Package view

Class View

java.lang.Object
        java.awt.Component
                java.awt.Container
                        java.awt.Window
                                java.awt.Frame
                                        javax.swing.JFrame
                                                view.View

All Implemented Interfaces:

`java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable,`
`javax.accessibility.Accessible, javax.swing.RootPaneContainer, javax.swing.WindowConstants`

`public class **View**`
`extends javax.swing.JFrame`

See Also:

Serialized Form

Nested Class Summary

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`

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

`java.awt.Container.AccessibleAWTContainer`

Nested classes/interfaces inherited from class java.awt.Frame

`java.awt.Frame.AccessibleAWTFrame`

Nested classes/interfaces inherited from class javax.swing.JFrame

`javax.swing.JFrame.AccessibleJFrame`

Nested classes/interfaces inherited from class java.awt.Window

`java.awt.Window.AccessibleAWTWindow, java.awt.Window.Type`

Modifier and Type	Field	Description
private javax.swing.JPanel	**bottomPanel**	A JPanel for the JTextArea to be presented on the GUI
private javax.swing.JButton[][]	**gameButtons**	A dual-array JButtons to keep record on where the pieces are being placed on the board
private javax.swing.JMenuItem	**giantsunflower**	A Giantsunflower option on the pop-up menu
private javax.swing.JScrollPane	**jScrollPane**	A JScrollPane for any excess logs on the JTextArea, allowing the scroll feature
(package private) javax.swing.JMenuBar	**menuBar**	MenuBar for the MenuItems to be placed
private javax.swing.JMenuItem	**peashooter**	A Peashooter option on the pop-up menu
private javax.swing.JPopupMenu	**popupMenu**	A pop-up menu to allow the user select which plant to place on the board
(package private) javax.swing.JMenuItem	**redoButton**	JMenu Title to redo an user-command
private javax.swing.JMenuItem	**repeater**	A Repeater option on the pop-up menu
private javax.swing.JMenuItem	**sunflower**	A Sunflower option on the pop-up menu
(package private) javax.swing.JLabel	**sunMoney**	JLabel String of the user's money pouch
(package private) javax.swing.JLabel	**sunPicture**	To display a JLabel logo of the Sun, representing the money of the user
private javax.swing.JTextArea	**textArea**	A JTextArea for in-game logs
private javax.swing.JMenuItem	**threepeater**	A Threepeater option on the pop-up menu

| | | JMenu Hide to undo all user command |
| private javax.swing.JMenuItem | **wallnut** | A Wallnut option on the pop-up menu |

Fields inherited from class java.awt.Component

BOTTOM_ALIGNMENT, CENTER_ALIGNMENT, LEFT_ALIGNMENT, RIGHT_ALIGNMENT, TOP_ALIGNMENT

Fields inherited from class java.awt.Frame

CROSSHAIR_CURSOR, DEFAULT_CURSOR, E_RESIZE_CURSOR, HAND_CURSOR, ICONIFIED,
MAXIMIZED_BOTH, MAXIMIZED_HORIZ, MAXIMIZED_VERT, MOVE_CURSOR, N_RESIZE_CURSOR,
NE_RESIZE_CURSOR, NORMAL, NW_RESIZE_CURSOR, S_RESIZE_CURSOR, SE_RESIZE_CURSOR,
SW_RESIZE_CURSOR, TEXT_CURSOR, W_RESIZE_CURSOR, WAIT_CURSOR

Fields inherited from interface java.awt.image.ImageObserver

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

Fields inherited from class javax.swing.JFrame

accessibleContext, rootPane, rootPaneCheckingEnabled

Fields inherited from interface javax.swing.WindowConstants

DISPOSE_ON_CLOSE, DO_NOTHING_ON_CLOSE, EXIT_ON_CLOSE, HIDE_ON_CLOSE

Constructor Summary

Constructors

| Constructor | Description |
| **View**() | Setting up the GUI using the fields that were chosen |

Method Summary

All Methods   Instance Methods   Concrete Methods

		specific point of the game board
javax.swing.JMenuItem	**getPeashooter**()	Getting or Creating a Peashooter at the specific point of the game board
javax.swing.JPopupMenu	**getPopupMenu**()	JPopupMenu shown in every JButton
javax.swing.JMenuItem	**getRedoButton**()	Getting the JMenu for the Redo Button on the JMenuBar
javax.swing.JMenuItem	**getRepeater**()	Getting or Creating a Repeater at the specific point of the game board
javax.swing.JMenuItem	**getSunflower**()	Getting or Creating a Sunflower at the specific point of the game board
javax.swing.JLabel	**getSunMoney**()	Getting the JLabel for money pouch of the user
javax.swing.JTextArea	**getTextArea**()	Getting the JTextArea for in-game logging
javax.swing.JMenuItem	**getThreepeater**()	Getting or Creating a Threepeater at the specific point of the game board
javax.swing.JPanel	**getTopPanel**()	Getter for the JPanel filled with JButtons
javax.swing.JMenuItem	**getTwinSunflower**()	Getting or Creating a TwinSunflower at the specific point of the game board
javax.swing.JMenuItem	**getUndoButton**()	Getting the JMenu for the Undo Button on the JMenuBar
javax.swing.JMenuItem	**getWallnut**()	Getting or Creating a Wallnut at the specific point of the game board

Methods inherited from class java.awt.Component

action, add, addComponentListener, addFocusListener, addHierarchyBoundsListener, addHierarchyListener, addInputMethodListener, addKeyListener, addMouseListener, addMouseMotionListener, addMouseWheelListener, bounds, checkImage, checkImage, coalesceEvents, contains, contains, createImage, createImage, createVolatileImage, createVolatileImage, disable, disableEvents, dispatchEvent, enable, enable, enableEvents, enableInputMethods, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getBaseline, getBaselineResizeBehavior, getBounds, getBounds, getColorModel, getComponentListeners, getComponentOrientation, getCursor, getDropTarget, getFocusListeners, getFocusTraversalKeysEnabled, getFont, getFontMetrics,

gotFocus, handleEvent, hasFocus, imageUpdate, inside, isBackgroundSet, isCursorSet,
isDisplayable, isDoubleBuffered, isEnabled, isFocusable, isFocusOwner,
isFocusTraversable, isFontSet, isForegroundSet, isLightweight, isMaximumSizeSet,
isMinimumSizeSet, isPreferredSizeSet, isValid, isVisible, keyDown, keyUp, list, list,
list, location, lostFocus, mouseDown, mouseDrag, mouseEnter, mouseExit, mouseMove,
mouseUp, move, nextFocus, paintAll, prepareImage, prepareImage, printAll,
processComponentEvent, processFocusEvent, processHierarchyBoundsEvent,
processHierarchyEvent, processInputMethodEvent, processKeyEvent, processMouseEvent,
processMouseMotionEvent, processMouseWheelEvent, removeComponentListener,
removeFocusListener, removeHierarchyBoundsListener, removeHierarchyListener,
removeInputMethodListener, removeKeyListener, removeMouseListener,
removeMouseMotionListener, removeMouseWheelListener, removePropertyChangeListener,
removePropertyChangeListener, repaint, repaint, repaint, requestFocus, requestFocus,
requestFocus, requestFocus, requestFocusInWindow, requestFocusInWindow,
requestFocusInWindow, resize, resize, revalidate, setComponentOrientation,
setDropTarget, setEnabled, setFocusable, setFocusTraversalKeysEnabled, setForeground,
setIgnoreRepaint, setLocale, setMaximumSize, setMixingCutoutShape, setName,
setPreferredSize, show, size, toString, transferFocus, transferFocusBackward,
transferFocusUpCycle

Methods inherited from class java.awt.Container

add, add, add, add, add, addContainerListener, applyComponentOrientation,
areFocusTraversalKeysSet, countComponents, deliverEvent, doLayout, findComponentAt,
findComponentAt, getAlignmentX, getAlignmentY, getComponent, getComponentAt,
getComponentAt, getComponentCount, getComponents, getComponentZOrder,
getContainerListeners, getFocusTraversalPolicy, getInsets, getLayout, getMaximumSize,
getMinimumSize, getMousePosition, getPreferredSize, insets, invalidate, isAncestorOf,
isFocusCycleRoot, isFocusTraversalPolicyProvider, isFocusTraversalPolicySet, layout,
list, list, locate, minimumSize, paintComponents, preferredSize, print,
printComponents, processContainerEvent, remove, removeAll, removeContainerListener,
setComponentZOrder, setFocusTraversalKeys, setFocusTraversalPolicy,
setFocusTraversalPolicyProvider, setFont, transferFocusDownCycle, validate,
validateTree

Methods inherited from class java.awt.Frame

addNotify, getCursorType, getExtendedState, getFrames, getIconImage,
getMaximizedBounds, getMenuBar, getState, getTitle, isResizable, isUndecorated,
remove, removeNotify, setBackground, setCursor, setExtendedState, setMaximizedBounds,
setMenuBar, setOpacity, setResizable, setShape, setState, setTitle, setUndecorated

Methods inherited from class javax.swing.JFrame

setRootPaneCheckingEnabled, setTransferHandler, update

Methods inherited from interface java.awt.MenuContainer

getFont, postEvent

Methods inherited from class java.lang.Object

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

Methods inherited from class java.awt.Window

addPropertyChangeListener, addPropertyChangeListener, addWindowFocusListener,
addWindowListener, addWindowStateListener, applyResourceBundle, applyResourceBundle,
createBufferStrategy, createBufferStrategy, dispose, getBackground,
getBufferStrategy, getFocusableWindowState, getFocusCycleRootAncestor, getFocusOwner,
getFocusTraversalKeys, getIconImages, getInputContext, getListeners, getLocale,
getModalExclusionType, getMostRecentFocusOwner, getOpacity, getOwnedWindows,
getOwner, getOwnerlessWindows, getShape, getToolkit, getType, getWarningString,
getWindowFocusListeners, getWindowListeners, getWindows, getWindowStateListeners,
hide, isActive, isAlwaysOnTop, isAlwaysOnTopSupported, isAutoRequestFocus,
isFocusableWindow, isFocusCycleRoot, isFocused, isLocationByPlatform, isOpaque,
isShowing, isValidateRoot, pack, paint, postEvent, processEvent,
processWindowFocusEvent, processWindowStateEvent, removeWindowFocusListener,
removeWindowListener, removeWindowStateListener, reshape, setAlwaysOnTop,
setAutoRequestFocus, setBounds, setBounds, setCursor, setFocusableWindowState,
setFocusCycleRoot, setIconImages, setLocation, setLocation, setLocationByPlatform,
setLocationRelativeTo, setMinimumSize, setModalExclusionType, setSize, setSize,
setType, setVisible, show, toBack, toFront

Field Detail

topPanel

private javax.swing.JPanel topPanel

A JPanel for the buttons to be presented on the GUI

bottomPanel

```
private javax.swing.JButton[][] gameButtons
```

A dual-array JButtons to keep record on where the pieces are being placed on the board

---

popupMenu

```
private javax.swing.JPopupMenu popupMenu
```

A pop-up menu to allow the user select which plant to place on the board

---

textArea

```
private javax.swing.JTextArea textArea
```

A JTextArea for in-game logs

---

jScrollPane

```
private javax.swing.JScrollPane jScrollPane
```

A JScrollPane for any excess logs on the JTextArea, allowing the scroll feature

---

sunflower

```
private javax.swing.JMenuItem sunflower
```

A Sunflower option on the pop-up menu

---

peashooter

```
private javax.swing.JMenuItem peashooter
```

A Peashooter option on the pop-up menu

---

repeater

```
private javax.swing.JMenuItem repeater
```

A Repeater option on the pop-up menu

A Threepeater option on the pop-up menu

---

giantsunflower

`private javax.swing.JMenuItem giantsunflower`

A Giantsunflower option on the pop-up menu

---

twinsunflower

`private javax.swing.JMenuItem twinsunflower`

A TwinSunflower option on the pop-up menu

---

wallnut

`private javax.swing.JMenuItem wallnut`

A Wallnut option on the pop-up menu

---

sunPicture

`javax.swing.JLabel sunPicture`

To display a JLabel logo of the Sun, representing the money of the user

---

sunMoney

`javax.swing.JLabel sunMoney`

JLabel String of the user's money pouch

---

redoButton

`javax.swing.JMenuItem redoButton`

JMenu Title to redo an user-command

---

undoButton

Search

menuBar

```
javax.swing.JMenuBar menuBar
```

MenuBar for the MenuItems to be placed

Constructor Detail

View

```
public View()
```

Setting up the GUI using the fields that were chosen

Method Detail

getTopPanel

```
public javax.swing.JPanel getTopPanel()
```

Getter for the JPanel filled with JButtons

Returns:
JPanel filled with JButtons

getGameButtons

```
public javax.swing.JButton[][] getGameButtons()
```

Dual-array JButtons that is used to place or remove plants and zombies on the game board

Returns:
Dual-array JButtons of the game board

getPopupMenu

```
public javax.swing.JPopupMenu getPopupMenu()
```

getSunflower

```
public javax.swing.JMenuItem getSunflower()
```

Getting or Creating a Sunflower at the specific point of the game board

Returns:
JMenuItem dedicated for Sunflower

getPeashooter

```
public javax.swing.JMenuItem getPeashooter()
```

Getting or Creating a Peashooter at the specific point of the game board

Returns:
JMenuItem dedicated for Peashooter

getRepeater

```
public javax.swing.JMenuItem getRepeater()
```

Getting or Creating a Repeater at the specific point of the game board

Returns:
JMenuItem dedicated for Repeater

getThreepeater

```
public javax.swing.JMenuItem getThreepeater()
```

Getting or Creating a Threepeater at the specific point of the game board

Returns:
JMenuItem dedicated for Threepeater

getWallnut

```
public javax.swing.JMenuItem getWallnut()
```

getTwinSunflower

```
public javax.swing.JMenuItem getTwinSunflower()
```

Getting or Creating a TwinSunflower at the specific point of the game board

Returns:
JMenuItem dedicated for TwinSunflower

getGiantSunflower

```
public javax.swing.JMenuItem getGiantSunflower()
```

Getting or Creating a GiantSunflower at the specific point of the game board

Returns:
JMenuItem dedicated for GiantSunflower

getTextArea

```
public javax.swing.JTextArea getTextArea()
```

Getting the JTextArea for in-game logging

Returns:
JTextArea for Logging

getSunMoney

```
public javax.swing.JLabel getSunMoney()
```

Getting the JLabel for money pouch of the user

Returns:
JLabel for money pouch

getRedoButton

```
public javax.swing.JMenuItem getRedoButton()
```

getUndoButton

```
public javax.swing.JMenuItem getUndoButton()
```

Getting the JMenu for the Undo Button on the JMenuBar

Returns:

JMenu for Undo