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Índex de continguts

Índex de continguts.....2
Annex. Documentació API de l'aplicació.....3
1. Package lhmc.files.....4
2. Package lhmc.network.....27
3. Package lhmc.plugins.....34
4. Package lhmc.utils.....66
5. Package lhmc.gui.plugingui.....72
6. Package lhmc.gui.thumbnailsbrowser.....92
7. Package lhmc.gui.util.....101
8. Package lhmc.gui.....114
9. Package lhmc.....121

Annex. Documentació API de l'aplicació.

Aquest document és un annex de la memòria LHCM: Un centre multimèdia Linux. A continuació es mostra la documentació generada amb l'eina javadoc a partir de les classes del codi font de l'aplicació LHMC desenvolupada. La documentació de les classes que es mostra seguidament està agrupada pels *packages* que aquestes formen.

1. Package lhmc.files

---

lhmc.files

Class ImageFileFilter

```
java.lang.Object
  └ lhmc.files.ImageFileFilter
```

All Implemented Interfaces:

java.io.FileFilter

```
public class ImageFileFilterextends java.lang.Objectimplements java.io.FileFilter
```

ImageFileFilter is an instance of the FileFilter interface Aceept all directories and image formats that our plugins can display.

Version:

0.01 Jul 2007

Author:

Cristina Roura Claver

Constructor Detail

ImageFileFilter

```
public ImageFileFilter()
```

Method Detail

accept

```
public boolean accept(java.net.URLurl)
```

Accept all directories and all bmp, gif, jpeg, jpg, png or wbmp files.

Parameters:

`url` - The URL to accept.

Returns:

True if its accepted.

---

accept

```
public boolean accept(java.io.Filefile)
```

Accept all directories and all bmp, gif, jpeg, jpg, png or wbmp files.

Specified by:

`accept` in interface `java.io.FileFilter`

Parameters:

`file` - The file to accept.

Returns:

True if its accepted.

---

accept

```
public boolean accept(SmbFilefile)
```

Accept all directories and all bmp, gif, jpeg, jpg, png or wbmp files.

Specified by:

`accept` in interface `java.io.FileFilter`

Parameters:

`file` - The smbfile to accept.

Returns:

True if its accepted.

---

lhmc.files

Class AudioFileFilter

```
java.lang.Object
  └ lhmc.files.AudioFileFilter
```

All Implemented Interfaces:

java.io.FileFilter

```
public class AudioFileFilterextends java.lang.Objectimplements java.io.FileFilter
```

AudioFileFilter is an instance of the FileFilter interface Accept all directories and image formats that our plugins can display.

Author:

Cristina Roura Claver

Constructor Detail

AudioFileFilter

```
public AudioFileFilter()
```

Method Detail

accept

```
public boolean accept(java.net.URLurl)
```

Accept all directories and all mp3, ogg, flac, MONKEY's AUDIO, WAV, AIFF, AU and SPEEX audio formats.

Parameters:

`url` - The url to accept.

Returns:

True if its accepted.

---

accept

`public boolean **accept**(java.io.Filefile)`

Accept all directories and all mp3, ogg, flac, MONKEY's AUDIO, WAV, AIFF, AU and SPEEX audio formats.

Specified by:
`accept` in interface `java.io.FileFilter`
Parameters:
`file` - The file to accept.
Returns:
True if its accepted.

---

accept

`public boolean **accept**(SmbFilefile)`

Accept all directories and all mp3, ogg, flac, MONKEY's AUDIO, WAV, AIFF, AU and SPEEX audio formats.

Specified by:
`accept` in interface `java.io.FileFilter`
Parameters:
`file` - The SmbFile to accept.
Returns:
True if its accepted.

---

lhmc.files

Class VideoFileFilter

```
java.lang.Object
  └ lhmc.files.VideoFileFilter
```

All Implemented Interfaces:

java.io.FileFilter

```
public class VideoFileFilterextends java.lang.Objectimplements java.io.FileFilter
```

VideoFileFilter is an instance of the FileFilter interface Aceept all directories and image formats that our plugins can display.

Author:

Cristina Roura Claver

Constructor Detail

VideoFileFilter

```
public VideoFileFilter()
```

Method Detail

accept

```
public boolean accept(java.net.URLurl)
```

Accept all directories and all mpg, mpeg, m1v, bin(VCD/SVCD Images), vob, avi, divx, mov, qt, asf, viv, rm, wmv, ogm, mkv, fli, flc and mvv formats. This are all formats suported by Mplayer.

Parameters:

`url` - The URL to accept.

Returns:

True if its accepted.

---

accept

`public boolean **accept**(java.io.Filefile)`

Accept all directories and all mpg, mpeg, m1v, bin(VCD/SVCD Images), vob, avi, divx, mov, qt, asf, viv, rm, wmv, ogm, mkv, fli, flc and mvv formats. This are all formats suported by Mplayer.

Specified by:

`accept` in interface `java.io.FileFilter`

Parameters:

`file` - The file to accept.

Returns:

True if its accepted.

---

accept

`public boolean **accept**(SmbFilefile)`

Accept all directories and all mpg, mpeg, m1v, bin(VCD/SVCD Images), vob, avi, divx, mov, qt, asf, viv, rm, wmv, ogm, mkv, fli, flc and mvv formats. This are all formats suported by Mplayer.

Specified by:

`accept` in interface `java.io.FileFilter`

Parameters:

`file` - The smbfile to accept.

Returns:

True if its accepted.

---

lhmc.files

Class SuportedFilesFileFilter

```
java.lang.Object
  └ lhmc.files.SuportedFilesFileFilter
```

All Implemented Interfaces:

java.io.FileFilter

```
public class SuportedFilesFileFilterextends java.lang.Objectimplements
java.io.FileFilter
```

SuportedFilesFileFilter is an instance of the FileFilter interface Aceept all directories and image, audio and video formats that our plugins can display.

Author:

Cristina Roura Claver

Constructor Detail

SuportedFilesFileFilter

```
public SuportedFilesFileFilter()
```

Method Detail

accept

```
public boolean accept(java.net.URLurl)
```

Accept all directories and all fileformats accepted by the image, audio and video filefilters.

Parameters:

`url` - The URL to accept.

Returns:

True if its accepted.

---

accept

`public boolean **accept**(java.io.Filefile)`

Accept all directories and all fileformats accepted by the image, audio and video filefilters.

Specified by:
`accept` in interface `java.io.FileFilter`
Parameters:
`file` - The file to accept.
Returns:
True if its accepted.

---

accept

`public boolean **accept**(SmbFilefile)`

Accept all directories and all fileformats accepted by the image, audio and video filefilters.

Specified by:
`accept` in interface `java.io.FileFilter`
Parameters:
`file` - The SmbFile to accept.
Returns:
True if its accepted.

---

lhmc.files

Class FileManager

```
java.lang.Object
  └ lhmc.files.FileManager
```

```
public class FileManagerextends java.lang.Object
```

FileManager uses the SortedTreeNode class to keep que current directory (with filtred files) in order.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

Constructor Detail

FileManager

```
public FileManager(java.net.URL[]files)
```

Constructs the file manager from a URL array.

Parameters:

`files` - The array of URLs to create the tree with.

Method Detail

getUrlType

```
public int getUrlType()
```

Gets the url type, it can be File or SmbFile

---

changeTreeNode

```
public void changeTreeNode(java.net.URL[]files)
```

Changes to a new URL array and the tree node.

Parameters:

`files` - The new array of URLs to create the tree with.

---

isDirectoryNode

```
public boolean isDirectoryNode(intindex)
```

Returns true if at the index position there is a directory.

Parameters:

`index` - The index position of a node.

Returns:

true if at the index position there is a directory.

---

getNodesNumber

```
public int getNodesNumber()
```

Gets the number of nodes of the sorted tree.

Returns:

The number of nodes.

---

getFileNameAt

```
public java.lang.String getFileNameAt(intindex)
```

Gets the file path of a node at index position.

Parameters:

`index` - The index position of a node.

Returns:

The file path.

getFileAt

```
public java.net.URL getFileAt(intindex)
```

Gets the URL at the certain position of the tree.

Parameters:

`index` - The position of the URL in the tree.

Returns:

The file.

---

lhmc.files

Class SortedTreeNode

```
java.lang.Object
  └ javax.swing.tree.DefaultMutableTreeNode
      └ lhmc.files.SortedTreeNode
```

All Implemented Interfaces:

java.io.Serializable, java.lang.Cloneable, javax.swing.tree.MutableTreeNode, javax.swing.tree.TreeNode

---

```
public class SortedTreeNodeextends javax.swing.tree.DefaultMutableTreeNode
```

SortedTreeNode: a mutable tree node with alphabetically sorted children

See Also:

Serialized Form

Constructor Detail

SortedTreeNode

```
public SortedTreeNode(intfileType)
```

Constructs a SortedTreeNode, specifying the filesystem location.

Parameters:

`fileType` - remote or local file type

SortedTreeNode

```
public SortedTreeNode(java.lang.ObjectuserObject)
```

Constructs a SortedTreeNode with a root node as an argument.

Parameters:

`userObject` - the object root node.

Method Detail

getIndex

```
public int getIndex()
```

Gets the index of the sortedTreeNode.

Returns:

the index of the treeNode.

---

setIndex

```
public void setIndex(intindex)
```

Gets the index of the sortedTreeNode.

Parameters:

`index` - the index of the treeNode.

---

add

```
public void add(SortedTreeNodechild)
```

Adds a TreeNode to the child list.

Parameters:

`child` - the SortedTreeNode to add.

}

---

lhmc.files

Class UrlUtils

```
java.lang.Object
  └ lhmc.files.UrlUtils
```

```
public class UrlUtilsextends java.lang.Object
```

UrlUtils helps the url files that can contain a File or a SmbFile.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

Constructor Detail

UrlUtils

```
public UrlUtils()
```

Constructs the UrlUtils class.

UrlUtils

```
public UrlUtils(intfilesystemLocation)
```

Constructs the UrlUtils class specifying the filesystem location.

Parameters:

`filesystemLocation` - the filesystem location.

UrlUtils

`public UrlUtils(java.net.URLurl)`

Constructs the UrlUtils and searches wich filesystem location has the URL.

Parameters:
`url` - the url file.

Method Detail

getUrlName

`public java.lang.String getUrlName(java.net.URLurl)`

Gets the name of the file.

Parameters:
`url` - the url file.
Returns:
the name of the file.

---

getLocation

`public int getLocation(java.net.URLurl)`

Gets the location (remote or local) of the file.

Parameters:
`url` - the url file.
Returns:
the location.

---

getLocation

```
public int getLocation()
```

Gets the location attribute (remote or local).

Returns:
the location.

---

isUrlDirectory

```
public boolean isUrlDirectory(java.net.URLurl)
```

Tests whether the file is a directory.

Returns:
true if it is a directory.

---

getSmbFile

```
public SmbFile getSmbFile(java.net.URLurl)
```

Extracts the SmbFile of a URL.

Parameters:
`url` - the url file.
Returns:
the SmbFile.

---

getFile

```
public java.io.File getFile(java.net.URLurl)
```

Extracts the File of a URL.

Parameters:
`url` - the url file.
Returns:
the File.

getURLParent

```
public java.net.URL getURLParent(java.net.URLurl)
```

Returns the pathname string of this abstract pathname's parent, or null if this pathname does not name a parent directory.

Parameters:

`url` - the url file.

Returns:

the parent url file.

---

getAbsolutePath

```
public java.lang.String getAbsolutePath(java.net.URLurl)
```

Returns the absolute pathname string of this abstract pathname.

Parameters:

`url` - the url file.

Returns:

the absolute path name string.

---

getPath

```
public java.lang.String getPath(java.net.URLurl)
```

Converts the url file abstract pathname into a pathname string.

Parameters:

`url` - the url file.

Returns:

The string form of this abstract pathname.

---

getFilteredUrls

```
public java.net.URL[] getFilteredUrls(java.net.URLrootFile,
                                      java.io.FileFiltercustomFileFilter)
```

Returns an array of url files and directories that satisfy the specified filter.

Parameters:

`rootFile` - the url directory to list.

`customFileFilter` - the file filter.

Returns:

an array of url files.

---

createURL

```
public java.net.URL createURL(java.lang.Stringpath)
```

Creates an URL file from a file path

Parameters:

`path` - the file path.

Returns:

an url file.

}

---

lhmc.files

Class CopyManager

```
java.lang.Object
  └ lhmc.files.CopyManager
```

```
public class CopyManagerextends java.lang.Object
```

CopyManager manages the copy of files between difrent locations. It can copy: from local to local. from local to remote. from remote to local. from remote to remote.

Author:

Cristina Roura Claver

Constructor Detail

CopyManager

```
public CopyManager(java.lang.StringactualLocation,java.lang.StringlocationToCopy,
java.lang.StringlocationToCopyType,java.lang.StringlocalPathToCopy,
                   java.lang.StringmediaType,java.io.FileFiltercustomFileFilter)
```

Constructor of CopyManager

Parameters:

`actualLocation` - the location where the files to copy lay.
`locationToCopy` - the location where the files would be copied.
`locationToCopyType` - the type of the location to copy.
`localPathToCopy` - the path where the files would be copied.
`mediaType` - the type of media files to copy.
`customFileFilter` - the filefilter to apply.

Method Detail

copyFiles

```
public void copyFiles(java.util.Vector<java.net.URL>filesToCopy,
                      java.lang.StringdirectoryToCopy)
```

Copies a vector of url files to a directory.

Parameters:

`filesToCopy` - the vector of url files to copy.

`directoryToCopy` - the directory to copy the files.

---

lhmc.files

Class CopyTo

```
java.lang.Object
  └ java.lang.Thread
      └ lhmc.files.CopyTo
```

All Implemented Interfaces:

java.lang.Runnable

```
public class CopyToextends java.lang.Thread
```

CopyTo is a threaded class that manages the copy of files from remote filesystem (SmbFile) to local filesystem (File) and vice versa. Also manages to copy from remote to remote filesystem or local to local filesystem.

Version:

0.01 20 Jun 2007

Author:

Cristina Roura Claver

Constructor Detail

CopyTo

```
public CopyTo(java.io.FilesrcFile,
              java.io.FiledestFile)
```

Constructor that creates the input and output stream from source file and destination file.

Parameters:

`srcFile` - the source file.
`destFile` - the destination file.

CopyTo

```
public CopyTo(java.io.FilesrcFile,
              SmbFiledestFile)
```

Constructor that creates the input and output stream from source file and destination smbfile.

Parameters:

`srcFile` - the source file.

`destFile` - the destination smbfile.

See Also:

`SmbFile`

CopyTo

```
public CopyTo(SmbFilesrcFile,
              SmbFiledestFile)
```

Constructor that creates the source and destination smbfile.

Parameters:

`srcFile` - the source smbfile.

`destFile` - the destination smbfile.

See Also:

`SmbFile`

CopyTo

```
public CopyTo(SmbFilesrcFile,
              java.io.FiledestFile)
```

Constructor that creates the input and output stream from source smbfile and destination file.

Parameters:

`srcFile` - the source smbfile.

`destFile` - the destination file.

See Also:

`SmbFile`

Method Detail

run

```
public void run()
```

Executes the copy of the files.

Specified by:

`run` in interface `java.lang.Runnable`

Overrides:

`run` in class `java.lang.Thread`

---

2. Package lhmc.network

}

---

lhmc.network

Class HostsVector

```
java.lang.Object
  └ lhmc.network.HostsVector
```

```
public class HostsVectorextends java.lang.Object
```

HostsVector is class manages a hostname vector.

Version:
0.01 Jun 2007

Author:
Cristina Roura Claver

Constructor Detail

HostsVector

```
public HostsVector()
```

HostsVector constructor.

Method Detail

addHost

```
public void addHost(java.lang.StringhostName)
```

Adds a hostname string to the vector. Synchronized method to be used by threads.

Parameters:
`hostName` - the host name.

---

getHosts

```
public java.util.Vector<java.lang.String> getHosts()
```

Gets the hostname vector. Synchronized method to be used by threads.

Returns:

the host names vector.

}

lhmc.network

Class HostListener

```
java.lang.Object
  └ lhmc.network.HostListener
```

All Implemented Interfaces:

java.lang.Runnable

```
public class HostListenerextends java.lang.Objectimplements java.lang.Runnable
```

HostListener is a threaded class that listens for a multicast messages and when a multicast message arrive sends the hostname.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

Constructor Detail

HostListener

```
public HostListener()
```

Method Detail

run

```
public void run()
```

Executes the HostListener thread.

Specified by:

`run` in interface `java.lang.Runnable`

---

lhmc.network

Class SendHostName

```
java.lang.Object
  └ lhmc.network.SendHostName
```

All Implemented Interfaces:

java.lang.Runnable

```
public class SendHostNameextends java.lang.Objectimplements java.lang.Runnable
```

SendHostName is a threaded class that sends a host name to the host that has made the petition.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

Constructor Detail

SendHostName

```
public SendHostName(java.net.InetAddressserverAddress,
                    intport)
```

SendHostName constructor.

Parameters:

`serverAddress` - the address to send the new packet.

`port` - the port to send the new packet.

Method Detail

run

```
public void run()
```

Executes the SendHostName thread.

Specified by:

`run` in interface `java.lang.Runnable`

}

lhmc.network

Class HostsSearch

```
java.lang.Object
  └ lhmc.network.HostsSearch
```

All Implemented Interfaces:

java.lang.Runnable

```
public class HostsSearchextends java.lang.Objectimplements java.lang.Runnable
```

HostsSearch is a threaded class that sends a multicast message and waits for ressponses. If there is a response saves the host name recived to a HostsVector.

Author:

Cristina Roura Claver

Constructor Detail

HostsSearch

```
public HostsSearch(HostsVectorhostsVector)
```

HostsSearch constructor.

Parameters:

`hostsVector` - the hostvector to fill.

Method Detail

run

```
public void run()
```

Executes the HostsSearch thread.

Specified by:

`run` in interface `java.lang.Runnable`

---

lhmc.network

Class ReceiveHostName

```
java.lang.Object
  └ lhmc.network.ReceiveHostName
```

All Implemented Interfaces:

java.lang.Runnable

```
public class ReceiveHostNameextends java.lang.Objectimplements java.lang.Runnable
```

ReceiveHostName is a threaded class that manages the received packet with the hostname.

Author:

Cristina Roura Claver

Constructor Detail

ReceiveHostName

```
public ReceiveHostName(java.net.Socketsocket,
                       HostsVectorhostsVector)
```

ReceiveHostName constructor.

Parameters:

`socket` - the socket that recives the packet.
`hostsVector` - the hostsVector to be filled.

Method Detail

run

```
public void run()
```

Executes the ReceiveHostName thread.

Specified by:

`run` in interface `java.lang.Runnable`

---

3. Package lhmc.plugins

---

lhmc.plugins

Class PluginFactory

```
java.lang.Object
  └ lhmc.plugins.PluginFactory
```

```
public class PluginFactoryextends java.lang.Object
```

PluginFactory decides which plugin must be executed depending on the file type of the giben file.

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Constructor Detail

PluginFactory

```
public PluginFactory()
```

Method Detail

getPlugin

```
public Plugin getPlugin(java.net.URLurl)
```

Returns the plugin suitable to execute the giben file.

Parameters:

`url` - the url file to execute.

Returns:

the plugin to use for executing the file.

---

getPlugin

```
public Plugin getPlugin(intcdType)
```

Returns the plugin suitable to execute the giben cdType.

Parameters:

`cdType` - the cdType to execute.

Returns:

the plugin to use for executing the cd or dvd.

---

figureOutfileType

```
public int figureOutfileType(java.io.Filefile)
```

Figures out the type of file.

Parameters:

`file` - the file to get the type.

Returns:

an integer that matches d.

---

figureOutfileType

```
public int figureOutfileType(SmbFilesmbFile)
```

Figures out the type of file.

Parameters:

`smbFile` - the smbfile to get the type.

Returns:

an integer that matches d.

---

lhmc.plugins

Class Plugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
```

Direct Known Subclasses:

BasicPlayerPlugin, CddaMPlayerPlugin, CddaPlayerPlugin, DvbMPlayerPlugin, DvdXinePlugin, ImagePlugin, MencoderPlugin, MPlayerPlugin, TvMPlayerPlugin

---

```
public abstract class Pluginextends java.lang.Object
```

Plugin abstract class. Must overide the run method.

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Field Detail

mainFrame

```
protected LHMCGUI mainFrame
```

---

backupFrame

```
protected LHMCGUI backupFrame
```

Constructor Detail

Plugin

```
public Plugin()
```

Method Detail

play

```
public abstract void play(java.net.URLfile)
```

Executes a file.

Parameters:

`file` - the url file to execute.

---

playAll

```
public abstract void playAll(java.net.URLfile)
```

Executes a directory.

Parameters:

`file` - the url directory to execute.

---

setMainFrame

```
public void setMainFrame(LHMCGUImainFrame)
```

Sets the main frame to mainFrame.

Parameters:

`mainFrame` - The main frame of the LHMCGUI.

}

---

lhmc.plugins

Class ImagePlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.ImagePlugin
```

All Implemented Interfaces:

java.awt.event.KeyListener, java.util.EventListener

```
public class ImagePluginextends Pluginimplements java.awt.event.KeyListener
```

ImagePlugin executes a single image file and shows it in fullscreen and executes a directory and make a slideshow from all the images in that directory.

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

```
protected java.awt.GraphicsDevice device
```

---

mainWindow

```
protected java.awt.Window mainWindow
```

---

ss

```
protected SlideShow ss
```

Method Detail

play

`public void play(java.net.URLfile)`

Shows the scaled image in fullscreen.

Specified by:
`play` in class `Plugin`
Parameters:
`file` - the image URL to show.

---

playAll

`public void playAll(java.net.URLfile)`

Shows a slideshow of a directory in fullscreen.

Specified by:
`playAll` in class `Plugin`
Parameters:
`file` - the URL directory to make the slideshow.

---

keyPressed

`public void keyPressed(java.awt.event.KeyEvente)`

Handles the keyPressed event by invoking the keyPressed methods on listener-a and listener-b.

Specified by:
`keyPressed` in interface `java.awt.event.KeyListener`
Parameters:
`e` - the key event.

---

keyReleased

```
public void keyReleased(java.awt.event.KeyEvente)
```

Handles the keyReleased event by invoking the keyReleased methods on listener-a and listener-b.

Specified by:

`keyReleased` in interface `java.awt.event.KeyListener`

Parameters:

`e` - the key event.

---

keyTyped

```
public void keyTyped(java.awt.event.KeyEvente)
```

Handles the keyTyped event by invoking the keyTyped methods on listener-a and listener-b.

Specified by:

`keyTyped` in interface `java.awt.event.KeyListener`

Parameters:

`e` - the key event.

}

---

lhmc.plugins

Class ScaledImageJComponent

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ lhmc.plugins.ScaledImageJComponent
```

```
public class ScaledImageJComponentextends javax.swing.JComponent
```

ScaledImageJComponent reads an image file and resizes it to fit fullscreen mantaing its ratio. Image I/O has built-in support for GIF, PNG, JPEG, BMP, and WBMP.

Author:

Cristina Roura Claver

Constructor Detail

ScaledImageJComponent

```
public ScaledImageJComponent()
```

Constructs a null scaled image.

ScaledImageJComponent

```
public ScaledImageJComponent(java.net.URLfile)
```

Constructs a scaled image from a file.

Parameters:

`file` - the url image to read.

ScaledImageJComponent

`public ScaledImageJComponent(java.lang.Stringstr)`

Constructs a scaled image from a string path.

Parameters:

`str` - the srt of the image to read.

Method Detail

setImage

`public void setImage(java.lang.Stringstr)`

Creates a scaled image from a strig path.

Parameters:

`str` - The path of the image.

---

getPreferredSize

`public java.awt.Dimension getPreferredSize()`

Gets the preferred size.

Overrides:

`getPreferredSize` in class `javax.swing.JComponent`

Returns:

The screen size.

---

paintScaledImage

`public void paintScaledImage(java.awt.Graphicsg)`

Invoques the paintComponent method.

Parameters:

`g` - the Graphics context.

---

paintComponent

```
protected void paintComponent(java.awt.Graphicsg)
```

Reimplementation of paintComponent to paint the img.

Overrides:

`paintComponent` in class `javax.swing.JComponent`

Parameters:

`g` - the Graphics context.

---

lhmc.plugins

Class SlideShow

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.plugins.SlideShow
```

All Implemented Interfaces:

java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.lang.Runnable, javax.accessibility.Accessible

---

```
public class SlideShowextends javax.swing.JPanelimplements java.lang.Runnable
```

Slideshow is a threaded class that shows images in fullscreen form a directory.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

SlideShow

```
public SlideShow(java.net.URLfile)
```

Constructs SlideShow managing the files from the directory.

Parameters:

`file` - the url file directory to do the slideshow

Method Detail

run

```
public void run()
```

Executes the slideshow, showing an image each MILISECONDS.

Specified by:

`run` in interface `java.lang.Runnable`

---

start

```
public void start()
```

Starts the thread calling the run method.

---

stop

```
public void stop()
```

Stops the thread avoiding deadlock-prone.

---

paintComponent

```
public void paintComponent(java.awt.Graphicsg)
```

Invoques the paintComponent method.

Overrides:

`paintComponent` in class `javax.swing.JComponent`

Parameters:

`g` - the Graphics context.

---

lhmc.plugins

Class BasicPlayerPlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.BasicPlayerPlugin
```

All Implemented Interfaces:

java.awt.event.FocusListener, java.awt.event.KeyListener, java.util.EventListener

---

```
public class BasicPlayerPluginextends Pluginimplements
java.awt.event.KeyListener, java.awt.event.FocusListener
```

BasicPlayerPlugin executes a single sound file or a directory of files making a playlist. When a file is played a play panel is showed. It supports MP3, OGG Vorbis, FLAC, MONKEY's AUDIO, WAV, AIFF, AU and SPEEX audio formats.

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Field Detail

player

```
protected BasicPlayer player
```

---

currentItem

```
protected PlaylistItem currentItem
```

---

audioInfo

```
protected java.util.Map audioInfo
```

---

positonValue

protected float **positonValue**

---

volume

protected double **volume**

---

isPaused

protected boolean **isPaused**

---

isMuted

protected boolean **isMuted**

Constructor Detail

BasicPlayerPlugin

public **BasicPlayerPlugin**()

Constructs the basic player plugin.

Method Detail

play

```
public void play(java.net.URLurl)
```

Shows the play panel and plays a single song.

Specified by:
`play` in class `Plugin`
Parameters:
`url` - the song to play.

---

playAll

```
public void playAll(java.net.URLfile)
```

Shows the play panel and creates a playlist for all the songs in the current directory, and plays one by one.

Specified by:
`playAll` in class `Plugin`
Parameters:
`file` - the songs directory to play.

---

run

```
public void run(java.net.URLurlFile)
```

Starts to play a song.

Parameters:
`urlFile` - the song file.

---

opened

```
public void opened(java.lang.Objectstream,
                   java.util.Mapproperties)
```

Open callback, stream is ready to play. properties map includes audio format dependant features such as bitrate, duration, frequency, channels, number of frames, vbr flag, id3v2/id3v1 (for MP3 only), comments (for Ogg Vorbis), ...

Parameters:

`stream` - could be File, URL or InputStream

`properties` - audio stream properties.

---

progress

```
public void progress(intbytesread,
                     longmicroseconds,
                     byte[]pcmdata,
                     java.util.Mapproperties)
```

Progress callback while playing. This method is called severals time per seconds while playing. properties map includes audio format features such as instant bitrate, microseconds position, current frame number, ...

Parameters:

`bytesread` - from encoded stream.

`microseconds` - elapsed (**reseted after a seek !**).

`pcmdata` - PCM samples.

`properties` - audio stream parameters.

---

stateUpdated

```
public void stateUpdated(BasicPlayerEventevent)
```

Notification callback for basicplayer events such as opened, eom ...

Parameters:

`event` -

---

setController

```
public void setController(BasicControllercontroller)
```

A handle to the BasicPlayer, plugins may control the player through the controller (play, stop, ...)

Parameters:

`controller` - : a handle to the player

---

display

```
public void display(java.lang.Stringmsg)
```

Displays a message.

Parameters:

`msg` - A string of the message.

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:

`focusGained` in interface `java.awt.event.FocusListener`

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

---

keyPressed

```
public void keyPressed(java.awt.event.KeyEvente)
```

Specified by:
keyPressed in interface java.awt.event.KeyListener

---

keyReleased

```
public void keyReleased(java.awt.event.KeyEvente)
```

Specified by:
keyReleased in interface java.awt.event.KeyListener

---

keyTyped

```
public void keyTyped(java.awt.event.KeyEvente)
```

Specified by:
keyTyped in interface java.awt.event.KeyListener

---

lhmc.plugins

Class ExternalPlugin

```
java.lang.Object
  └ lhmc.plugins.ExternalPlugin
```

All Implemented Interfaces:

java.lang.Runnable

```
public class ExternalPluginextends java.lang.Objectimplements java.lang.Runnable
```

ExternalPlugin executes a command to run a non-java external plugin.

Version:

0.01 Jul 2007

Author:

Cristina Roura Claver

Method Detail

executeCommand

```
public java.lang.Process executeCommand()
```

Executes the command.

Returns:

Process the process in execution.

---

setCommand

```
public void setCommand(java.lang.String[]command)
```

Sets the command string.

Parameters:

`command` - the command string.

---

run

```
public void run()
```

Executes this thread.

Specified by:
`run` in interface `java.lang.Runnable`

---

start

```
public void start()
```

Starts the thread calling the run method.

---

stop

```
public void stop()
```

Stops the thread avoiding deadlock-prone.

---

lhmc.plugins

Class MPlayerPlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.MPlayerPlugin
```

---

public class **MPlayerPlugin**extends Plugin

MPlayerPlugin executes a single video file in fullscreen

Version:

0.01 29 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

protected java.awt.GraphicsDevice **device**

---

mainWindow

protected java.awt.Window **mainWindow**

Method Detail

play

```
public void play(java.net.URLfile)
```

Plays a video file.

Specified by:

`play` in class `Plugin`

Parameters:

`file` - the url video file to execute.

---

playAll

```
public void playAll(java.net.URLfile)
```

Description copied from class: `Plugin`

Executes a directory.

Specified by:

`playAll` in class `Plugin`

Parameters:

`file` - the url directory to execute.

}

---

lhmc.plugins

Class CddaMPlayerPlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.CddaMPlayerPlugin
```

All Implemented Interfaces:

java.awt.event.FocusListener, java.awt.event.KeyListener, java.util.EventListener

---

```
public class CddaMPlayerPluginextends Pluginimplements
java.awt.event.KeyListener, java.awt.event.FocusListener
```

CddaMPlayerPlugin plays an audio CD with MPlayer

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

```
protected java.awt.GraphicsDevice device
```

---

mainWindow

```
protected java.awt.Window mainWindow
```

Method Detail

play

```
public void play(java.net.URLfile)
```

Shows the play panel and plays the first track of an audio Cd.

Specified by:
`play` in class `Plugin`
Parameters:
`file` - not in use.

---

generateCommand

```
public java.lang.String[] generateCommand()
```

Creates the command to be executed.

Returns:
the command string.

---

playAll

```
public void playAll(java.net.URLfile)
```

Description copied from class: `Plugin`
Executes a directory.

Specified by:
`playAll` in class `Plugin`
Parameters:
`file` - the url directory to execute.

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:
focusGained in interface java.awt.event.FocusListener

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:
focusLost in interface java.awt.event.FocusListener

---

keyPressed

```
public void keyPressed(java.awt.event.KeyEvente)
```

Specified by:
keyPressed in interface java.awt.event.KeyListener

---

keyReleased

```
public void keyReleased(java.awt.event.KeyEvente)
```

Specified by:
keyReleased in interface java.awt.event.KeyListener

---

keyTyped

```
public void keyTyped(java.awt.event.KeyEvente)
```

Specified by:
keyTyped in interface java.awt.event.KeyListener

---

lhmc.plugins

Class DvdXinePlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.DvdXinePlugin
```

```
public class DvdXinePluginextends Plugin
```

DvdXinePlugin reproduces a video DVD with Xine.

Version:

0.01 29 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

```
protected java.awt.GraphicsDevice device
```

---

mainWindow

```
protected java.awt.Window mainWindow
```

Method Detail

play

```
public void play(java.net.URLfile)
```

Plays the DVD.

Specified by:

`play` in class `Plugin`

Parameters:

`file` - not used.

---

playAll

```
public void playAll(java.net.URLfile)
```

Description copied from class: `Plugin`

Executes a directory.

Specified by:

`playAll` in class `Plugin`

Parameters:

`file` - the url directory to execute.

---

lhmc.plugins

Class DvbMPlayerPlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.DvbMPlayerPlugin
```

```
public class DvbMPlayerPluginextends Plugin
```

DvbMPlayerPlugin displays the digital TV with MPlayer.

Version:

0.01 29 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

```
protected java.awt.GraphicsDevice device
```

---

mainWindow

```
protected java.awt.Window mainWindow
```

Method Detail

play

```
public void play(java.net.URLfile)
```

Shows the television.

Specified by:

`play` in class `Plugin`

Parameters:

`file` - not used.

---

playAll

```
public void playAll(java.net.URLfile)
```

Description copied from class: `Plugin`

Executes a directory.

Specified by:

`playAll` in class `Plugin`

Parameters:

`file` - the url directory to execute.

---

lhmc.plugins

Class MencoderPlugin

```
java.lang.Object
  └ lhmc.plugins.Plugin
      └ lhmc.plugins.MencoderPlugin
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.util.EventListener

---

```
public class MencoderPluginextends Pluginimplements java.awt.event.FocusListener,
java.awt.event.ActionListener
```

MencoderPlugin records television shows.

Version:

0.01 Mar 2007

Author:

Cristina Roura Claver

Field Detail

device

```
protected java.awt.GraphicsDevice device
```

---

mainWindow

```
protected java.awt.Window mainWindow
```

---

focusedButton

```
protected CustomButton focusedButton
```

Constructor Detail

MencoderPlugin

```
public MencoderPlugin()
```

Constructs MencoderPlugin. Shows a list of chanels to choose wich to record.

Method Detail

play

```
public void play(java.net.URLfile)
```

Shows the panel.

Specified by:
`play` in class `Plugin`
Parameters:
`file` - not used.

---

playAll

```
public void playAll(java.net.URLfile)
```

Description copied from class: `Plugin`
Executes a directory.

Specified by:
`playAll` in class `Plugin`
Parameters:
`file` - the url directory to execute.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:

`focusGained` in interface `java.awt.event.FocusListener`

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

---

4. Package lhmc.utils

---

lhmc.utils

Class ConfigReader

```
java.lang.Object
  └ lhmc.utils.ConfigReader
```

```
public class ConfigReaderextends java.lang.Object
```

ConfigReader reads the config file and gets it's properties.

Version:

0.01 Jul 2007

Author:

Cristina Roura Claver

Constructor Detail

ConfigReader

```
public ConfigReader()
```

Constructs ConfigReader.

Method Detail

getProperty

```
public java.lang.String getProperty(java.lang.Stringkey)
```

Gets the property string from key string.

Parameters:

`key` - the key string.

Returns:

the property related to the key.

---

propertyNames

```
public java.util.Enumeration propertyNames()
```

Gets an enumeration on key Names

Returns:

the enumeration of keys.

---

loadColor

```
public java.awt.Color loadColor(java.lang.StringcolorType)
```

Gets the color from a colortype string.

Parameters:

`colorType` - the name of the color type to get.

Returns:

the Color required.

---

loadFont

```
public java.awt.Font loadFont(java.lang.StringfontType)
```

Gets the font from a fontType string.

Parameters:

`fontType` - the name of the font type to get.

Returns:

the Font required.

---

lhmc.utils

Class OpticalDiscTypeFinder

```
java.lang.Object
  └ lhmc.utils.OpticalDiscTypeFinder
```

```
public class OpticalDiscTypeFinderextends java.lang.Object
```

OpticalDiscTypeFinder uses cdtool and dvd+rwtools to discover the disc type.

Version:
0.01 Jul 2007

Author:
Cristina Roura Claver

Constructor Detail

OpticalDiscTypeFinder

```
public OpticalDiscTypeFinder()
```

Constructs OpticalDiscTypeFinder

Method Detail

setDiscType

```
public void setDiscType(inttype)
```

Sets the disc type

Parameters:
`type` - the disc type.

---

getDiscType

```
public int getDiscType()
```

Gets the disc type

Returns:

the disc type.

---

getTypeOf

```
public int getTypeOf(java.lang.Stringtype)
```

Gets the type identification from a string.

Parameters:

`type` - the disc string type.

Returns:

the disc type.

---

lhmc.utils

Class RemovableDevicesActivator

```
java.lang.Object
  └ lhmc.utils.RemovableDevicesActivator
```

```
public class RemovableDevicesActivatorextends java.lang.Object
```

RemovableDevicesActivator mounts the removable devices connected to the system. The mount is done automaticaly accecing to the devices by automount.

Version:

0.01 Jul 2007

Author:

Cristina Roura Claver

Constructor Detail

RemovableDevicesActivator

```
public RemovableDevicesActivator(java.net.URLroot)
```

Constructs RemovableDevicesActivator

Parameters:

`root` - the root directory where the devices are mounted.

Method Detail

setDevicesRoot

```
public void setDevicesRoot(java.net.URLroot)
```

Sets the devices root directory.

Parameters:

`root` - the root directory where the devices are mounted.

---

getDevicesRoot

```
public java.net.URL getDevicesRoot()
```

Gets the devices root directory.

Returns:

the root directory where the devices are mounted.

---

setRemovableDevices

```
public void setRemovableDevices(java.net.URL[]devicesList)
```

Sets the devices directories URL array.

Parameters:

`devicesList` - the devices directory URL array where each device is mounted.

---

getRemovableDevices

```
public java.net.URL[] getRemovableDevices()
```

Gets the devices directories URL array.

Returns:

the devices directory URL array where each device is mounted.

---

activatingUSBDevices

```
public void activatingUSBDevices()
```

Activates the removable devices accecing to the files.

---

5. Package lhmc.gui.plugingui

---

lhmc.gui.plugingui

Class PluginGUI

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
```

All Implemented Interfaces:

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

Direct Known Subclasses:

DVDCDJPanel, ImagesJPanel, MoviesJPanel, MusicJPanel, RemovableDevJPanel, TvJPanel

---

```
public class PluginGUIextends javax.swing.JPanelimplements
java.awt.event.FocusListener
```

Plugin GUI. Each plugin inherits form this class, that contains the basics for the plugin panel.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

USB_DEVICES

```
protected static final int USB_DEVICES
```

See Also:

Constant Field Values

CD_DVD_DEVICE

```
protected static final int CD_DVD_DEVICE
```

See Also:

Constant Field Values

LOCAL_FILE

```
protected static final int LOCAL_FILE
```

See Also:

Constant Field Values

REMOTE_SMBFILE

```
protected static final int REMOTE_SMBFILE
```

See Also:

Constant Field Values

---

focusedButton

```
protected CustomButton focusedButton
```

---

appTitle

```
protected java.lang.String appTitle
```

---

backButton

protected CustomButton **backButton**

Constructor Detail

PluginGUI

public **PluginGUI**()

Constructs a basic plugin panel.

Method Detail

createPanel

public void **createPanel**()

Creates the plugin panel.

---

getTitle

public java.lang.String **getTitle**()

Gets the title of the plugin.

Returns:

The title of the plugin.

---

setTitle

public void **setTitle**(java.lang.Stringtitle)

Sets the title of the plugin.

Parameters:

`title` - The title of the plugin.

---

getMediaUrl

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

Gets the files location.

Returns:

The files location.

---

setMediaUrl

```
public void setMediaUrl(java.lang.Stringurl)
```

Sets the files location.

Parameters:

`url` - The files location.

---

setMainFrame

```
public void setMainFrame(LHMCGUImainFrame)
```

Sets the main frame to mainFrame.

Parameters:

`mainFrame` - The main frame of the LHMCGUI.

---

getMainFrame

```
public LHMCGUI getMainFrame()
```

Gets the main frame to mainFrame.

Returns:

The main frame of the LHMCGUI.

See Also:

LHMCGUI

---

getPluginFactory

```
public PluginFactory getPluginFactory()
```

Gets the plugin factory.

Returns:

The plugin factory.

See Also:

PluginFactory

---

focusComponent

```
public void focusComponent()
```

Requests the focus for the initial focused component.

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:

focusGained in interface java.awt.event.FocusListener

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

focusLost in interface java.awt.event.FocusListener

}

---

lhmc.gui.plugingui

Class ImagesJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.ImagesJPanel
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible

---

```
public class ImagesJPanelextends PluginGUIimplements
java.awt.event.ActionListener
```

Images viewer panel. Has a option list buttons and a browser panel with thumbnails.

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

filesPanel

```
protected ThumbnailsBrowser filesPanel
```

Constructor Detail

ImagesJPanel

```
public ImagesJPanel()
```

Constructs the images viewer panel.

Method Detail

createPanel

```
public void createPanel()
```

Creates the images viewer panel.

Overrides:

createPanel in class PluginGUI

---

focusThumbnail

```
public void focusThumbnail()
```

Requests the focus for the current thumbnail.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

actionPerformed in interface java.awt.event.ActionListener

Parameters:

e - The action event

---

focusComponent

```
public void focusComponent()
```

Requests the focus for the initial focused component.

Overrides:

focusComponent in class PluginGUI

---

lhmc.gui.plugingui

Class MusicJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.MusicJPanel
```

```
public class MusicJPanelextends PluginGUIimplements java.awt.event.ActionListener
```

Music player panel. Has a option list buttons and a browser panel with thumbnails.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

filesPanel

```
protected ThumbnailsBrowser filesPanel
```

Constructor Detail

MusicJPanel

```
public MusicJPanel()
```

Constructs the music listener panel

Method Detail

createPanel

```
public void createPanel()
```

Creates the Music Panel

Overrides:

createPanel in class PluginGUI

---

createComponents

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

Creates all the components of the music panel. Is composed by a buttons list and an thumbnail browser.

Returns:

The music panel.

---

createOptionsPanel

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

Creates all the option buttons.

Returns:

The buttons panel.

---

actionPerformed

`public void **actionPerformed**(java.awt.event.ActionEvente)`

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusComponent

`public void **focusComponent**()`

Requests the focus for the initial focused component.

Overrides:

`focusComponent` in class `PluginGUI`

---

lhmc.gui.plugingui

Class MoviesJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.MoviesJPanel
```

```
public class MoviesJPanelextends PluginGUIimplements
java.awt.event.ActionListener
```

Movies player panel. Has a option list buttons and a browser panel with thumbnails.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

filesPanel

```
protected ThumbnailsBrowser filesPanel
```

Constructor Detail

MoviesJPanel

```
public MoviesJPanel()
```

Constructs the movie player panel

Method Detail

createPanel

```
public void createPanel()
```

Creates the movies panel.

Overrides:

createPanel in class PluginGUI

---

createComponents

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

Creates all the components of the music panel. Is composed by a buttons list and an thumbnail browser.

Returns:

The music panel.

---

createOptionsPanel

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

Creates all the option buttons.

Returns:

The buttons panel.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusComponent

```
public void focusComponent()
```

Requests the focus for the initial focused component.

Overrides:

`focusComponent` in class `PluginGUI`

}

---

lhmc.gui.plugingui

Class DVDCDJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.DVDCDJPanel
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible

---

```
public class DVDCDJPanelextends PluginGUIimplements java.awt.event.ActionListener
```

DVD CD reproduction panel. Depending on the type of DVD or CD it reproduces automaticaly or displays a panel with an option list buttons and a browser panel with thumbnails.

Version:

0.01 20 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

filesPanel

```
protected ThumbnailsBrowser filesPanel
```

Constructor Detail

DVDCDJPanel

```
public DVDCDJPanel()
```

Constructs the DVDCD menu.

Method Detail

createPanel

```
public void createPanel()
```

Creates the movies panel.

Overrides:

`createPanel` in class `PluginGUI`

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusComponent

```
public void focusComponent()
```

Requests the focus for the initial focused component.

Overrides:

`focusComponent` in class `PluginGUI`

---

lhmc.gui.plugingui

Class RemovableDevJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.RemovableDevJPanel
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible

---

```
public class RemovableDevJPanelextends PluginGUIimplements
java.awt.event.ActionListener
```

Removable Devices panel. Has a option list buttons and a browser panel with thumbnails.

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

filesPanel

```
protected ThumbnailsBrowser filesPanel
```

Constructor Detail

RemovableDevJPanel

```
public RemovableDevJPanel()
```

Constructs the removable devices panel

Method Detail

createPanel

```
public void createPanel()
```

Creates the movies panel.

Overrides:

createPanel in class PluginGUI

---

createComponents

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

Creates all the components of the removable devices panel. Is composed by a buttons list and an thumbnail browser.

Returns:

The removibles panel.

---

createOptionsPanel

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

Creates all the option buttons.

Returns:

The buttons panel.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusComponent

```
public void focusComponent()
```

Requests the focus for the initial focused component.

Overrides:

`focusComponent` in class `PluginGUI`

---

lhmc.gui.plugingui

Class TvJPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.plugingui.PluginGUI
                      └ lhmc.gui.plugingui.TvJPanel
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible

---

```
public class TvJPanelextends PluginGUIimplements java.awt.event.ActionListener
```

Television viewer panel. Has a option list buttons.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

TvJPanel

```
public TvJPanel()
```

Constructs the television viewer panel.

Method Detail

createPanel

```
public void createPanel()
```

Creates the television viewer panel.

Overrides:
`createPanel` in class `PluginGUI`

---

createComponents

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

Creates all the components of the television viewer panel. Is composed by a buttons list.

Returns:
The television viewer panel.

---

createOptionsPanel

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

Creates all the option buttons.

Returns:
The buttons panel.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:
`actionPerformed` in interface `java.awt.event.ActionListener`
Parameters:
`e` - The action event

---

6. Package lhmc.gui.thumbnailsbrowser

---

lhmc.gui.thumbnailsbrowser

Class ThumbnailPanel

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.thumbnailsbrowser.ThumbnailPanel
```

All Implemented Interfaces:

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

---

```
public class ThumbnailPanelextends javax.swing.JPanel
```

ThumbnaiPanel is the external panel that contains the thumbnail and adds a border.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

ThumbnailPanel

```
public ThumbnailPanel()
```

Constructs the thumbanail panel

Method Detail

setThumbnailPath

```
public void setThumbnailPath(java.net.URLfilePath)
```

Sets the path of the thumbnail.

Parameters:

`filePath` - The file of the thumbnail.

---

getThumbnailPath

```
public java.net.URL getThumbnailPath()
```

Gets the path of the thumbnail.

Returns:

The url file of the thumbnail.

---

lhmc.gui.thumbnailsbrowser

Class ThumbnailFacade

```
java.lang.Object
  └ lhmc.gui.thumbnailsbrowser.ThumbnailFacade
```

```
public class ThumbnailFacadeextends java.lang.Object
```

ThumbnailFacade provides a simplified interface to the external classes: ThumbanailsManager, ThumbnailsPanel. Manages the files from a directory and its thumbnails.

Version:
0.01 Jun 2007

Author:
Cristina Roura Claver

Constructor Detail

ThumbnailFacade

```
public ThumbnailFacade(java.net.URL[]files)
```

Constructs the thumbnail facade.

Parameters:
`files` - an array of files in a directory.

Method Detail

changeDirectory

```
public void changeDirectory(java.net.URL[]files)
```

Changes the current directory, changin the tree node

Parameters:
`files` - The new directory files.

---

getFileNameAt

```
public java.lang.String getFileNameAt(intindex)
```

Gets the file name at the certain position.

Parameters:

`index` - The position of the thumbnail.

Returns:

The file name.

---

getFileAt

```
public java.net.URL getFileAt(intindex)
```

Gets the file at the certain position.

Parameters:

`index` - The position of the thumbnail file.

Returns:

The url file.

---

createThumbnail

```
public javax.swing.JPanel createThumbnail(intindex)
```

Creates a thumbnail panel for one file at certain position in the tree.

Parameters:

`index` - The position of the file.

Returns:

The thumbnail panel.

---

lhmc.gui.thumbnailsbrowser

Class ThumbnailsBrowser

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JScrollPane
                  └ lhmc.gui.thumbnailsbrowser.ThumbnailsBrowser
```

```
public class ThumbnailsBrowserextends javax.swing.JScrollPane
```

ThumbnailsBrowser its a JScrollPane that contains thumbnails corresponding to the files in a especified directory.

Version:

0.01 20 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

selectedThumbnail

```
protected java.net.URL selectedThumbnail
```

---

thumbnailFacade

```
protected ThumbnailFacade thumbnailFacade
```

---

pluginFactory

```
protected PluginFactory pluginFactory
```

mainFrame

```
protected LHMCGUI mainFrame
```

---

focusedThumbnailPanel

```
protected javax.swing.JPanel focusedThumbnailPanel
```

Constructor Detail

ThumbnailsBrowser

```
public ThumbnailsBrowser(java.net.URLrootFile,
                         java.io.FileFilterfileFilter,
                         PluginFactorypluginFactory,
                         LHMCGUImainFrame)
```

Constructs the thumbanail browser panel.

Parameters:

`rootFile` - the current directory to browse.
`fileFilter` - the file filter to apply if the all files are from the same kind.
`pluginFactory` - the pluginFactory to instance plugins.
`mainFrame` - the mainFrame of the application.

ThumbnailsBrowser

```
public ThumbnailsBrowser(java.net.URLrootFile,
                         java.net.URL[]initialRemovableFiles,
                         java.io.FileFilterfileFilter,
                         PluginFactorypluginFactory,
                         LHMCGUImainFrame)
```

Constructs the thumbanail browser panel for removable devices.

Parameters:

`rootFile` - the current directory to browse.
`initialRemovableFiles` - url file array of removable devices.
`fileFilter` - the file filter to apply if the all files are from the same kind.
`pluginFactory` - the pluginFactory to instance plugins.
`mainFrame` - the mainFrame of the application.

Method Detail

getSelectedThumbnail

```
public java.net.URL getSelectedThumbnail()
```

Gets the URL file of the selected thumbnail.

Returns:

The url file correspondig to the thumbnail.

---

getActualRoot

```
public java.net.URL getActualRoot()
```

Gets current directory.

Returns:

The URL file of the actual root.

---

setActualRoot

```
public void setActualRoot(java.net.URLroot)
```

Sets current directory.

Parameters:

`root` - The url file of the actual root.

---

setInitialRoot

```
public void setInitialRoot(java.net.URLroot)
```

Sets the initial root directory.

Parameters:

`root` - The url file of the new root directory.

---

getInitialRoot

```
public java.net.URL getInitialRoot()
```

Gets the initial root directory.

Returns:

The url file of the root directory.

---

setUsbDevices

```
public void setUsbDevices(java.net.URL[]usbDevices)
```

Sets the removible devices directories.

Parameters:

`usbDevices` - The url files of the removible devices.

---

getSelectedThumbnails

```
public java.util.Vector<java.net.URL> getSelectedThumbnails()
```

Gets a vector of URL files from the selected thumbnails.

Returns:

The url files vector correspondig to the selected thumbnails.

---

getActualFilesystemLocation

```
public int getActualFilesystemLocation()
```

Gets the actual filesystem location

Returns:

The actual filesystem location.

---

createFilesPanel

```
public void createFilesPanel(java.net.URLrootFile,
                             inturlType)
```

Creates a panel of thumbnails. Each thumbnail corresponds to a directory, a file or a back image.

Parameters:

`rootFile` - The current directory.
`urlType` - the type of url.

---

getFocusedThumbnailPanel

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

Returns the current focused Thumbnail.

Returns:

The focused thumbnail panel.

---

7. Package lhmc.gui.util

---

lhmc.gui.util

Class NoticeDialog

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ java.awt.Window
              └ java.awt.Dialog
                  └ javax.swing.JDialog
                      └ lhmc.gui.util.NoticeDialog
```

All Implemented Interfaces:

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

---

```
public class NoticeDialogextends javax.swing.JDialogimplements
java.awt.event.FocusListener
```

Custom Dialog.

Version:

0.01 20 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

NoticeDialog

```
public NoticeDialog(javax.swing.JFrameframe,
                    java.lang.Stringmessage)
```

Constructs the custom dialog.

Parameters:

`frame` - the fame on the dialog will be displayed.

`message` - the message to display by the dialog.

Method Detail

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:

`focusGained` in interface `java.awt.event.FocusListener`

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

---

lhmc.gui.util

Class SharedFileSystemsDialog

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ java.awt.Window
              └ java.awt.Dialog
                  └ javax.swing.JDialog
                      └ lhmc.gui.util.SharedFileSystemsDialog
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible, javax.swing.RootPaneContainer, javax.swing.WindowConstants

---

```
public class SharedFileSystemsDialogextends javax.swing.JDialogimplements
java.awt.event.FocusListener, java.awt.event.ActionListener
```

Shared filessystems and removible devices choose dialog.

Version:

0.01 20 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

SharedFileSystemsDialog

```
public SharedFileSystemsDialog(javax.swing.JFrameframe)
```

Constructs the chooser dialog.

Method Detail

createHostsDialog

```
public void createHostsDialog(java.lang.StringfilesystemLocation)
```

Creates the panel of the chooser dialog.

Parameters:

`filesystemLocation` - the current location

---

createToSaveDialog

```
public void createToSaveDialog(java.lang.StringfilesystemLocation)
```

Creates the panel of the chooser dialog to save a file.

Parameters:

`filesystemLocation` - the current location

---

getRemovableDevices

```
public java.net.URL[] getRemovableDevices()
```

Gets an array of removible devices location

Returns:

an array of removible devices location.

---

getHostsNames

```
public java.util.Vector<java.lang.String> getHostsNames()
```

Gets the remote available hostnames.

Returns:

a vector of hostnames.

---

getRemoteHost

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

Gets the choosed option.

Returns:
the name of the choosed option.

---

getHostType

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

Gets the choosed option type.

Returns:
the name of the choosed option type.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:
`actionPerformed` in interface `java.awt.event.ActionListener`
Parameters:
`e` - The action event

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:
`focusGained` in interface `java.awt.event.FocusListener`

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

---

lhmc.gui.util

Class Keyboard

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ java.awt.Window
              └ java.awt.Dialog
                  └ javax.swing.JDialog
                      └ lhmc.gui.util.Keyboard
```

All Implemented Interfaces:

java.awt.event.ActionListener, java.awt.event.FocusListener, java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable, java.util.EventListener, javax.accessibility.Accessible, javax.swing.RootPaneContainer, javax.swing.WindowConstants

---

```
public class Keyboardextends javax.swing.JDialogimplements
java.awt.event.FocusListener, java.awt.event.ActionListener
```

Keyboard. Dialog with keybload letters and an input label to write a name.

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

keys

```
public static final java.lang.String[] keys
```

Constructor Detail

Keyboard

```
public Keyboard(javax.swing.JFrameframe)
```

Constructs the Keyboard dialog.

Method Detail

getNewDirectory

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

Gets the name wrote.

Returns:

the wrote name.

---

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Specified by:

`focusGained` in interface `java.awt.event.FocusListener`

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

---

lhmc.gui.util

Class ImageJComponent

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ lhmc.gui.util.ImageJComponent
```

All Implemented Interfaces:

java.awt.image.ImageObserver, java.awt.MenuContainer, java.io.Serializable

---

```
public class ImageJComponentextends javax.swing.JComponent
```

Loads an Image from an external file and converts it a JComponent

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

ImageJComponent

```
public ImageJComponent()
```

Constructs a null image JComponent.

ImageJComponent

```
public ImageJComponent(java.io.Filefile)
```

Constructs an image JComponent from a File

Parameters:

`file` - The image file.

ImageJComponent

```
public ImageJComponent(java.lang.Stringstr)
```

Constructs an image JComponent from a String path.

Parameters:

`str` - The path where the image located.

Method Detail

setImage

```
public void setImage(java.lang.Stringstr)
```

Sets an image JComponent from a String path.

Parameters:

`str` - The path where the image located.

---

getPreferredSize

```
public java.awt.Dimension getPreferredSize()
```

Gets the preferred Size of the image.

Overrides:

`getPreferredSize` in class `javax.swing.JComponent`

Returns:

The size of the image.

---

paintComponent

```
protected void paintComponent(java.awt.Graphicsg)
```

Reimplementation of paintComponent to paint the img.

Overrides:

`paintComponent` in class `javax.swing.JComponent`

Parameters:

`g` - the Graphics context.

---

lhmc.gui.util

Class CustomButton

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.AbstractButton
                  └ javax.swing.JButton
                      └ lhmc.gui.util.CustomButton
```

All Implemented Interfaces:

java.awt.image.ImageObserver, java.awt.ItemSelectable, java.awt.MenuContainer, java.io.Serializable, javax.accessibility.Accessible, javax.swing.SwingConstants

---

```
public class CustomButtonextends javax.swing.JButton
```

Custom button with concrete characteristics.

Version:

0.01 Jun 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

CustomButton

```
public CustomButton()
```

Constructs the custom button.

CustomButton

```
public CustomButton(java.lang.Stringname)
```

Constructs the custom button.

Parameters:

`name` - The text of the button.

Method Detail

getImageURL

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

Gets the location of the image related to the button.

Returns:

the image path.

---

setImageURL

```
public void setImageURL(java.lang.StringimgUrl)
```

Sets the location of the image related to the button.

Parameters:

`imgUrl` - the image path.

---

8. Package lhmc.gui

---

lhmc.gui

Class LHMCGUI

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ java.awt.Window
              └ java.awt.Frame
                  └ javax.swing.JFrame
                      └ lhmc.gui.LHMCGUI
```

All Implemented Interfaces:

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

---

```
public class LHMCGUIextends javax.swing.JFrame
```

Main user interface. It contains: At top: A header, with the application name and date information. At center: A center panel with a title and a main panel.

Version:

0.01 Jan 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Constructor Detail

LHMCGUI

```
public LHMCGUI()
```

Constructs LHMC GUI

Method Detail

changeTitlePanel

```
public void changeTitlePanel(java.lang.Stringtitle)
```

Changes the panel title.

Parameters:

`title` - the name of the main panel.

---

addToMainScreenCardLayout

```
public void addToMainScreenCardLayout(javax.swing.JPanelnewMainScreenPanel,
                                      java.lang.Stringname)
```

Adds a new panel to the main screen panel card layout.

Parameters:

`newMainScreenPanel` - the panel to add in the card layout.

`name` - the name that identifies the new panel.

---

restoreMainScreen

```
public void restoreMainScreen(javax.swing.JPanelscreenPanel)
```

Restores the initial main screen, removing the previous screen panel.

Parameters:

`screenPanel` - the panel to remove from the card layout.

---

setMainScreenPanel

```
public void setMainScreenPanel(java.lang.Stringname)
```

Set the correspondig panel to the main panel and shows it. It also changes the title name.

Parameters:

`name` - the name of the panel to show.

---

backToMainScreen

```
public void backToMainScreen()
```

Set the main panel to menu panel and shows it.

---

getIsRecordingDvbt

```
public boolean getIsRecordingDvbt()
```

Returns if the application es recording the DVB-T

Returns:

true if it is recording.

---

setIsRecordingDvbt

```
public void setIsRecordingDvbt(booleanisRecording,
                               ExternalPluginep)
```

Sets isRecording attribute and the plugin that is running to record

Parameters:

`isRecording` - describes if the application is recording or not.

`ep` - the ExternalPlugin used to record.

---

getRecordingThread

```
public ExternalPlugin getRecordingThread()
```

Returns if the ExternalPlugin that is used to record DVB-T

Returns:

the ExternalPlugin.

---

addToCardLayout

```
public void addToCardLayout(javax.swing.JPanelnewMainPanel,
                            java.lang.Stringname)
```

Adds a new panel to the main panel card layout.

Parameters:

`newMainPanel` - the panel to add in the card layout.

`name` - the name that identifies the new panel.

---

setMainPanel

```
public void setMainPanel(java.lang.Stringname)
```

Set the correspondig panel to the main panel and shows it. It also changes the title name.

Parameters:

`name` - the name of the panel to show.

---

backToMenu

```
public void backToMenu()
```

Set the main panel to menu panel and shows it.

---

lhmc.gui

Class MainMenu

```
java.lang.Object
  └ java.awt.Component
      └ java.awt.Container
          └ javax.swing.JComponent
              └ javax.swing.JPanel
                  └ lhmc.gui.MainMenu
```

```
public class MainMenuextends javax.swing.JPanelimplements
java.awt.event.FocusListener, java.awt.event.ActionListener
```

Menu panel. It contains a button panel, each for each plugin available and a image panel, that shows an image representig the plugin.

Version:

0.01 Jan 2007

Author:

Cristina Roura Claver

See Also:

Serialized Form

Field Detail

focusedButton

```
public CustomButton focusedButton
```

---

pluginsClassName

```
protected java.util.Vector<java.lang.String> pluginsClassName
```

---

pluginsName

```
protected java.util.Vector<java.lang.String> pluginsName
```

Constructor Detail

MainMenu

```
public MainMenu(LHMCGUImainFrame)
```

Constructs the menu.

Parameters:

`mainFrame` - LHMC object

Method Detail

actionPerformed

```
public void actionPerformed(java.awt.event.ActionEvente)
```

Invoked when the action button pressed occurs.

Specified by:

`actionPerformed` in interface `java.awt.event.ActionListener`

Parameters:

`e` - The action event

---

focusGained

```
public void focusGained(java.awt.event.FocusEvente)
```

Invoked when a button gains focus.

Specified by:

`focusGained` in interface `java.awt.event.FocusListener`

Parameters:

`e` - The focus event

---

focusLost

```
public void focusLost(java.awt.event.FocusEvente)
```

Invoked when a button loses focus.

Specified by:

`focusLost` in interface `java.awt.event.FocusListener`

Parameters:

`e` - The focus event

---

9. Package lhmc

}

---

lhmc

Class LHMC

```
java.lang.Object
  └ lhmc.LHMC
```

```
public class LHMCextends java.lang.Object
```

Main Class.

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Constructor Detail

LHMC

```
public LHMC()
```

Method Detail

main

```
public static void main(java.lang.String[]args)
```

Main method.