

## クラス ViewPanel

```
java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          ViewPanel
```

すべての実装されたインタフェース:

java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable,  
java.util.Observer, javax.accessibility.Accessible

```
class ViewPanel
  extends javax.swing.JPanel
  implements java.util.Observer
```

描画するパネルです。 DrawModel が変更されると再描画します。

### ネストされたクラスのサマリー

#### クラスから継承されたネストされたクラス/インタフェース javax.swing.JPanel

javax.swing.JPanel.AccessibleJPanel

#### クラスから継承されたネストされたクラス/インタフェース javax.swing.JComponent

javax.swing.JComponent.AccessibleJComponent

#### クラスから継承されたネストされたクラス/インタフェース java.awt.Container

java.awt.Container.AccessibleAWTContainer

#### クラスから継承されたネストされたクラス/インタフェース java.awt.Component

java.awt.Component.AccessibleAWTComponent, java.awt.Component.BaselineResizeBehavior,  
java.awt.Component.BltBufferStrategy, java.awt.Component.FlipBufferStrategy

### フィールドのサマリー

フィールド	
修飾子とタイプ	フィールドと説明
protected	<b>DrawController</b> <b>cont</b>
static java.awt.Color	<b>CORSOR_COLOR</b>
static java.awt.Color	<b>GRID_COLOR</b>
protected	<b>DrawModel</b> <b>model</b>

クラスから継承されたフィールド javax.swing.JComponent
listenerList, TOOL_TIP_TEXT_KEY, ui, UNDEFINED_CONDITION, WHEN_ANCESTOR_OF_FOCUSED_COMPONENT, WHEN_FOCUSED, WHEN_IN_FOCUSED_WINDOW

クラスから継承されたフィールド java.awt.Component
accessibleContext, BOTTOM_ALIGNMENT, CENTER_ALIGNMENT, LEFT_ALIGNMENT, RIGHT_ALIGNMENT, TOP_ALIGNMENT

インタフェースから継承されたフィールド java.awt.image.ImageObserver
ABORT, ALLBITS, ERROR, FRAMEBITS, HEIGHT, PROPERTIES, SOMEBITS, WIDTH

## コンストラクタのサマリー

コンストラクタ
コンストラクタと説明
<b>ViewPanel</b> ( <b>DrawModel</b> m, <b>DrawController</b> c) 新しい ViewPanel を作成します.

## メソッドのサマリー

すべてのメソッド	インスタンス・メソッド	concreteメソッド
修飾子とタイプ	メソッドと説明	
java.awt.Color	<b>getColor</b> (int x, int y) ピクセルの色を取得します.	
void	<b>paintComponent</b> (java.awt.Graphics g)	
void	<b>save</b> () 描画した絵のピクセルデータをファイルに書き出します.	

void

**update**(java.util.Observable o, java.lang.Object arg)

## クラスから継承されたメソッド javax.swing.JPanel

getAccessibleContext, getUI, getUIClassID, paramString, setUI, updateUI

## クラスから継承されたメソッド 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, getVerifyInputWhenFocusTarget, getVetoableChangeListeners, getVisibleRect, getWidth, getX, getY, grabFocus, hide, isDoubleBuffered, isLightweightComponent, isManagingFocus, isOpaque, isOptimizedDrawingEnabled, isPaintingForPrint, isPaintingOrigin, isPaintingTile, isRequestFocusEnabled, isValidRoot, paint, paintBorder, paintChildren, paintImmediately, paintImmediately, print, printAll, printBorder, printChildren, printComponent, processComponentKeyEvent, processKeyBinding, processKeyEvent, processMouseEvent, processMouseMotionEvent, putClientProperty, registerKeyboardAction, registerKeyboardAction, removeAncestorListener, removeNotify, removeVetoableChangeListener, repaint, repaint, requestDefaultFocus, requestFocus, 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

## クラスから継承されたメソッド java.awt.Container

add, 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, setLayout,

transferFocusDownCycle, validate, validateTree

## クラスから継承されたメソッド 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, 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, 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

## クラスから継承されたメソッド java.lang.Object

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

## フィールドの詳細

### CORSOR\_COLOR

```
public static final java.awt.Color CORSOR_COLOR
```

### GRID\_COLOR

```
public static final java.awt.Color GRID_COLOR
```

### model

```
protected DrawModel model
```

### cont

```
protected DrawController cont
```

## コンストラクタの詳細

### ViewPanel

```
public ViewPanel(DrawModel m,  
                 DrawController c)
```

新しい ViewPanel を作成します.

パラメータ:

m - DrawModel

c - DrawController

## メソッドの詳細

### paintComponent

```
public void paintComponent(java.awt.Graphics g)
```

オーバーライド:

paintComponent クラス内 javax.swing.JComponent

### save

```
public void save()
```

描画した絵のピクセルデータをファイルに書き出します.

### getColor

```
public java.awt.Color getColor(int x,
                                int y)
```

ピクセルの色を取得します.

パラメータ:

x - x 座標

y - y 座標

戻り値:

点 (x, y) の色

## update

```
public void update(java.util.Observable o,
                   java.lang.Object arg)
```

定義:

update インタフェース内 java.util.Observer