Class TelaBase

java.lang.Object⬚
    java.awt.Component⬚
        java.awt.Container⬚
            javax.swing.JComponent⬚
                javax.swing.JPanel⬚
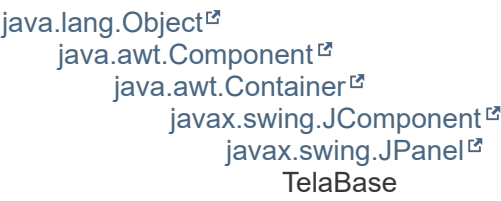   TelaBase

All Implemented Interfaces:

ActionListener⬚, ImageObserver⬚, MenuContainer⬚, Serializable⬚, EventListener⬚, Accessible⬚

Direct Known Subclasses:

TelaBoss, TelaGameOver, TelaInicio, TelaJogo, TelaSecreta, TelaVitoria

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public abstract class **TelaBase**
extends JPanel⬚
implements ActionListener⬚

Classe base abstrata para todas as telas do jogo. Fornece as funcionalidades comuns entre as telas

Version:

1.0

Author:

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See Also:

Serialized Form

Nested Class Summary

Nested Classes

Modifier and Type	Class	Description
protected static enum	**TelaBase.EstadoJogo**	Representa os possíveis estados do jogo

Nested classes/interfaces inherited from class javax.swing.*JPanel*⬚

JPanel.AccessibleJPanel⬚

Nested classes/interfaces inherited from class javax.swing.*JComponent*⬚

JComponent.AccessibleJComponent⬚

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

Container.AccessibleAWTContainer⬚

Nested classes/interfaces inherited from class java.awt.*Component*⬚

Component.AccessibleAWTComponent⬚, Component.BaselineResizeBehavior⬚,
Component.BltBufferStrategy⬚, Component.FlipBufferStrategy⬚

Field Summary

Fields

Modifier and Type	Field	Description
protected static final int	ALTURA_TELA	Altura padrão da tela (em pixels)
protected MusicPlayer	efeito	Reprodutor de efeitos sonoros
protected TelaBase.EstadoJogo	estado	Estado atual do jogo (inicialmente PARADO)
protected static final int	INTERVALO	Intervalo de tempo (em milissegundos) usado pelo timer do jogo
protected static final int	LARGURA_TELA	Largura padrão da tela (em pixels)
protected MusicPlayer	musica	Reprodutor de música de fundo
protected static final String	NOME_FONTE	Fonte padrão usada na maioria dos textos do jogo
protected int	save	Slot de save atual (determina qual mundo será carregado)
protected static final int	TAMANHO_BLOCO	Tamanho padrão (em pixels) para objetos colidíveis
(package private) Timer	timer	Timer principal para atualização do jogo

Fields inherited from class javax.swing.JComponent

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

accessibleContext, 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	Description
TelaBase(MusicPlayer musica)	Construtor da tela base

Method Summary

All Methods	Instance Methods	Abstract Methods	Concrete Methods

Modifier and Type	Method	Description
void	actionPerformed(ActionEvent e)	Manipula eventos de ação, principalmente do timer, solicitando repintura do componente a cada intervalo definido.
abstract void	carregarImagens()	Carrega os recursos gráficos necessários para a tela.
abstract void	cleanUp()	Realiza limpeza de recursos antes da tela ser descartada.
abstract void	desenharTela(Graphics g)	Renderiza os elementos visuais específicos da tela.
void	paintComponent(Graphics g)	Método de renderização do Swing.
void	saveData()	Salva o valor atual de save no arquivo de save
void	start()	Inicia o timer e muda o estado do jogo para RODANDO

Methods inherited from class javax.swing.JPanel

getAccessibleContext, getUI, getUIClassID, paramString, setUI, updateUI

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, getVerifyInputWhenFocusTarget, getVetoableChangeListeners, getVisibleRect, getWidth, getX, getY, grabFocus, hide, isDoubleBuffered, isLightweightComponent, isManagingFocus, isOpaque, isOptimizedDrawingEnabled, isPaintingForPrint, isPaintingOrigin, isPaintingTile, isRequestFocusEnabled, isValidateRoot, 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

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, setLayout, 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, 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, requestFocus, requestFocus, requestFocusInWindow, resize, resize, setBounds, setBounds, setComponentOrientation, setCursor, setDropTarget, setFocusable, setFocusTraversalKeysEnabled, setIgnoreRepaint, setLocale, setLocation, setLocation, setMixingCutoutShape, 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 Details

LARGURA_TELA

```
protected static final int LARGURA_TELA
```

Largura padrão da tela (em pixels)

See Also:

Constant Field Values

ALTURA_TELA

```
protected static final int ALTURA_TELA
```

Altura padrão da tela (em pixels)

See Also:

Constant Field Values

TAMANHO_BLOCO

```
protected static final int TAMANHO_BLOCO
```

Tamanho padrão (em pixels) para objetos colidíveis

See Also:

Constant Field Values

INTERVALO

```
protected static final int INTERVALO
```

Intervalo de tempo (em milissegundos) usado pelo timer do jogo

See Also:

Constant Field Values

NOME_FONTE

```
protected static final String NOME_FONTE
```

Fonte padrão usada na maioria dos textos do jogo

See Also:

Constant Field Values

estado

```
protected TelaBase.EstadoJogo estado
```

Estado atual do jogo (inicialmente PARADO)

musica

```
protected MusicPlayer musica
```

Reprodutor de música de fundo

efeito

protected `MusicPlayer` efeito

Reprodutor de efeitos sonoros

save

protected int save

Slot de save atual (determina qual mundo será carregado)

timer

`Timer`⊡ timer

Timer principal para atualização do jogo

Constructor Details

TelaBase

TelaBase(`MusicPlayer` musica)

Construtor da tela base

Parameters:

musica - Player de música compartilhado entre telas

Method Details

saveData

public void saveData()

Salva o valor atual de `save` no arquivo de save

start

public void start()

Inicia o timer e muda o estado do jogo para RODANDO

carregarImagens

public abstract void carregarImagens()

Carrega os recursos gráficos necessários para a tela. Deve ser implementado por subclasses para carregar imagens específicas.

paintComponent

`public void paintComponent(Graphics⬈ g)`

Método de renderização do Swing. Chama `desenharTela()` após a preparação básica do componente.

Overrides:

`paintComponent`⬈ in class `JComponent`⬈

Parameters:

g - Contexto gráfico para renderização

desenharTela

`public abstract void desenharTela(Graphics⬈ g)`

Renderiza os elementos visuais específicos da tela. Deve ser implementado por subclasses para definir a renderização personalizada.

Parameters:

g - Contexto gráfico para renderização

actionPerformed

`public void actionPerformed(ActionEvent⬈ e)`

Manipula eventos de ação, principalmente do timer, solicitando repintura do componente a cada intervalo definido.

Specified by:

`actionPerformed`⬈ in interface `ActionListener`⬈

Parameters:

e - Evento de ação disparado

cleanUp

`public abstract void cleanUp()`

Realiza limpeza de recursos antes da tela ser descartada. Deve ser implementado por subclasses para liberar recursos específicos