

AIQWA

1.0

Generated by Doxygen 1.9.1

1 Class Index	1
1.1 Class List	1
2 Class Documentation	3
2.1 Color Struct Reference	3
2.2 CurveChartParams Struct Reference	3
2.3 DataElement Struct Reference	4
2.4 dataSet Struct Reference	4
2.5 myCurl Class Reference	4
2.5.1 Detailed Description	5
2.5.2 Constructor & Destructor Documentation	5
2.5.2.1 myCurl()	5
2.5.3 Member Function Documentation	5
2.5.3.1 exec()	5
2.5.3.2 getApi_key()	6
2.5.3.3 getData()	6
2.5.3.4 getLatitude()	6
2.5.3.5 getLongitude()	7
2.5.3.6 getResponseSize()	7
2.5.3.7 getUrl()	7
2.5.3.8 setApi_key()	7
2.5.3.9 setLatitude()	8
2.5.3.10 setLongitude()	8
2.5.3.11 setUrl()	8
2.6 myGraphics Class Reference	8
2.6.1 Member Function Documentation	9
2.6.1.1 curveChart()	9
2.6.1.2 pieChart()	9
2.7 myOptions Class Reference	10
2.7.1 Member Function Documentation	10
2.7.1.1 getApiKeyHeader()	10
2.7.1.2 getFilesOwner()	11
2.7.1.3 getFullCurveChartFileName()	11
2.7.1.4 getFullDataFileName()	11
2.7.1.5 getFullHistoChartFileName()	11
2.7.1.6 getFullLogFileName()	12
2.7.1.7 getFullPieChartFileName()	12
2.7.1.8 getFullUrl()	12
2.7.1.9 isDisplay()	12
2.7.1.10 readFromFile()	12
2.8 myParsing Class Reference	13
2.8.1 Member Function Documentation	13

2.8.1.1 appendFileToDatas()	13
2.8.1.2 appendToDatas()	14
2.8.1.3 fromChar()	14
2.8.1.4 fromDatasFile()	14
2.8.1.5 fromFile()	15
2.8.1.6 getMyJson()	15
2.8.1.7 setMyJson()	15
2.8.1.8 toFile()	16
2.8.1.9 toString()	16
2.9 myRegex Class Reference	16
2.9.1 Detailed Description	17
2.9.2 Member Function Documentation	17
2.9.2.1 ambeeDataGetDateTime()	17
2.9.2.2 toFormatDDMMYY()	17
2.9.2.3 toFormatDDMMYYHHMM()	18
2.9.2.4 toFormatHHMM()	18
2.10 response Struct Reference	18
2.11 updatedAt Struct Reference	19
Index	21

Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Color	3
CurveChartParams	3
DataElement	4
dataSet	4
myCurl	
# The myCurl class	4
myGraphics	8
myOptions	10
myParsing	13
myRegex	
The myRegex class	16
response	18
updatedAt	19

Chapter 2

Class Documentation

2.1 Color Struct Reference

Public Attributes

- string **nom**
- int **indice**
- int **red**
- int **green**
- int **blue**

The documentation for this struct was generated from the following file:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/mygraphics.↔
h

2.2 CurveChartParams Struct Reference

Public Attributes

- string **title**
- string **description**
- vector< [dataSet](#) > * **dataSets**
- int **nbMeasures**
- int **colorIndex**
- int **titleHeight**
- int **marginLeft**
- int **marginBottom**
- int **legendWidth**
- float **globalMax**
- float **globalMin**

The documentation for this struct was generated from the following file:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/mygraphics.↔
h

2.3 DataElement Struct Reference

Public Attributes

- string **label**
- float **abscisse**
- float **value**

The documentation for this struct was generated from the following file:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/mygraphics.↔
h

2.4 dataSet Struct Reference

Public Attributes

- vector< [DataElement](#) > * **dataElements**
- int **colorIndex**
- string **legend**

The documentation for this struct was generated from the following file:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/mygraphics.↔
h

2.5 myCurl Class Reference

The [myCurl](#) class

```
#include <mycurl.h>
```

Public Member Functions

- [myCurl](#) ()
myCurl
- const string & [getApi_key](#) () const
getApi_key
- void [setApi_key](#) (const string &newApi_key)
setApi_key
- const string & [getLongitude](#) () const
getLongitude
- void [setLongitude](#) (const string &newLongitude)
setLongitude
- const string & [getLatitude](#) () const
getLatitude

- void [setLatitude](#) (const string &newLatitude)
setLatitude
- const string & [getUrl](#) () const
getUrl
- void [setUrl](#) (const string &newUrl)
setUrl
- size_t [getResponseSize](#) ()
getResponseSize
- void [getData](#) (char **[response](#))
getData
- CURLcode [exec](#) ([myOptions](#) *options)
exec

2.5.1 Detailed Description

The [myCurl](#) class

Manage **API access**

includes *curl/curl.h* library

Requires *-lcurl*

2.5.2 Constructor & Destructor Documentation

2.5.2.1 myCurl()

```
myCurl::myCurl ( )
```

[myCurl](#)

constructor

2.5.3 Member Function Documentation

2.5.3.1 exec()

```
CURLcode myCurl::exec (  
    myOptions * options )
```

[exec](#)

Parameters

<i>myOption</i>	options
-----------------	---------

Returns**2.5.3.2 getApi_key()**

```
const string & myCurl::getApi_key ( ) const
```

getApi_key

Returns**2.5.3.3 getData()**

```
void myCurl::getData (
    char ** response )
```

getData

Parameters

<i>char**</i>	response
---------------	----------

2.5.3.4 getLatitude()

```
const string & myCurl::getLatitude ( ) const
```

getLatitude

Returns

2.5.3.5 getLongitude()

```
const string & myCurl::getLongitude ( ) const
```

getLongitude

Returns

2.5.3.6 getResponseSize()

```
size_t myCurl::getResponseSize ( )
```

getResponseSize

Returns

2.5.3.7 getUrl()

```
const string & myCurl::getUrl ( ) const
```

getUrl

Returns

2.5.3.8 setApi_key()

```
void myCurl::setApi_key (
    const string & newApi_key )
```

setApi_key

Parameters

<i>newApi_key</i>	
-------------------	--

2.5.3.9 setLatitude()

```
void myCurl::setLatitude (
    const string & newLatitude )
```

setLatitude

Parameters

<i>newLatitude</i>	
--------------------	--

2.5.3.10 setLongitude()

```
void myCurl::setLongitude (
    const string & newLongitude )
```

setLongitude

Parameters

<i>newLongitude</i>	
---------------------	--

2.5.3.11 setUrl()

```
void myCurl::setUrl (
    const string & newUrl )
```

setUrl

Parameters

<i>newUrl</i>	
---------------	--

The documentation for this class was generated from the following files:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWAtch/mycurl.↵
h
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWAtch/mycurl.↵
cpp

2.6 myGraphics Class Reference

Public Member Functions

- [myGraphics](#) ()

myGraphics

- void [pieChart](#) (json *datas*, [myOptions](#) *options)
pieChart
- void [curveChart](#) (json *datas*, [myOptions](#) *options)
curveChart

2.6.1 Member Function Documentation

2.6.1.1 [curveChart\(\)](#)

```
void myGraphics::curveChart (  
    json datas,  
    myOptions * options )
```

curveChart

Parameters

<i>datas</i>	
<i>options</i>	

2.6.1.2 [pieChart\(\)](#)

```
void myGraphics::pieChart (  
    json datas,  
    myOptions * options )
```

pieChart

Parameters

<i>datas</i>	
<i>options</i>	

The documentation for this class was generated from the following files:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/mygraphics.↔
h
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/mygraphics.↔
cpp

2.7 myOptions Class Reference

Public Member Functions

- [myOptions](#) ()
myOptions
- void [readFromFile](#) (string fileName)
readFromFile
- string [getFullUrl](#) ()
getFullUrl
- string [getApiKeyHeader](#) ()
getApiKeyHeader
- string [getFilesOwner](#) ()
getFilesOwner
- string [getFullLogFileName](#) ()
getFullLogFileName
- string [getFullDataFileName](#) ()
getFullDataFileName
- string [getFullCurveChartFileName](#) ()
getFullCurveChartFileName
- string [getFullHistoChartFileName](#) ()
getFullHistoChartFileName
- string [getFullPieChartFileName](#) ()
getFullPieChartFileName
- bool [isDisplay](#) ()
isDisplay

2.7.1 Member Function Documentation

2.7.1.1 getApiKeyHeader()

```
string myOptions::getApiKeyHeader ( )
```

getApiKeyHeader

Returns

2.7.1.2 getFilesOwner()

```
string myOptions::getFilesOwner ( )
```

getFilesOwner

Returns

2.7.1.3 getFullCurveChartFileName()

```
string myOptions::getFullCurveChartFileName ( )
```

getFullCurveChartFileName

Returns

2.7.1.4 getFullDataFileName()

```
string myOptions::getFullDataFileName ( )
```

getFullDataFileName

Returns

2.7.1.5 getFullHistoChartFileName()

```
string myOptions::getFullHistoChartFileName ( )
```

getFullHistoChartFileName

Returns

2.7.1.6 getFullLogFileName()

```
string myOptions::getFullLogFileName ( )
```

getFullLogFileName

Returns

2.7.1.7 getFullPieChartFileName()

```
string myOptions::getFullPieChartFileName ( )
```

getFullPieChartFileName

Returns

2.7.1.8 getFullUrl()

```
string myOptions::getFullUrl ( )
```

getFullUrl

Returns

2.7.1.9 isDisplay()

```
bool myOptions::isDisplay ( )
```

isDisplay

Returns

2.7.1.10 readFromFile()

```
void myOptions::readFromFile (
    string fileName )
```

readFromFile

Parameters

<i>fileName</i>	
-----------------	--

The documentation for this class was generated from the following files:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/myoptions.h↔
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/myoptions.cpp↔

2.8 myParsing Class Reference

Public Member Functions

- [myParsing](#) ()
myParsing
- const json & [getMyJson](#) () const
getMyJson
- void [setMyJson](#) (const json &newMyJson)
setMyJson
- [myParsing](#) * [fromChar](#) (char *str)
fromChar
- string [toString](#) ()
toString
- [myParsing](#) * [fromFile](#) (string fileName)
fromFile
- int [toFile](#) ([myOptions](#) *options)
toFile
- void [appendToDatas](#) ([myOptions](#) *options)
appendToDatas
- void [appendFileToDatas](#) (string fileName)
appendFileToDatas
- const json [fromDdatasFile](#) ([myOptions](#) *options)
fromDdatasFile

2.8.1 Member Function Documentation

2.8.1.1 appendFileToDdatas()

```
void myParsing::appendFileToDdatas (
    string fileName )
```

appendFileToDdatas

Parameters

<i>fileName</i>	
-----------------	--

2.8.1.2 appendToDatas()

```
void myParsing::appendToDatas (
    myOptions * options )
```

appendToDatas

Parameters

<i>options</i>	
----------------	--

2.8.1.3 fromChar()

```
myParsing * myParsing::fromChar (
    char * str )
```

fromChar

Parameters

<i>str</i>	
------------	--

Returns**2.8.1.4 fromDatasFile()**

```
const json myParsing::fromDatasFile (
    myOptions * options )
```

fromDatasFile

Parameters

<i>options</i>	
----------------	--

Returns

2.8.1.5 fromFile()

```
myParsing * myParsing::fromFile (
    string fileName )
```

fromFile

Parameters

<i>fileName</i>	
-----------------	--

Returns

2.8.1.6 getMyJson()

```
const json & myParsing::getMyJson ( ) const
```

getMyJson

Returns

2.8.1.7 setMyJson()

```
void myParsing::setMyJson (
    const json & newMyJson )
```

setMyJson

Parameters

<i>newMyJson</i>	
------------------	--

2.8.1.8 toFile()

```
int myParsing::toFile (
    myOptions * options )
```

toFile

Parameters

<i>options</i>	
----------------	--

Returns

2.8.1.9 toString()

```
string myParsing::toString ( )
```

toString

Returns

The documentation for this class was generated from the following files:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/myparsing.↵
h
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AlrQualityWAtch/myparsing.↵
cpp

2.9 myRegex Class Reference

The [myRegex](#) class.

```
#include <myregex.h>
```

Public Member Functions

- [myRegex](#) ()
[myRegex](#)

Static Public Member Functions

- static [updatedAt ambeeDataGetDateTime](#) (string updatedAtField)
ambeeDataGetDateTime
- static string [toFormatDDMMYY](#) (string updatedAtField)
toFormatDDMMYY
- static string [toFormatHHMM](#) (string updatedAtField)
toFormatHHMM
- static string [toFormatDDMMYYHHMM](#) (string updatedAtField)
toFormatDDMMYYHHMM

2.9.1 Detailed Description

The [myRegex](#) class.

2.9.2 Member Function Documentation

2.9.2.1 ambeeDataGetDateTime()

```
updatedAt myRegex::ambeeDataGetDateTime (
    string updatedAtField ) [static]
```

ambeeDataGetDateTime

Parameters

<i>updatedAtField</i>	
-----------------------	--

Returns

2.9.2.2 toFormatDDMMYY()

```
string myRegex::toFormatDDMMYY (
    string updatedAtField ) [static]
```

toFormatDDMMYY

Parameters

<i>updatedAtField</i>	
-----------------------	--

Returns

2.9.2.3 toFormatDDMMYYHHMM()

```
string myRegex::toFormatDDMMYYHHMM (
    string updatedAtField ) [static]
```

toFormatDDMMYYHHMM

Parameters

<i>updatedAtField</i>	
-----------------------	--

Returns

2.9.2.4 toFormatHHMM()

```
string myRegex::toFormatHHMM (
    string updatedAtField ) [static]
```

toFormatHHMM

Parameters

<i>updatedAtField</i>	
-----------------------	--

Returns

The documentation for this class was generated from the following files:

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/myregex.h↵
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/myregex.cpp↵

2.10 response Struct Reference

Public Attributes

- char * **memory**

- `size_t size`

The documentation for this struct was generated from the following file:

- `/home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/mycurl.h`↩

2.11 updatedAt Struct Reference

Public Attributes

- `int year`
- `int month`
- `int day`
- `int hour`
- `int minute`
- `int second`

The documentation for this struct was generated from the following file:

- `/home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AirQualityWatch/myregex.h`↩

Index

- ambeeDataGetDateTime
 - myRegex, [17](#)
- appendFileToDatas
 - myParsing, [13](#)
- appendToDatas
 - myParsing, [14](#)
- Color, [3](#)
- curveChart
 - myGraphics, [9](#)
- CurveChartParams, [3](#)
- DataElement, [4](#)
- dataSet, [4](#)
- exec
 - myCurl, [5](#)
- fromChar
 - myParsing, [14](#)
- fromDatasFile
 - myParsing, [14](#)
- fromFile
 - myParsing, [15](#)
- getApi_key
 - myCurl, [6](#)
- getApiKeyHeader
 - myOptions, [10](#)
- getData
 - myCurl, [6](#)
- getFilesOwner
 - myOptions, [10](#)
- getFullCurveChartFileName
 - myOptions, [11](#)
- getFullDataFileName
 - myOptions, [11](#)
- getFullHistoChartFileName
 - myOptions, [11](#)
- getFullLogFileName
 - myOptions, [11](#)
- getFullPieChartFileName
 - myOptions, [12](#)
- getFullUrl
 - myOptions, [12](#)
- getLatitude
 - myCurl, [6](#)
- getLongitude
 - myCurl, [6](#)
- getMyJson
 - myParsing, [15](#)
- getResponseSize
 - myCurl, [7](#)
- getUrl
 - myCurl, [7](#)
- isDisplay
 - myOptions, [12](#)
- myCurl, [4](#)
 - exec, [5](#)
 - getApi_key, [6](#)
 - getData, [6](#)
 - getLatitude, [6](#)
 - getLongitude, [6](#)
 - getResponseSize, [7](#)
 - getUrl, [7](#)
 - myCurl, [5](#)
 - setApi_key, [7](#)
 - setLatitude, [7](#)
 - setLongitude, [8](#)
 - setUrl, [8](#)
- myGraphics, [8](#)
 - curveChart, [9](#)
 - pieChart, [9](#)
- myOptions, [10](#)
 - getApiKeyHeader, [10](#)
 - getFilesOwner, [10](#)
 - getFullCurveChartFileName, [11](#)
 - getFullDataFileName, [11](#)
 - getFullHistoChartFileName, [11](#)
 - getFullLogFileName, [11](#)
 - getFullPieChartFileName, [12](#)
 - getFullUrl, [12](#)
 - isDisplay, [12](#)
 - readFromFile, [12](#)
- myParsing, [13](#)
 - appendFileToDatas, [13](#)
 - appendToDatas, [14](#)
 - fromChar, [14](#)
 - fromDatasFile, [14](#)
 - fromFile, [15](#)
 - getMyJson, [15](#)
 - setMyJson, [15](#)
 - toFile, [15](#)
 - toString, [16](#)
- myRegex, [16](#)
 - ambeeDataGetDateTime, [17](#)
 - toFormatDDMMYY, [17](#)
 - toFormatDDMMYYHHMM, [18](#)
 - toFormatHHMM, [18](#)

- pieChart
 - myGraphics, [9](#)
- readFromFile
 - myOptions, [12](#)
- response, [18](#)
- setApi_key
 - myCurl, [7](#)
- setLatitude
 - myCurl, [7](#)
- setLongitude
 - myCurl, [8](#)
- setMyJson
 - myParsing, [15](#)
- setUrl
 - myCurl, [8](#)
- toFile
 - myParsing, [15](#)
- toFormatDDMMYY
 - myRegex, [17](#)
- toFormatDDMMYYHHMM
 - myRegex, [18](#)
- toFormatHHMM
 - myRegex, [18](#)
- toString
 - myParsing, [16](#)
- updatedAt, [19](#)