

COBrA DAPPs

by Aldo D'Aquino

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Package

com.aldodaquino.cobra.authorserver

com.aldodaquino.cobra.authorserver Class Main

```
java.lang.Object
|
+--com.aldodaquino.cobra.authorserver.Main
```

```
public class Main
extends java.lang.Object
```

The Main class of the author server. The author server remains always online to listen access request. The author can use its server to deploy his content on the blockchain and publish it on the catalog. This server serves content also when the author has closed his client. Includes two functions that handle the two urls /deploy (to deploy a content) and /access to access a content.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

Main

```
public Main()
```

Methods

main

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

Main method.

Parameters:

args - a String[] passed through command line.

Throws:

IOException - if it is not possible to create the server.

Package

com.aldodaquino.cobra.connections

com.aldodaquino.cobra.connections Interface API

public interface **API**
extends

Interface for the author server API. Specify the urls of the handlers. Check Main class in [com.aldodaquino.cobra.authorserver](https://github.com/aldodaquino/cobra/blob/master/src/main/java/com/aldodaquino/cobra/authorserver/AuthorServer.java)

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

DEPLOY_API_PATH

public static final java.lang.String **DEPLOY_API_PATH**

Constant value: **/deploy**

ACCESS_API_PATH

public static final java.lang.String **ACCESS_API_PATH**

Constant value: **/access**

com.aldodaquino.cobra.connections

Class CobraHttpHelper

```
java.lang.Object
├── com.aldodaquino.javautils.HttpHelper
│   └── com.aldodaquino.cobra.connections.CobraHttpHelper
```

```
public class CobraHttpHelper
    extends HttpHelper
```

Contains method that help to make http request. Works with JSON body for POST request and query-style GET parameters.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

CobraHttpHelper

```
public CobraHttpHelper()
```

Methods

newHandler

```
public static com.sun.net.httpserver.HttpHandler
newHandler(java.util.function.BiConsumer consumer,
            Status status)
```

Return new HttpHandler

Parameters:

consumer - a function to be called when a new request arrive. The consumer has to accept the HttpExchange request and the Status.

status - to be passed to the consumer.

Returns:

HttpHandler, the handler.

com.aldodaquino.cobra.connections Class Status

```
java.lang.Object
|
+--com.aldodaquino.cobra.connections.Status
```

```
public class Status
extends java.lang.Object
```

Defines the status for the author-server.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

privateKey

```
public java.lang.String privateKey
```

credentials

```
public org.web3j.crypto.Credentials credentials
```

catalogManager

```
public com.aldodaquino.cobra.main.CatalogManager catalogManager
```

hostname

```
public java.lang.String hostname
```

port

```
public int port
```

Constructors

Status

```
public Status()
```

(continued from last page)

Package

com.aldodaquino.cobra.gui

com.aldodaquino.cobra.gui

Class Main

```
java.lang.Object
|
+--com.aldodaquino.cobra.gui.Main
```

```
public class Main
extends java.lang.Object
```

The GUI Main. Starts the GUI with the [StarterPanel](#).

Author:
Aldo D'Aquino.

Version:
1.0.

Constructors

Main

```
public Main()
```

Methods

main

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

Main method.

Parameters:
args - an empty array, no parameters are required.

com.aldodaquino.cobra.gui Class Status

```
java.lang.Object
|
+--com.aldodaquino.cobra.gui.Status
```

```
public class Status
extends java.lang.Object
```

The Status class. A Status object is generated in the [StarterPanel](#). Contains all the information about the user and the catalog and is passed through the classes.

Author:
Aldo D'Aquino.

Version:
1.0.

Fields

ROLE_CUSTOMER

```
public static final int ROLE_CUSTOMER
```

Constant value: 0

ROLE_AUTHOR

```
public static final int ROLE_AUTHOR
```

Constant value: 1

credentials

```
public org.web3j.crypto.Credentials credentials
```

Constructors

Status

```
public Status()
```

Methods

login

```
public void login(java.lang.String privateKey)
    throws javax.naming.OperationNotSupportedException
```

Given a private key generates and stores the credentials for this user.

(continued from last page)

Parameters:

`privateKey` - the user's private key.

Throws:

`OperationNotSupportedException` - if the user is already logged in.

connectCatalog

```
public void connectCatalog(java.lang.String catalogAddress)
    throws javax.naming.OperationNotSupportedException
```

Connects to an existent catalog and stores it.

Parameters:

`catalogAddress` - the catalog address.

Throws:

`OperationNotSupportedException` - if the user is not logged in.

disconnectCatalog

```
public void disconnectCatalog()
```

Disconnects from the catalog.

deployCatalog

```
public void deployCatalog()
    throws javax.naming.OperationNotSupportedException
```

Deploys a new catalog with the user credentials.

Throws:

`OperationNotSupportedException` - if the user is not logged in.

getUserAddress

```
public java.lang.String getUserAddress()
    throws javax.naming.OperationNotSupportedException
```

Returns the user address.

Returns:

a String with the user address.

Throws:

`OperationNotSupportedException` - if the user is not logged in.

isCatalogOwner

```
public boolean isCatalogOwner()
    throws javax.naming.OperationNotSupportedException
```

Returns true if the user that deployed the catalog is the current user, false otherwise.

Returns:

true if the current user is the catalog owner, false otherwise.

(continued from last page)

Throws:

`OperationNotSupportedException` - if the user is not connected to a catalog.

getCatalogManager

```
public CatalogManager getCatalogManager()
```

Returns the catalog manager.

Returns:

the `CatalogManager`.

getPrivateKey

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

Returns the user's private key.

Returns:

a `String` with the user's private key.

setRole

```
public void setRole(int role)
```

Set the role for the current user.

Parameters:

`role` - an `int` specifying the role.

com.aldodaquino.cobra.gui Class Utils

```
java.lang.Object
|
+--com.aldodaquino.cobra.gui.Utils
```

```
public class Utils
extends java.lang.Object
```

Utilities for the GUI.

Author:
Aldo D'Aquino.

Version:
1.0.

Constructors

Utils

```
public Utils()
```

Methods

newWindow

```
public static javax.swing.JFrame newWindow(java.lang.String title,
      javax.swing.JComponent panel,
      boolean exitOnClose)
```

Show a new centered Window with fixed dimensions and not resizable.

Parameters:

title - of the Window.
panel - to show in the Window body.
exitOnClose - if true exit the Client when the Window is close.

Returns:

the generated JFrame.

newMessageDialog

```
public static void newMessageDialog(java.lang.String msg)
```

Shows a dialog, running on another thread.

Parameters:

msg - the dialog message.

newErrorDialog

```
public static void newErrorDialog(java.lang.String msg)
```

(continued from last page)

Shows an error dialog, running on another thread.

Parameters:

msg - the error message.

newExitDialog

```
public static void newExitDialog(java.lang.String errorMessage)
```

Shows an error dialog that advice that the program will close, then exit the program.

Parameters:

errorMessage - the error message.

newConfirmDialog

```
public static boolean newConfirmDialog(java.lang.String msg)
```

Shows a confirmation dialog (yes/no).

Parameters:

msg - the question.

Returns:

true for yes, false for no.

setFontSize

```
public static void setFontSize(javax.swing.JLabel label,  
                                int fontSize)
```

Set the font size of a label.

Parameters:

label - of which set the font size.
fontSize - the size to set.

openFileDialog

```
public static java.io.File openFileDialog()
```

Show the file selection dialog for file choosing and saving.

Returns:

a File.

saveFileDialog

```
public static java.io.File saveFileDialog(java.lang.String defaultName)
```

Show the file selection dialog for file choosing and saving.

Parameters:

defaultName - specify the original filename of the incoming file.

Returns:

a File.

Package

com.aldodaquino.cobra.gui.components

com.aldodaquino.cobra.gui.components

Class AsyncPanel

```

java.lang.Object
  |
  +- java.awt.Component
        |
        +- java.awt.Container
              |
              +- javax.swing.JComponent
                    |
                    +- javax.swing.JPanel
                          |
                          +- com.aldodaquino.cobra.gui.components.AsyncPanel

```

All Implemented Interfaces:

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

Direct Known Subclasses:

[AuthorPanel](#), [ContentInfoPanel](#), [UpgradablePanel](#)

```

public class AsyncPanel
extends javax.swing.JPanel

```

A JPanel that listen for ancestor changes. If it is added to an ancestor it saves it a protected variable window. Include a doAsync method that runs the Runnable in another Thread and set the glass panel of the window in a loading state to prevent actions from the user.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

window

protected javax.swing.JFrame **window**

Constructors

AsyncPanel

protected **AsyncPanel**()

Constructor.

Methods

doAsync

protected void **doAsync**(java.lang.Runnable runnable)

Run a runnable asynchronously. Shows a loading panel during the loading.

(continued from last page)

Parameters:

runnable - to be run.

com.aldodaquino.cobra.gui.components

Class AuthorContentTable

```

java.lang.Object
  |-- java.awt.Component
    |-- java.awt.Container
      |-- javax.swing.JComponent
        |-- javax.swing.JTable
          |-- com.aldodaquino.cobra.gui.components.AuthorContentTable

```

All Implemented Interfaces:

```

java.io.Serializable, java.awt.MenuContainer, java.awt.image.ImageObserver,
javax.swing.TransferHandler.HasGetTransferHandler, java.io.Serializable, javax.swing.event.RowSorterListener,
javax.accessibility.Accessible, javax.swing.event.CellEditorListener, javax.swing.event.ListSelectionListener,
javax.swing.event.TableColumnModelListener, javax.swing.Scrollable, javax.swing.event.TableModelListener

```

```

public class AuthorContentTable
extends javax.swing.JTable

```

A JTable for the [AuthorPanel](#).

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

AuthorContentTable

```

public AuthorContentTable(Status status,
                           java.util.List contents)

```

Constructor.

Parameters:

status - the Status object.

contents - a List of Content objects.

Methods

isCellEditable

```

public boolean isCellEditable(int row,
                               int column)

```

com.aldodaquino.cobra.gui.components

Class CatalogForm

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   └-- com.aldodaquino.cobra.gui.components.CatalogForm
```

All Implemented Interfaces:

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

```
public class CatalogForm
extends javax.swing.JPanel
```

A JPanel used in the [StarPanel](#). Ask the user which catalog to connect to.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

CatalogForm

```
public CatalogForm(java.util.function.Consumer connectCallback,
                   java.lang.Runnable deployCallback)
```

Constructor.

Parameters:

connectCallback - a callback to be invoked when the deploy button is clicked or the form is submitted and the catalog address is correct.

deployCallback - a callback invoked when the deploy button is clicked.

com.aldodaquino.cobra.gui.components

Class ChartWidget

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.InfoPanel
│   │   │   │   │   └-- com.aldodaquino.cobra.gui.components.ChartWidget
```

All Implemented Interfaces:

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

public class **ChartWidget**
extends [InfoPanel](#)

An [InfoPanel](#) used in the [CustomerPanel](#). Shows the chart of the catalog, that includes: the latest content, the most popular content, and the highest rated content in absolute and for each category.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

ChartWidget

public **ChartWidget**([Status](#) status)

Constructor.

Parameters:

status - the Status object.

com.aldodaquino.cobra.gui.components

Class ComponentFactory

```
java.lang.Object
|
+--com.aldodaquino.cobra.gui.components.ComponentFactory
```

```
public class ComponentFactory
extends java.lang.Object
```

Components factory: makes components creation faster and easier.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

ComponentFactory

```
public ComponentFactory()
```

Methods

newButton

```
public static javax.swing.JButton newButton(java.lang.String text,
                                             java.awt.event.ActionListener e)
```

Returns a new JButton.

Parameters:

text - the text of the button.

e - the ActionListener of the button.

Returns:

a JButton.

newTextField

```
public static javax.swing.JTextField newTextField(java.awt.event.ActionListener e)
```

Returns a new JTextField.

Parameters:

e - the ActionListener called when enter is pressed.

Returns:

a JTextField.

(continued from last page)

newBorder

```
public static javax.swing.border.Border newBorder(int width,  
int height)
```

Returns a new border with the specified dimensions.

Parameters:

width - the border width.
height - the border height.

Returns:

a Border.

newVSpacer

```
public static java.awt.Component newVSpacer(java.awt.Dimension dimension)
```

Returns a vertical spacer of the specified dimensions.

Parameters:

dimension - the dimensions.

Returns:

a Component.

com.aldodaquino.cobra.gui.components

Class ContentList

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JList
│   │   │   └-- com.aldodaquino.cobra.gui.components.ContentList
```

All Implemented Interfaces:

java.io.Serializable, java.awt.MenuContainer, java.awt.image.ImageObserver,
javax.swing.TransferHandler.HasGetTransferHandler, java.io.Serializable, javax.accessibility.Accessible,
javax.swing.Scrollable

public class **ContentList**
extends javax.swing.JList

a JList of Content objects.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

ContentList

```
public ContentList(Status status,  
                  java.util.List contents)
```

Constructor.

Parameters:

status - the Status object.

contents - a List of Content objects.

com.aldodaquino.cobra.gui.components

Class InfoPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   └-- com.aldodaquino.cobra.gui.components.InfoPanel
```

All Implemented Interfaces:

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

Direct Known Subclasses:

[AuthorInfoPanel](#), [GenreInfoPanel](#), [ChartWidget](#)

```
public class InfoPanel
extends javax.swing.JPanel
```

Info panel, superclass of [AuthorInfoPanel](#), [GenreInfoPanel](#) and [ChartWidget](#).

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

latestLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel latestLabel
```

mostPopularLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel mostPopularLabel
```

highestRatedLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel highestRatedLabel
```

mostEnjoyedLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel mostEnjoyedLabel
```

biggestPriceFairnessLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel  
biggestPriceFairnessLabel
```

highestContentMeaningLabel

```
protected final com.aldodaquino.cobra.gui.components.LabelPanel  
highestContentMeaningLabel
```

Constructors

InfoPanel

```
protected InfoPanel(Status status,  
                    java.lang.String mainLabelString)
```

Constructor. Can be invoked only by its children.

Parameters:

status - the Status object.

mainLabelString - the String to be putted in the top of the panel, with a bigger font.

com.aldodaquino.cobra.gui.components

Class LabelPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.AsyncPanel
│   │   │   │   │   ├── com.aldodaquino.cobra.gui.components.UpgradablePanel
│   │   │   │   │   │   └-- com.aldodaquino.cobra.gui.components.LabelPanel
```

All Implemented Interfaces:

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

```
public class LabelPanel
extends UpgradablePanel
```

Label JPanel, contains a fixed label and an updatable value. The initial value is a loader spinner.

Author:

Aldo D'Aquino.

Version:

1.0.

Methods

update

```
public void update(Content content)
```

Set the content name as value of the panel in a link style.

Parameters:

content - the Content object.

com.aldodaquino.cobra.gui.components

Class LoginForm

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   └-- com.aldodaquino.cobra.gui.components.LoginForm
```

All Implemented Interfaces:

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

```
public class LoginForm
extends javax.swing.JPanel
```

Login Form under the Logo in the Starter Panel.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

LoginForm

```
public LoginForm(java.util.function.Consumer loginCallback)
```

Constructor.

Parameters:

loginCallback - a String Consumer called if the login button is clicked or enter is pressed and the private key is valid.

com.aldodaquino.cobra.gui.components

Class Logo

```
java.lang.Object
  |
  +- java.awt.Component
        |
        +- java.awt.Container
              |
              +- javax.swing.JComponent
                    |
                    +- javax.swing.JPanel
                          |
                          +- com.aldodaquino.cobra.gui.components.Logo
```

All Implemented Interfaces:

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

public class **Logo**
extends javax.swing.JPanel

Application Logo for the [StarterPanel](#).

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

Logo

```
public Logo()
```

Constructor.

com.aldodaquino.cobra.gui.components

Class NewContentsWidget

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   └-- com.aldodaquino.cobra.gui.components.NewContentsWidget
```

All Implemented Interfaces:

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

public class **NewContentsWidget**
extends javax.swing.JPanel

A widget inserted in the [CustomerPanel](#) under the [ChartWidget](#). Allows to select how many content the user want in the new content list and shows a window with this content.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

NewContentsWidget

public **NewContentsWidget**([Status](#) status)

Constructor.

Parameters:

status - the Status object.

com.aldodaquino.cobra.gui.components

Class RoleForm

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   └-- com.aldodaquino.cobra.gui.components.RoleForm
```

All Implemented Interfaces:

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

```
public class RoleForm
extends javax.swing.JPanel
```

The last of the Panels shows in the [StarterPanel](#). Asks the user if want to see the [CustomerPanel](#) or the [AuthorPanel](#).

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

RoleForm

```
public RoleForm( java.lang.Runnable browseCallback,
                 java.lang.Runnable manageCallback,
                 java.lang.Runnable disconnectCallback,
                 java.lang.Runnable deleteCallback)
```

Constructor.

Parameters:

browseCallback - callback for the "Browser contents" button.

manageCallback - callback for the "Manage my contents" button.

disconnectCallback - callback for the "Disconnect" button.

deleteCallback - callback for the "Delete catalogManager" contents button. If null the button is not shown.

com.aldodaquino.cobra.gui.components

Class StarPanel

```

java.lang.Object
  |
  +- java.awt.Component
        |
        +- java.awt.Container
              |
              +- javax.swing.JComponent
                    |
                    +- javax.swing.JPanel
                          |
                          +- com.aldodaquino.cobra.gui.components.AsyncPanel
                                |
                                +- com.aldodaquino.cobra.gui.components.UpgradablePanel
                                      |
                                      +- com.aldodaquino.cobra.gui.components.StarPanel

```

All Implemented Interfaces:

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

public class **StarPanel**
extends [UpgradablePanel](#)

Shows rating or ask the user to vote.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

StarPanel

```
public StarPanel()
```

Constructor. Initialize an empty StarPanel, enabled.

StarPanel

```
public StarPanel(int rating)
```

Constructor. Initialize a StarPanel with the specified rating, disabled.

Parameters:

rating - in the interval [0, 5]. 0 means no rating.

Methods

getRating

```
public int getRating()
```

Returns the rating.

Returns:

(continued from last page)

int in the interval $[0, 5]$. 0 means no rating.

com.aldodaquino.cobra.gui.components

Class UpgradablePanel

```

java.lang.Object
  |
  +- java.awt.Component
        |
        +- java.awt.Container
              |
              +- javax.swing.JComponent
                    |
                    +- javax.swing.JPanel
                          |
                          +- com.aldodaquino.cobra.gui.components.AsyncPanel
                                |
                                +- com.aldodaquino.cobra.gui.components.UpgradablePanel
  
```

All Implemented Interfaces:

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

Direct Known Subclasses:

[CustomerPanel](#), [StarterPanel](#), [LabelPanel](#), [StarPanel](#), [UserInfo](#)

```

public class UpgradablePanel
extends AsyncPanel
  
```

An [AsyncPanel](#) with java.awt.GridBagLayout. Implements method to easy replace panels.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

UpgradablePanel

```
protected UpgradablePanel()
```

Constructor. Set the GridBagLayout. Can be called only by its children.

Methods

replaceComponent

```
protected void replaceComponent( java.awt.Component toBeReplaced,
                                java.awt.Component replacement,
                                java.awt.GridBagConstraints position)
```

Replace a component with another one. Can be called only by its children.

Parameters:

toBeReplaced - the old component.
 replacement - the new component.
 position - the position of the component to be replaced.

(continued from last page)

newGBC

```
public static java.awt.GridBagConstraints newGBC(int x,  
int y)
```

A public method that help to create GridBagConstraints in less time.

Parameters:

- x - the gridx property of the GridBagConstraints object.
- y - the gridy property of the GridBagConstraints object.

Returns:

a GridBagConstraints object.

com.aldodaquino.cobra.gui.components

Class UserInfo

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.AsyncPanel
│   │   │   │   │   ├── com.aldodaquino.cobra.gui.components.UpgradablePanel
│   │   │   │   │   │   └-- com.aldodaquino.cobra.gui.components.UserInfo
```

All Implemented Interfaces:

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

public class **UserInfo**
extends [UpgradablePanel](#)

Shows the catalog to which the user is connected and the user address and premium status.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

UserInfo

```
public UserInfo(Status status)
```

Constructor.

Parameters:

status - the Status object.

Methods

updateStatus

```
public void updateStatus()
```

Update its fields according with the latest information available in status.

com.aldodaquino.cobra.gui.components Class ViewsContentTable

```

java.lang.Object
  |-- java.awt.Component
    |-- java.awt.Container
      |-- javax.swing.JComponent
        |-- javax.swing.JTable
          |-- com.aldodaquino.cobra.gui.components.ViewsContentTable

```

All Implemented Interfaces:

java.io.Serializable, java.awt.MenuContainer, java.awt.image.ImageObserver,
 javax.swing.TransferHandler.HasGetTransferHandler, java.io.Serializable, javax.swing.event.RowSorterListener,
 javax.accessibility.Accessible, javax.swing.event.CellEditorListener, javax.swing.event.ListSelectionListener,
 javax.swing.event.TableColumnModelListener, javax.swing.Scrollable, javax.swing.event.TableModelListener

```

public class ViewsContentTable
extends javax.swing.JTable

```

A content list that includes also the number of views. Accessible in the [CustomerPanel](#).

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

ViewsContentTable

```

public ViewsContentTable(Status status,
                        java.util.List contents)

```

Constructor.

Parameters:

status - the Status object.

contents - a List of Content objects to be shown in this table.

Methods

isCellEditable

```

public boolean isCellEditable(int row,
                              int column)

```

Package

com.aldodaquino.cobra.gui.constants

com.aldodaquino.cobra.gui.constants

Class Colors

```
java.lang.Object
|
+--com.aldodaquino.cobra.gui.constants.Colors
```

```
public class Colors
extends java.lang.Object
```

Colors constants for the Graphic Interface.

Author:
Aldo D'Aquino.

Version:
1.0.

Fields

GREEN

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

RED

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

Constructors

Colors

```
public Colors()
```

com.aldodaquino.cobra.gui.constants

Class Dimensions

```
java.lang.Object
  |
  +--com.aldodaquino.cobra.gui.constants.Dimensions
```

```
public class Dimensions
  extends java.lang.Object
```

Dimensions constant for the Graphic Interface.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

LOGO_SIZE

```
public static final int LOGO_SIZE
```

Constant value: **128**

STAR_SIZE

```
public static final int STAR_SIZE
```

Constant value: **10**

STARTER_PANEL_PADDING

```
public static final java.awt.Dimension STARTER_PANEL_PADDING
```

INFO_PANEL_PADDING

```
public static final java.awt.Dimension INFO_PANEL_PADDING
```

LATERAL_BAR_PADDING

```
public static final java.awt.Dimension LATERAL_BAR_PADDING
```

V_SPACER_S

```
public static final java.awt.Dimension V_SPACER_S
```

V_SPACER_M

```
public static final java.awt.Dimension V_SPACER_M
```

V_SPACER_L

```
public static final java.awt.Dimension V_SPACER_L
```

Constructors

Dimensions

```
public Dimensions()
```

com.aldodaquino.cobra.gui.constants

Class Images

```
java.lang.Object
  |
  +--com.aldodaquino.cobra.gui.constants.Images
```

```
public class Images
  extends java.lang.Object
```

Images used in the Graphic Interface.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

logo

```
public static final javax.swing.ImageIcon logo
```

loading

```
public static final javax.swing.ImageIcon loading
```

emptyStar

```
public static final javax.swing.ImageIcon emptyStar
```

filledStar

```
public static final javax.swing.ImageIcon filledStar
```

Constructors

Images

```
public Images()
```

Methods

(continued from last page)

getScaled

```
public static javax.swing.ImageIcon getScaled( javax.swing.ImageIcon icon,  
                                               int size)
```

Returns the scaled version of an image.

Parameters:

`icon` - the original image.

`size` - the size that you want the final image to have.

Returns:

another ImageIcon, scaled.

com.aldodaquino.cobra.gui.constants

Class Strings

java.lang.Object

└--com.aldodaquino.cobra.gui.constants.Strings

```
public class Strings
    extends java.lang.Object
```

Strings constants for the app.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

appName

```
public static final java.lang.String appName
```

Constant value: **COBrA DAPP**

Constructors

Strings

```
public Strings()
```

Package

com.aldodaquino.cobra.gui.panels

com.aldodaquino.cobra.gui.panels

Class AuthorInfoPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.InfoPanel
│   │   │   │   │   └-- com.aldodaquino.cobra.gui.panels.AuthorInfoPanel
```

All Implemented Interfaces:

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

```
public class AuthorInfoPanel
extends InfoPanel
```

Shows the author charts in the catalog.

Author:

Aldo D'Aquino.

See Also:

[the parent class.](#)

Version:

1.0.

Methods

newWindow

```
public static void newWindow(Status status,
    java.lang.String author)
```

Open a new window with this panel.

Parameters:

status - the Status.

author - of the content.

com.aldodaquino.cobra.gui.panels

Class AuthorPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.AsyncPanel
│   │   │   │   └-- com.aldodaquino.cobra.gui.panels.AuthorPanel
```

All Implemented Interfaces:

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

```
public class AuthorPanel
extends AsyncPanel
```

The author panel, a main panel showed after the starter panel if the user have chosen the author role.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

AuthorPanel

```
public AuthorPanel(Status status)
```

Constructor.

Parameters:

status - the Status object.

com.aldodaquino.cobra.gui.panels

Class ContentInfoPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.AsyncPanel
│   │   │   │   └-- com.aldodaquino.cobra.gui.panels.ContentInfoPanel
```

All Implemented Interfaces:

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

```
public class ContentInfoPanel
extends AsyncPanel
```

Shows info about a content. Allows also to buy and consume the content or gift it to another user.

Author:

Aldo D'Aquino.

Version:

1.0.

Methods

newWindow

```
public static void newWindow(Status status,
                             java.lang.String address)
```

Open a new window with this panel.

Parameters:

status - the Status.

address - of the content.

com.aldodaquino.cobra.gui.panels

Class CustomerPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.AsyncPanel
│   │   │   │   │   ├── com.aldodaquino.cobra.gui.components.UpgradablePanel
│   │   │   │   │   │   └-- com.aldodaquino.cobra.gui.panels.CustomerPanel
```

All Implemented Interfaces:

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

```
public class CustomerPanel
extends UpgradablePanel
```

The customer panel, a main panel showed after the starter panel if the user have chosen the customer role.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

CustomerPanel

```
public CustomerPanel(Status status)
```

Constructor.

Parameters:

status - the Status object.

com.aldodaquino.cobra.gui.panels Class GenreInfoPanel

```
java.lang.Object
├-- java.awt.Component
│   ├── java.awt.Container
│   │   ├── javax.swing.JComponent
│   │   │   ├── javax.swing.JPanel
│   │   │   │   ├── com.aldodaquino.cobra.gui.components.InfoPanel
│   │   │   │   │   └-- com.aldodaquino.cobra.gui.panels.GenreInfoPanel
```

All Implemented Interfaces:

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

```
public class GenreInfoPanel
extends InfoPanel
```

Shows the genre charts in the catalog.

Author:

Aldo D'Aquino.

See Also:

[the parent class.](#)

Version:

1.0.

Methods

newWindow

```
public static void newWindow(Status status,
                             java.lang.String genre)
```

Open a new window with this panel.

Parameters:

status - the Status.

genre - of the content.

com.aldodaquino.cobra.gui.panels

Class StarterPanel

```

java.lang.Object
  |
  +- java.awt.Component
        |
        +- java.awt.Container
              |
              +- javax.swing.JComponent
                    |
                    +- javax.swing.JPanel
                          |
                          +- com.aldodaquino.cobra.gui.components.AsyncPanel
                                |
                                +- com.aldodaquino.cobra.gui.components.UpgradablePanel
                                      |
                                      +- com.aldodaquino.cobra.gui.panels.StarterPanel

```

All Implemented Interfaces:

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

public class **StarterPanel**
extends [UpgradablePanel](#)

The starter panel. Main panel showed when the app starts. Manage the user login and require all the data to start the app.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

StarterPanel

```
public StarterPanel(java.util.function.Consumer whenDone)
```

Constructor.

Parameters:

whenDone - a consumer of Status object called when all the requested fields in the status object are completed.

Methods

getMinimumSize

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

Package

com.aldodaquino.cobra.main

com.aldodaquino.cobra.main Class CatalogManager

```
java.lang.Object
|
|--com.aldodaquino.cobra.main.ContractManager
|   |
|   |--com.aldodaquino.cobra.main.CatalogManager
```

public class **CatalogManager**
extends ContractManager

An higher level Catalog Manager. Contains methods that call the methods in the `com.aldodaquino.cobra.contracts.CatalogContract` generated by Web3j and parse and aggregate the result in a more comfortable representation.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

CatalogManager

```
public CatalogManager(org.web3j.crypto.Credentials credentials)
```

Deploy and manage a new catalog contract.

Parameters:

`credentials` - your account credentials.

CatalogManager

```
public CatalogManager(org.web3j.crypto.Credentials credentials,  
                      java.lang.String contractAddress)
```

Load and manage an existent catalog contract.

Parameters:

`credentials` - your account credentials.

`contractAddress` - the existent contract address on blockchain.

Methods

listenNewContentAvailable

```
public void listenNewContentAvailable(java.util.function.BiConsumer callback)
```

Subscribe a callback for new content available events.

Parameters:

`callback` - a BiConsumer of content name and address.

(continued from last page)

listenNewContentAvailable

```
public void listenNewContentAvailable(java.lang.Runnable callback)
```

Subscribe a callback for new content available events.

Parameters:

callback - a Runnable.

listenAccessGranted

```
public void listenAccessGranted(java.util.function.BiConsumer callback)
```

Subscribe a callback for access granted events for this user.

Parameters:

callback - a BiConsumer of content address and content name.

listenAccessGranted

```
public void listenAccessGranted(java.lang.String user,  
    java.util.function.BiConsumer callback)
```

Subscribe a callback for access granted events for the specified user.

Parameters:

user - the user for which be registered.

callback - a BiConsumer of content address and content name.

listenBecomesPremium

```
public void listenBecomesPremium(java.lang.Runnable callback)
```

Subscribe a callback for becomes premium events for this user.

Parameters:

callback - a Runnable.

listenBecomesPremium

```
public void listenBecomesPremium(java.lang.String user,  
    java.lang.Runnable callback)
```

Subscribe a callback for becomes premium events for this user.

Parameters:

user - the user for which be registered.

callback - a Runnable.

listenFeedbackAvailable

```
public void listenFeedbackAvailable(java.util.function.BiConsumer callback)
```

Subscribe a callback for feedback available events for this user.

Parameters:

callback - a BiConsumer of content address and content name.

(continued from last page)

listenPaymentAvailable

```
public void listenPaymentAvailable(java.lang.String content,  
    java.util.function.BiConsumer callback)
```

Subscribe a callback for payment available events for this user.

Parameters:

content - the content of which listen to.

callback - a BiConsumer of content address and content name.

listenCatalogClosed

```
public void listenCatalogClosed(java.lang.Runnable callback)
```

Subscribe a callback for payment available events for this user.

Parameters:

callback - a Runnable.

hasAccess

```
public boolean hasAccess(java.lang.String address)
```

Check if the user has access to a content.

Parameters:

address - the content address.

Returns:

boolean if has access, false otherwise.

hasAccess

```
public boolean hasAccess(java.lang.String address,  
    java.lang.String user)
```

Check if the specified user has access to a content.

Parameters:

address - the content address.

user - the user address.

Returns:

boolean if has access, false otherwise.

buyContent

```
public boolean buyContent(java.lang.String address,  
    java.math.BigInteger price)
```

Buy a content.

Parameters:

address - the content address.

price - the content price.

Returns:

a boolean representing the operation outcome.

giftContent

```
public boolean giftContent(java.lang.String address,  
                           java.lang.String user,  
                           java.math.BigInteger price)
```

Gift a content to another user.

Parameters:

address - the content address.
user - the user address.
price - the content price.

Returns:

a boolean representing the operation outcome.

buyPremium

```
public boolean buyPremium()
```

Buy a premium subscription.

Returns:

a boolean representing the operation outcome.

giftPremium

```
public boolean giftPremium(java.lang.String user)
```

Gift a premium subscription to another user.

Parameters:

user - the user address.

Returns:

a boolean representing the operation outcome.

isPremium

```
public boolean isPremium()
```

Return true if the user has an active premium subscription.

Returns:

a boolean representing the operation outcome.

vote

```
public void vote(java.lang.String content,  
                int enjoy,  
                int valueForMoney,  
                int contentMeaning)
```

Set rating for a content.

Parameters:

content - the content address.
enjoy - the rating for the enjoy category.

(continued from last page)

valueForMoney - the rating for the value for money category.

contentMeaning - the rating for the content meaning category.

getContentInfo

```
public Content getContentInfo(java.lang.String address)
```

Returns all the info and ratings of a content.

Parameters:

address - the content address.

Returns:

a list of Content objects.

getContentList

```
public java.util.List getContentList()
```

Returns a list of all contents in the Catalog.

Returns:

a list of Content objects.

getContentListWithViews

```
public java.util.List getContentListWithViews()
```

Returns a list of all contents in the Catalog and its views.

Returns:

a list of Content objects.

getAuthorContents

```
public java.util.List getAuthorContents(java.lang.String author)
```

Return the list of all the content of a given author.

Parameters:

author - the authors address.

Returns:

a list of Content objects.

getNewContentList

```
public java.util.List getNewContentList(int n)
```

Return the n latest releases.

Parameters:

n - the number of item that you want in the list.

Returns:

List of Content objects with the latest n contents.

(continued from last page)

getLatest

```
public Content getLatest( )
```

Return the latest release.

Returns:

String[] where the first element is the name of the content and the second is the address.

getLatestByGenre

```
public Content getLatestByGenre( java.lang.String genre)
```

Return the latest release for a genre.

Parameters:

genre - the chosen genre.

Returns:

String[] where the first element is the name of the content and the second is the address.

getLatestByAuthor

```
public Content getLatestByAuthor( java.lang.String author)
```

Return the latest release of an author.

Parameters:

author - the author address.

Returns:

String[] where the first element is the name of the content and the second is the address.

getMostPopular

```
public Content getMostPopular( )
```

Return the most popular content.

Returns:

Content.

getMostPopularByGenre

```
public Content getMostPopularByGenre( java.lang.String genre)
```

Return the most popular content for a genre.

Parameters:

genre - the chosen genre.

Returns:

String[] where the first element is the name of the content and the second is the address.

getMostPopularByAuthor

```
public Content getMostPopularByAuthor( java.lang.String author)
```

(continued from last page)

Return the most popular content of an author.

Parameters:

author - the author address.

Returns:

String[] where the first element is the name of the content and the second is the address.

getMostRated

```
public Content getMostRated(java.lang.String category)
```

Return the highest rated content.

Parameters:

category - the category name for which you want to know the rating.

Returns:

Content.

getMostRatedByGenre

```
public Content getMostRatedByGenre(java.lang.String genre,  
    java.lang.String category)
```

Return the highest rated content for a genre.

Parameters:

genre - the chosen genre.

category - the category name for which you want to know the rating.

Returns:

Content.

getMostRatedByAuthor

```
public Content getMostRatedByAuthor(java.lang.String author,  
    java.lang.String category)
```

Return the highest rated content of an author.

Parameters:

author - the author address.

category - the category name for which you want to know the rating.

Returns:

Content.

withdraw

```
public java.math.BigInteger withdraw(java.lang.String address)
```

Collect the payout for a content. Can be called only on content of the current user.

Parameters:

address - the address of the content.

Returns:

(continued from last page)

a BigInteger with the withdrawn amount, 0 otherwise (for example if the specified content is not owned by the user that have done the login).

com.aldodaquino.cobra.main Class Content

```
java.lang.Object
  |
+-com.aldodaquino.cobra.main.Content
```

```
public class Content
extends java.lang.Object
```

Defines a content object.

Author:
Aldo D'Aquino.

Version:
1.0.

Fields

address

```
public final java.lang.String address
```

name

```
public final java.lang.String name
```

author

```
public final java.lang.String author
```

genre

```
public final java.lang.String genre
```

price

```
public final java.math.BigInteger price
```

views

```
public final java.math.BigInteger views
```

averageRating

public final int **averageRating**

enjoy

public final int **enjoy**

priceFairness

public final int **priceFairness**

contentMeaning

public final int **contentMeaning**

com.aldodaquino.cobra.main Class ContentManager

```
java.lang.Object
|
|--com.aldodaquino.cobra.main.ContractManager
|   |
|   |--com.aldodaquino.cobra.main.ContentManager
```

public class **ContentManager**
extends ContractManager

An higher level Content Manager. Contains methods that call the methods in the `com.aldodaquino.cobra.contracts.DAPPContentManagementContract` generated by Web3j and parse and aggregate the result in a more comfortable representation.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

ContentManager

```
public ContentManager(org.web3j.crypto.Credentials credentials,
                      java.lang.String catalogAddress,
                      java.lang.String name,
                      java.lang.String genre,
                      java.math.BigInteger price,
                      java.lang.String hostname,
                      int port)
```

Deploy and manage a new content manager contract.

Parameters:

credentials - your account credentials.
catalogAddress - the address of the catalog.
name - the name you want to assign to this content.
genre - the genre you want to assign to this content.
price - the price you want to assign to this content.
hostname - the hostname of the author server.
port - the port on which is running the author server.

Throws:

Exception - if there is errors when deploying the Content contract.

ContentManager

```
public ContentManager(org.web3j.crypto.Credentials credentials,
                      java.lang.String contractAddress)
```

Load and manage an existent content manager contract.

Parameters:

credentials - your account credentials.
contractAddress - the existent contract address on blockchain.

(continued from last page)

Methods

listenContentPublished

```
public void listenContentPublished(java.lang.Runnable callback)
```

Subscribe a callback for content published events.

Parameters:

callback - a Runnable.

consumeContent

```
public boolean consumeContent()
```

Consume a bought content. Note that the content is consumed by the user that owns the credentials passed to the constructor.

Returns:

a boolean representing the operation outcome.

getHostname

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

Returns the hostname of the author-server.

Returns:

String the hostname.

getPort

```
public int getPort()
```

Returns the port number of the author-server.

Returns:

the int number of the port.

Package

com.aldodaquino.javautils

com.aldodaquino.javautils

Class CliHelper

```
java.lang.Object
|
+--com.aldodaquino.javautils.CliHelper
```

```
public class CliHelper
extends java.lang.Object
```

Help parsing the args[]. You can add the option you want retrieve and this class will parse it automatically.

Author:

Aldo D'Aquino.

Version:

1.0.

Constructors

CliHelper

```
public CliHelper()
```

Methods

addOption

```
public void addOption(java.lang.String shortOpt,
                      java.lang.String longOpt,
                      boolean hasValue,
                      java.lang.String description)
```

Add available option for the CLI.

Parameters:

shortOpt - like "-v".

longOpt - like "--verbose".

hasValue - true if the option must have a value (i.e. -o value), false if is an option without value (i.e. --help).

description - the description of the option to be shown in the help message.

Throws:

IllegalArgumentException - if the shortOpt or the longOpt already exists in another option.

parse

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

Parse the String[] args of the main and saves the option value.

Parameters:

args - the main's args.

(continued from last page)

getValues

```
public java.lang.String[] getValues(java.lang.String opt)
```

Return the list of all values of an option. For example -o value1 -o value2 will return [value1, value2].

Parameters:

opt - the option in the short or the long format (will return the same list).

Returns:

a String[] containing all the values, empty array if the option has no value or null if this option doesn't exist.

getValue

```
public java.lang.String getValue(java.lang.String opt)
```

Return first value of an option. For example -o value1 -o value2 will return value1. Use it for functions that are intended usable only once.

Parameters:

opt - the option in the short or the long format (will return the same list).

Returns:

the first value, empty string if the option has no value or null if this option doesn't exist.

isPresent

```
public boolean isPresent(java.lang.String opt)
```

Return true if the program is launched with the specified option, false otherwise.

Parameters:

opt - the option in the short or the long format (will return the same list).

Returns:

true if the program is launched with the specified option, false otherwise.

getHelpMessage

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

Return a formatted help message showing the usage. The message has this format: usage: -o --longopt an option description
-h --help shows help

Returns:

String of the message.

getMissingOptionMessage

```
public java.lang.String getMissingOptionMessage(java.lang.String opt)
```

Return a missing option message with this format: Missing an option: -o -option description of the option.

Parameters:

opt - the short or long code of the option that you want (i.e. "o");

Returns:

String of the message.

com.aldodaquino.javautils

Class FileExchange

```
java.lang.Object
|
+--com.aldodaquino.javautils.FileExchange
```

```
public class FileExchange
extends java.lang.Object
```

Utility for exchanging file. Contains method to receive data from a Socket and save it to a File and to read a file and write data to the socket.

Author:
Aldo D'Aquino.

Version:
1.2.

Constructors

FileExchange

```
public FileExchange()
```

Methods

receiveFile

```
public static void receiveFile(java.io.File destFile,
                                java.lang.String hostname,
                                int port)
```

Receive and save a file.

Parameters:

destFile - the destination file where save data.
hostname - of the sender.
port - of the sender.

openFileSocket

```
public static java.nio.channels.ServerSocketChannel openFileSocket()
```

Opens a socket on which waits an incoming connection from the file recipient.

Returns:

a ServerSocketChannel.

startFileSender

```
public static void startFileSender(java.nio.channels.ServerSocketChannel serverSocket,
                                     java.io.File file,
                                     java.lang.Runnable callback)
```

(continued from last page)

When the other client has connected to the socket it behaves as a server and sends the file.

Parameters:

`serverSocket` - the `ServerSocketChannel` opened in `openFileSocket`.
`file` - the `File` to be sent.
`callback` - optional callback to be run when the upload is finished.

readFile

```
public static void readFile(java.io.File file,  
                             java.nio.channels.SocketChannel outChannel)  
    throws java.io.IOException
```

Read a File using NIO channels. Send the file to a socket.

Parameters:

`file` - File object, the file to be read.
`outChannel` - Socket where the file will be sent.

Throws:

`IOException` - if the file not exists or is not readable.

writeFile

```
public static void writeFile(java.nio.channels.SocketChannel inChannel,  
                              java.io.File file)  
    throws java.io.IOException
```

Read the specified Socket using NIO, and save the data to File.

Parameters:

`inChannel` - Socket from where data will be read.
`file` - File object, destination of the data.

Throws:

`IOException` - if the file not exists or is not writeable.

com.aldodaquino.javautils

Class HttpHelper

```
java.lang.Object
|
|--com.aldodaquino.javautils.HttpHelper
```

Direct Known Subclasses:

[CobraHttpHelper](#)

```
public class HttpHelper
extends java.lang.Object
```

Contains method that help to make http request. Works with JSON body for POST request and query-style GET parameters.

Author:

Aldo D'Aquino.

Version:

1.1.

Constructors

HttpHelper

```
public HttpHelper()
```

Methods

parseGET

```
public static java.util.Map parseGET(com.sun.net.httpserver.HttpExchange request)
```

Parse a GET request and return a Map with keys equals to parameters name and values equals to the parameters values.

Parameters:

request - the HttpExchange request received by the handler.

Returns:

Map where both keys and values are strings containing the parameters.

parseQuery

```
public static java.util.Map parseQuery(java.lang.String query)
```

Parse a query and return a Map with keys equals to parameters name and values equals to the parameters values.

Parameters:

query - the String representing the query.

Returns:

Map where both keys and values are strings containing the parameters.

(continued from last page)

parsePOST

```
public static java.util.Map parsePOST(com.sun.net.httpserver.HttpExchange request)
```

Parse a POST request and return a Map with keys equals to parameters name and values equals to the parameters values.

Parameters:

request - the HttpExchange request received by the handler.

Returns:

Map where both keys and values are strings containing the parameters.

parseJson

```
public static java.util.Map parseJson(java.lang.String json)
```

Parse a JSON and return a Map with keys equals to parameters name and values equals to the parameters values.

Parameters:

json - the String representing the stringified JSON.

Returns:

Map where both keys and values are strings containing the parameters.

sendResponse

```
public static void sendResponse(com.sun.net.httpserver.HttpExchange request,  
    java.lang.String response,  
    int code)
```

Send a response to an HttpExchange request.

Parameters:

request - the request.
response - a String containing the response.
code - the status code of the response.

sendResponse

```
public static void sendResponse(com.sun.net.httpserver.HttpExchange request,  
    java.lang.String response)
```

Send a response to an HttpExchange request.

Parameters:

request - the request.
response - a String containing the response..

makeGet

```
public static HttpHelper.Response makeGet(java.lang.String url,  
    java.util.Map parameters)
```

Make a GET request on the specified url.

Parameters:

url - the url to be called.
parameters - a map containing all the parameters that you want to be passed when the url is called.

(continued from last page)

Returns:a [HttpHelper.Response](#) object.

makePost

```
public static HttpHelper.Response makePost(java.lang.String url,  
      java.util.Map parameters)
```

Make a POST request on the specified url.

Parameters:

url - the url to be called.

parameters - a map containing all the parameters that you want to be passed in the body.

Returns:a [HttpHelper.Response](#) object.

jsonifyParameters

```
public static java.lang.String jsonifyParameters(java.util.Map parameters)
```

Return a stringified JSON with the passed parameters.

Parameters:

parameters - a Map where both keys and values are strings containing the parameters.

Returns:the stringified JSON.

querifyParameters

```
public static java.lang.String querifyParameters(java.util.Map parameters)
```

Return a string containing the parameters in the query format, ready to be appended to an url for a GET request.

Parameters:

parameters - a Map where both keys and values are strings containing the parameters.

Returns:the String in the url format.

com.aldodaquino.javautils

Class **HttpHelper.Response**

java.lang.Object

└--com.aldodaquino.javautils.HttpHelper.Response

public static class **HttpHelper.Response**
extends java.lang.Object

Response class returned by the makeGet and makePost method. Contains two field: the response code and the data String of the response.

Author:

Aldo D'Aquino.

Version:

1.0.

Fields

code

public final int **code**

data

public final java.lang.String **data**

Methods

toString

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

Returns this object as a stringified JSON.

Returns:

a String representing the stringified JSON.

Index

A

ACCESS_API_PATH 5
addOption 66
address 61
appName 44
AsyncPanel 17
author 61
AuthorContentTable 19
AuthorPanel 47
averageRating 62

B

biggestPriceFairnessLabel 26
buyContent 55
buyPremium 56

C

CatalogForm 20
CatalogManager 53
catalogManager 7
ChartWidget 21
CliHelper 66
CobraHttpHelper 6
code 73
Colors 39
ComponentFactory 22
connectCatalog 12
consumeContent 64
ContentList 24
ContentManager 63
contentMeaning 62
credentials 7, 11
CustomerPanel 49

D

data 73
DEPLOY_API_PATH 5
deployCatalog 12
Dimensions 41

disconnectCatalog 12
doAsync 17

E

emptyStar 42
enjoy 62

F

FileExchange 68
filledStar 42

G

genre 61
getAuthorContents 57
getCatalogManager 13
getContentInfo 57
getContentList 57
getContentListWithViews 57
getHelpMessage 67
getHostname 64
getLatest 57
getLatestByAuthor 58
getLatestByGenre 58
getMinimumSize 51
getMissingOptionMessage 67
getMostPopular 58
getMostPopularByAuthor 58
getMostPopularByGenre 58
getMostRated 59
getMostRatedByAuthor 59
getMostRatedByGenre 59
getNewContentList 57
getPort 64
getPrivateKey 13
getRating 32
getScaled 42
getUserAddress 12
getValue 67
getValues 66
giftContent 56
giftPremium 56
GREEN 39

H

hasAccess 55
highestContentMeaningLabel 26
highestRatedLabel 25
hostname 7
HttpHelper 70

I

Images 42
INFO_PANEL_PADDING 40
InfoPanel 26
isCatalogOwner 12
isCellEditable 19, 37
isPremium 56
isPresent 67

J

jsonifyParameters 72

L

LATERAL_BAR_PADDING 40
latestLabel 25
listenAccessGranted 54
listenBecomesPremium 54
listenCatalogClosed 55
listenContentPublished 63
listenFeedbackAvailable 54
listenNewContentAvailable 53
listenPaymentAvailable 54
loading 42
login 11
LoginForm 28
Logo 29
logo 42
LOGO_SIZE 40

M

Main 3, 10
main 3, 10

makeGet 71
makePost 72
mostEnjoyedLabel 25
mostPopularLabel 25

N

name 61
newBorder 22
newButton 22
newConfirmDialog 15
NewContentsWidget 30
newErrorDialog 14
newExitDialog 15
newGBC 34
newHandler 6
newMessageDialog 14
newTextField 22
newVSpacer 23
newWindow 14, 46, 48, 50

O

openFileDialog 15
openFileSocket 68

P

parse 66
parseGET 70
parseJson 71
parsePOST 70
parseQuery 70
port 7
price 61
priceFairness 62
privateKey 7

Q

querifyParameters 72

R

readFile 69

receiveFile 68
RED 39
replaceComponent 34
ROLE_AUTHOR 11
ROLE_CUSTOMER 11
RoleForm 31

withdraw 59
writeFile 69

S

saveFileDialog 15
sendResponse 71
setFontSize 15
setRole 13
STAR_SIZE 40
StarPanel 32
STARTER_PANEL_PADDING 40
StarterPanel 51
startFileSender 68
Status 7, 11
Strings 44

T

toString 73

U

update 27
updateStatus 36
UpgradablePanel 34
UserInfo 36
Utils 14

V

V_SPACER_L 41
V_SPACER_M 41
V_SPACER_S 40
views 61
ViewsContentTable 37
vote 56

W

window 17