroundSet, isCursorSet, isDisplayable, isEnabled, isFocusable, isFocusOwner, isFocusTraversable, isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet, isMinimumSizeSet, isPreferredSizeSet, isShowing, isValid, isVisible, keyDown, keyUp, list, list, list, location, lostFocus, mouseDown, mouseDrag, mouseEnter, mouseExit, mouseMove, mouseUp, move, nextFocus, paintAll, postEvent, prepareImage, prepareImage, processComponentEvent, processFocusEvent, processHierarchyBoundsEvent, processHierarchyEvent, processInputMethodEvent, processMouseWheelEvent, remove, removeComponentListener, removeFocusListener, removeHierarchyBoundsListener, removeHierarchyListener, removeInputMethodListener, removeKeyListener, removeMouseListener, removeMouseMotionListener, removeMouseWheelListener, removePropertyChangeListener, removePropertyChangeListener, repaint, repaint, repaint, resize, resize, setBounds, setBounds, setComponentOrientation, setCursor, setDropTarget, setFocusable, setFocusTraversalKeysEnabled, setIgnoreRepaint, setLocale, setLocation, setLocation, setName, setSize, setSize, show, show, size, toString, transferFocus, transferFocusBackward, transferFocusUpCycle

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Detail

slider

public javax.swing.JSlider slider

The slider that the user interacts with

min

protected int min

The minimum value on the slider (must be an integer)

max

protected int max

The maximum value on the slider (must be an integer)

mul

protected double mul

A number to multiply all slider outputs by

Constructor Detail

LinkedSlider

public LinkedSlider(java.lang.String name, int min, int max, int val)

A constructor for a LinkedSlider

Parameters:

- `name` - The name of the slider
- `min` - The minimum value
- `max` - The maximum value
- `val` - The initial value

Method Detail

setValue

```
public abstract void setValue(double val)
```

A setter for the value of the slider

Parameters:

- `val` - the value to set the slider to

stateChanged

```
public void stateChanged(javax.swing.event.ChangeEvent e)
```

Specified by:

- `stateChanged` in interface `javax.swing.event.ChangeListener`

updateValLabel

```
protected void updateValLabel()
```

This method updates the label on the right side that displays the current value

getValText

```
public java.lang.String getValText()
```

This method returns a human-readable formatted number suited for the type of LinkedSlider. It is used to show the current value on the slider

Returns:

- The string that is shown in the JLabel to the right of the slider

getValue

```
public abstract double getValue()
```

Returns:

- The current value