AIQWA

1.0

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Chapter 1

Class Index

1.1 Class List

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

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

Chapter 3

Class Documentation

3.1 Color Struct Reference

`#include <mygraphics.h>`

Public Attributes

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

3.1.1 Member Data Documentation

3.1.1.1 blue

`int Color::blue`

3.1.1.2 green

`int Color::green`

3.1.1.3 indice

`int Color::indice`

3.1.1.4 nom

```
string Color::nom
```

3.1.1.5 red

```
int Color::red
```

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

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

3.2 CurveChartParams Struct Reference

```
#include <mygraphics.h>
```

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

3.2.1 Member Data Documentation

3.2.1.1 colorIndex

```
int CurveChartParams::colorIndex
```

3.2.1.2 dataSets

```
vector<dataSet>* CurveChartParams::dataSets
```

3.2.1.3 description

```
string CurveChartParams::description
```

3.2.1.4 globalMax

```
float CurveChartParams::globalMax
```

3.2.1.5 globalMin

```
float CurveChartParams::globalMin
```

3.2.1.6 legendWidth

```
int CurveChartParams::legendWidth
```

3.2.1.7 marginBottom

```
int CurveChartParams::marginBottom
```

3.2.1.8 marginLeft

```
int CurveChartParams::marginLeft
```

3.2.1.9 nbMeasures

```
int CurveChartParams::nbMeasures
```

3.2.1.10 title

```
string CurveChartParams::title
```

3.2.1.11 titleHeight

```
int CurveChartParams::titleHeight
```

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

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

3.3 DataElement Struct Reference

```
#include <mygraphics.h>
```

Public Attributes

- string label
- float abscisse
- float value

3.3.1 Member Data Documentation

3.3.1.1 abscisse

```
float DataElement::abscisse
```

3.3.1.2 label

```
string DataElement::label
```

3.3.1.3 value

```
float DataElement::value
```

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

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

3.4 dataSet Struct Reference

`#include <mygraphics.h>`

Public Attributes

- vector< DataElement > * dataElements
- int colorIndex
- string legend

3.4.1 Member Data Documentation

3.4.1.1 colorIndex

`int dataSet::colorIndex`

3.4.1.2 dataElements

`vector<DataElement>* dataSet::dataElements`

3.4.1.3 legend

`string dataSet::legend`

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

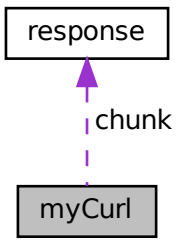
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/mygraphics.h

3.5 myCurl Class Reference

The myCurl class

`#include <mycurl.h>`

Collaboration diagram for myCurl:



Public Member Functions

- myCurl ()
  myCurl
- void getData (char **response)
  getData
- CURLcode exec (myOptions *options)
  exec

Static Private Member Functions

- static size_t mem_cb (void *contents, size_t size, size_t nmemb, void *userp)
  mem_cb

Private Attributes

- CURL * hnd
- struct response chunk
- struct curl_slist * headers = nullptr

3.5.1 Detailed Description

The myCurl class

Manage **API access**

includes *curl/curl.h* library

includes *myoptions.h* library

Requires *-lcurl* flag

3.5.2 Constructor & Destructor Documentation

3.5.2.1 myCurl()

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

myCurl

constructor

3.5.3 Member Function Documentation

3.5.3.1 exec()

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

exec

Parameters

myOption∗	options

Returns

CURLcode

Prepare and execute curl request using parameters in options

Downloaded data can be retrieved by a call to the method getData()

3.5.3.2 getData()

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

getData

Allows to recover downloaded data

Parameters

char∗∗	response

3.5.3.3 mem_cb()

```
size_t myCurl::mem_cb (
            void * contents,
            size_t size,
            size_t nmemb,
            void * userp )  [static], [private]
```

mem_cb

Call back method required by *curl_easy_perform()* method to store read datas in buffer

Parameters

void∗	contents
size_t	size
size_t	nmemb
void∗	userp

Returns

static size_t

3.5.4 Member Data Documentation

3.5.4.1 chunk

```
struct response myCurl::chunk  [private]
```

3.5.4.2 headers

```
struct curl_slist* myCurl::headers = nullptr  [private]
```

3.5.4.3 hnd

```
CURL* myCurl::hnd  [private]
```

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

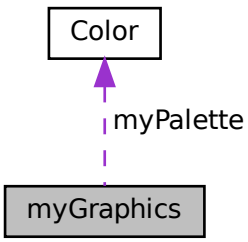
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/mycurl.h
- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/mycurl.cpp

3.6 myGraphics Class Reference

The myGraphics class.

```
#include <mygraphics.h>
```

Collaboration diagram for myGraphics:



Public Member Functions

- myGraphics ()

  myGraphics
- void pieChart (json datas, myOptions *options)

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

  curveChart \param json datas

Private Member Functions

- void initPalette ()

  initPalette
- void initFonts ()

  initFonts
- Color * createColor (string nom, int indice, int red, int green, int blue)

  createColor
- float getDataVectorMaxValue (vector< DataElement > *v)

  getDataVectorMaxValue
- float getDataVectorMinValue (vector< DataElement > *v)

  getDataVectorMinValue
- vector< DataElement > * appendDataVector (vector< DataElement > *v, string label="", float abscisse=0.0, float value=0.0)

  appendDataVector
- void setVector (vector< DataElement > *v, json datas, string dataSet)

  setVector
- void curveChartInit (CurveChartParams params)

  curveChartInit
- void pieChartInit (CurveChartParams params)

  pieChartInit
- void pieChartDraw (CurveChartParams params)

  pieChartDraw
- double calcRatioPourcent (CurveChartParams params)

  calcRatioPourcent
- void curveChartAddCurves (CurveChartParams params)

  curveChartAddCurves
- void curveChartSetLegend (CurveChartParams params)

  curveChartSetLegend

Private Attributes

- string titre
- char ficOut [255]
- int imageSize = 1024
- Color * myPalette [12]
- int gdColors [12]
- gdFontPtr fonts [5]
- gdImagePtr im

3.6.1 Detailed Description

The myGraphics class.

#include "myoptions.h"

#include "myparsing.h"

#include "myregex.h"

#include "gd.h"

requires -lgd flag

Provides methods for generating, displaying and saving pie charts and curve charts

3.6.2 Constructor & Destructor Documentation

3.6.2.1 myGraphics()

```
myGraphics::myGraphics ( )
```

myGraphics

Constructor

Initialize image, palette and fonts

3.6.3 Member Function Documentation

3.6.3.1 appendDataVector()

```
vector< DataElement > * myGraphics::appendDataVector (
            vector< DataElement > * v,
            string label = "",
            float abscisse = 0.0,
            float value = 0.0 )  [private]
```

appendDataVector

Parameters

vector<DataElement>	*v
string	label=""
float	abscisse=0.↩ 0
float	value=0.0

Returns

vector<DataElement>*

Create new DataElement and appends it to v

3.6.3.2 calcRatioPourcent()

```
double myGraphics::calcRatioPourcent (
            CurveChartParams params )  [private]
```

calcRatioPourcent

Parameters

CurveChartParams	params

Returns

double

Compute S sum of the values

returns 100/(S+1)

Required to calculate the angles of the pie chart

3.6.3.3 createColor()

```
Color * myGraphics::createColor (
            string nom,
            int indice,
            int red,
            int green,
            int blue )  [private]
```

createColor

Parameters

nom	
indice	
red	
green	
blue	

Returns

struct Color object. See gdImageColorAllocate documentation.

3.6.3.4 curveChart()

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

curveChart \param json datas

Parameters

myOptions	*options

generate, displays and save curve chart

3.6.3.5 curveChartAddCurves()

```
void myGraphics::curveChartAddCurves (
            CurveChartParams params )  [private]
```

curveChartAddCurves

Parameters

CurveChartParams	params

Draw lines

3.6.3.6 curveChartInit()

```
void myGraphics::curveChartInit (
            CurveChartParams params )  [private]
```

curveChartInit

Parameters

CurveChartParams	params

Draws Frame, axes, title and description

3.6.3.7 curveChartSetLegend()

```
void myGraphics::curveChartSetLegend (
            CurveChartParams params )  [private]
```

curveChartSetLegend

Parameters

CurveChartParams	params

Displays colored labels in legend area

3.6.3.8 getDataVectorMaxValue()

```
float myGraphics::getDataVectorMaxValue (
            vector< DataElement > * v )  [private]
```

getDataVectorMaxValue

Parameters

vector<DataElement>	*v

Returns

float

required to set curve chart ordinate scale

3.6.3.9 getDataVectorMinValue()

```
float myGraphics::getDataVectorMinValue (
            vector< DataElement > * v )  [private]
```

getDataVectorMinValue

Parameters

vector<DataElement>	*v

Returns

float

required to set curve chart ordinate scale

3.6.3.10 initFonts()

```
void myGraphics::initFonts ( )  [private]
```

initFonts

Initialize fonts

based on _<gdfontt.h> <gdfonts.h> <gdfontmb.h> <gdfontl.h> <gdfontg.h>

3.6.3.11 initPalette()

```
void myGraphics::initPalette ( )  [private]
```

initPalette

creates 12 colors palette

Each color works in pair

eg: 2 -> green and 3 -> darkgreen

0 -> black

1 -> white

3.6.3.12 pieChart()

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

pieChart

Parameters

json	datas
myOptions	*options

generate, displays and save pie chart

3.6.3.13 pieChartDraw()

```
void myGraphics::pieChartDraw (
            CurveChartParams params )  [private]
```

pieChartDraw

Parameters

CurveChartParams	params

Draws pie chart

3.6.3.14 pieChartInit()

```
void myGraphics::pieChartInit (
            CurveChartParams params )  [private]
```

pieChartInit

Parameters

CurveChartParams	params

Draws Frame, axes, title and description

3.6.3.15 setVector()

```
void myGraphics::setVector (
            vector< DataElement > * v,
            json datas,
            string dataSet )  [private]
```

setVector

Parameters

*vector<DataElement>**	v
json	datas
string	dataSet

Creates a DataElement for each measure stored in json datas

parsing datas using dataset : datas[i]["stations"][0][dataSet];

3.6.4 Member Data Documentation

3.6.4.1 ficOut

```
char myGraphics::ficOut[255]  [private]
```

3.6.4.2 fonts

```
gdFontPtr myGraphics::fonts[5]  [private]
```

3.6.4.3 gdColors

```
int myGraphics::gdColors[12]  [private]
```

3.6.4.4 im

```
gdImagePtr myGraphics::im  [private]
```

3.6.4.5 imageSize

```
int myGraphics::imageSize = 1024  [private]
```

3.6.4.6 myPalette

```
Color* myGraphics::myPalette[12]  [private]
```

3.6.4.7 titre

```
string myGraphics::titre  [private]
```

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

3.7 myOptions Class Reference

The myOptions class.

```
#include <myoptions.h>
```

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 getDataPathName ()
  getDataPathName();
- string getFullCurveChartFileName ()
  getFullCurveChartFileName
- string getFullHistoChartFileName ()
  getFullHistoChartFileName
- string getFullPieChartFileName ()
  getFullPieChartFileName
- bool isDisplay ()
  isDisplay

Private Attributes

- json options
  options

3.7.1 Detailed Description

The myOptions class.

Manage acces to AIQWA.conf file

Allows to modify API parameters and local files names and paths

without the need to recompile

File Format :

{

"curlopts": {

"url": "https://api.ambeedata.com/latest/by-lat-lng",

"urlParams": {

"lat": "43.560537",

"lng": "1.404690"

},

"api-key": "x-api-

key:b83fcfd7137ff81d96b92a34d3488506b7d3976bda58077cab133e94efd0a240"

},

"display":true,

"filesOwner": "owner",

"logPath": "logs",

"logFileName": "AIQWA.log",

"dataPath": "datas",

"dataFileName": "AirQualityWatch",

"chartPath": "charts",

"curveChartFileName": "curve.png",

"histoChartFileName": "histo.png",

"pieChartFileName": "pie.png"

}

3.7.2 Constructor & Destructor Documentation

3.7.2.1 myOptions()

```
myOptions::myOptions ( )
```

myOptions

Constructor

3.7.3 Member Function Documentation

3.7.3.1 getApiKeyHeader()

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

getApiKeyHeader

Returns

string

3.7.3.2 getDataPathName()

```
string myOptions::getDataPathName ( )
```

getDataPathName();

Returns

string

return datas path

3.7.3.3 getFilesOwner()

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

getFilesOwner

Returns

string

3.7.3.4 getFullCurveChartFileName()

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

getFullCurveChartFileName

Returns

string

return path/fileName

3.7.3.5 getFullDataFileName()

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

getFullDataFileName

Returns

string

return datas path/fileName

3.7.3.6 getFullHistoChartFileName()

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

getFullHistoChartFileName

Returns

string

return path/fileName

3.7.3.7 getFullLogFileName()

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

getFullLogFileName

Returns

string

3.7.3.8 getFullPieChartFileName()

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

getFullPieChartFileName

Returns

string

return path/fileName

3.7.3.9 getFullUrl()

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

getFullUrl

Returns

string

Returns full API Url, including GET params

3.7.3.10 isDisplay()

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

isDisplay

Returns

bool

Set false on embedded system

Set true on local system to allow system call to *display*

3.7.3.11 readFromFile()

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

readFromFile

Parameters

string	fileName

Read options from file in json format

3.7.4 Member Data Documentation

3.7.4.1 options

```
json myOptions::options  [private]
```

options

Stores json options

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

3.8 myParsing Class Reference

The myParsing class.

`#include <myparsing.h>`

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 fromDatasFile (myOptions *options)
  fromDatasFile

Private Attributes

- json myJson

3.8.1 Detailed Description

The myParsing class.

shortcut methods based on <nlohmann/json.hpp> library

3.8.2 Constructor & Destructor Documentation

3.8.2.1 myParsing()

```
myParsing::myParsing ( )
```

myParsing

Constructor

3.8.3 Member Function Documentation

3.8.3.1 appendFileToDatas()

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

appendFileToDatas

Parameters

string	fileName

Append current latest downloaded data to file *fileName*

3.8.3.2 appendToDatas()

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

appendToDatas

Parameters

myOptions∗	options

Append current latest downloaded data to file *options->getFullDataFileName().json*

3.8.3.3 fromChar()

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

fromChar

Parameters

char∗	str

Returns

myParsing∗

Generate json from char ∗data read from API returned by curl

3.8.3.4 fromDatasFile()

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

fromDatasFile

Parameters

myOptions	∗options

Returns

const json

returns json content of _options->getFullDataFileName().json"

the file is json array containing previously stored datasets

3.8.3.5 fromFile()

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

fromFile

Parameters

string	fileName

Returns

myParsing∗

Read file in json format, parse it and strores data in myJson

3.8.3.6 getMyJson()

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

getMyJson

Returns

const json &

3.8.3.7 setMyJson()

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

setMyJson

Parameters

const	json &newMyJson

3.8.3.8 toFile()

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

toFile

Parameters

myOptions∗	options

Returns

int

stores myJson to fileName returned by options->getFullDataFileName

an updatedAt tag is appended to fileName

3.8.3.9 toString()

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

toString

Returns

string

return json dump, for debug purpose

3.8.4 Member Data Documentation

3.8.4.1 myJson

```
json myParsing::myJson  [private]
```

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

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

3.9 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

3.9.1 Detailed Description

The myRegex class.

Regex helpers to display dates and times

3.9.2 Constructor & Destructor Documentation

3.9.2.1 myRegex()

```
myRegex::myRegex ( )
```

myRegex

3.9.3 Member Function Documentation

3.9.3.1 ambeeDataGetDateTime()

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

ambeeDataGetDateTime

Parameters

updatedAtField	

Returns

3.9.3.2 toFormatDDMMYY()

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

toFormatDDMMYY

Parameters

updatedAtField	

Returns

3.9.3.3 toFormatDDMMYYHHMM()

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

toFormatDDMMYYHHMM

Parameters

updatedAtField	

Returns

3.9.3.4 toFormatHHMM()

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

toFormatHHMM

Parameters

updatedAtField	

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

3.10 response Struct Reference

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

Public Attributes

- char * memory
- size_t size

3.10.1 Member Data Documentation

3.10.1.1 memory

```
char* response::memory
```

3.10.1.2 size

```
size_t response::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

3.11 updatedAt Struct Reference

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

Public Attributes

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

3.11.1 Member Data Documentation

3.11.1.1 day

```
int updatedAt::day
```

3.11.1.2 hour

```
int updatedAt::hour
```

3.11.1.3 minute

```
int updatedAt::minute
```

3.11.1.4 month

```
int updatedAt::month
```

3.11.1.5 second

```
int updatedAt::second
```

3.11.1.6 year

```
int updatedAt::year
```

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

- /home/sylvain/Documents/Travail/ajc-akkodis/formation/LinuxEmbarque/Projet/devel/AIrQualityWAtch/myregex.h

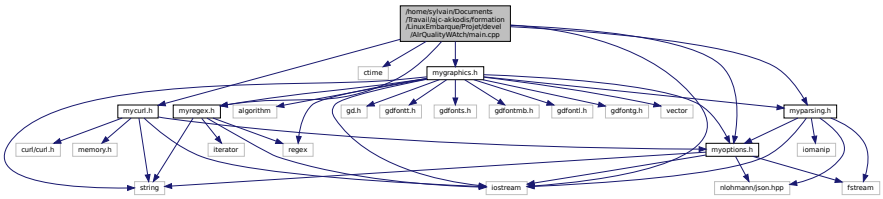
Chapter 4

File Documentation

4.1 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/main.cpp File Reference

```
#include <iostream>
#include <ctime>
#include "mycurl.h"
#include "myparsing.h"
#include "myoptions.h"
#include "mygraphics.h"
#include "myregex.h"
```

Include dependency graph for main.cpp:



Functions

- int downloadDatas (char **data, myOptions *options)
- int main ()

4.1.1 Function Documentation

4.1.1.1 downloadDatas()

```
int downloadDatas (
            char ** data,
            myOptions * options )
```

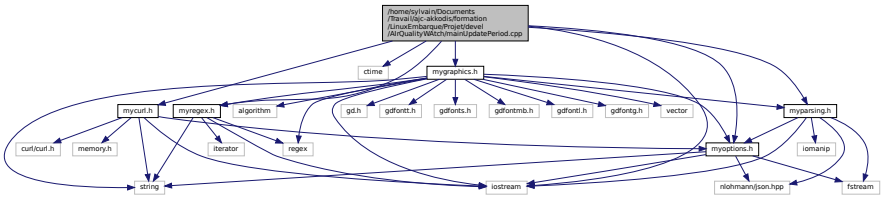
4.1.1.2 main()

```
int main ( )
```

4.2 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/mainUpdatePeriod.cpp File Reference

```
#include <iostream>
#include <ctime>
#include "mycurl.h"
#include "myparsing.h"
#include "myoptions.h"
#include "mygraphics.h"
#include "myregex.h"
```

Include dependency graph for mainUpdatePeriod.cpp:



Functions

- int downloadDatas (char **data, myOptions *options)
- int main ()

4.2.1 Function Documentation

4.2.1.1 downloadDatas()

```
int downloadDatas (
            char ** data,
            myOptions * options )
```

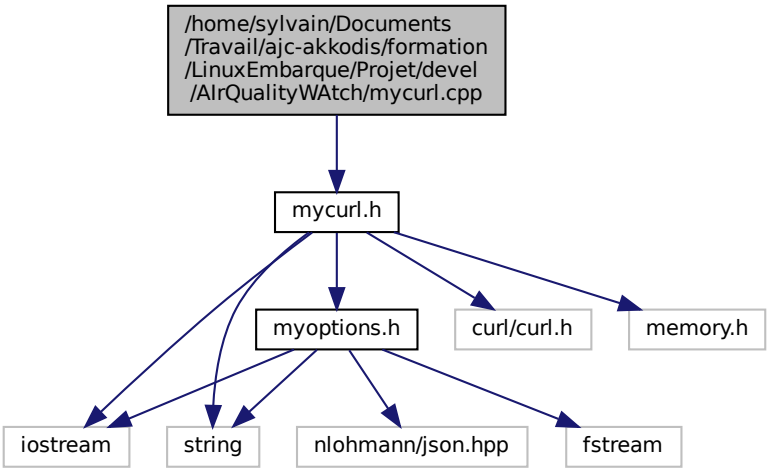
4.2.1.2 main()

```
int main ( )
```

4.3 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/mycurl.cpp File Reference

```
#include "mycurl.h"
```

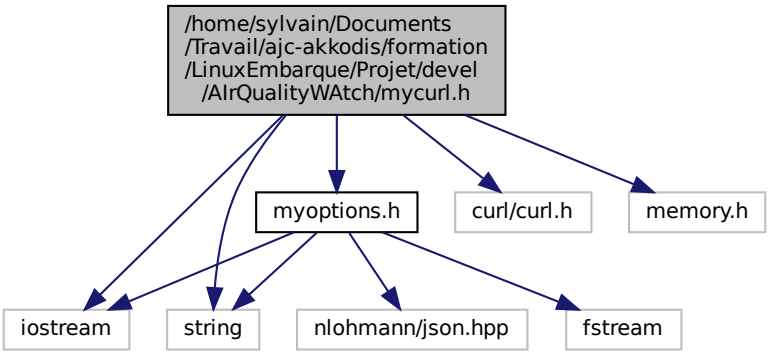
Include dependency graph for mycurl.cpp:



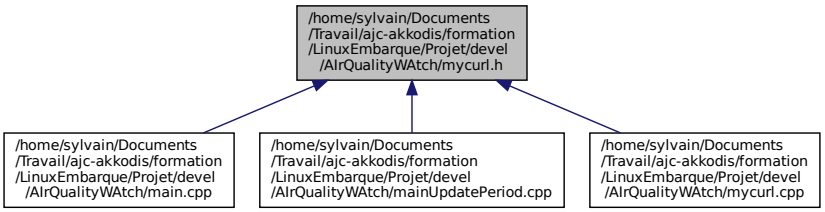
4.4 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/mycurl.h File Reference

```
#include <iostream>
#include <curl/curl.h>
#include <memory.h>
#include <string>
#include "myoptions.h"
```

Include dependency graph for mycurl.h:



This graph shows which files directly or indirectly include this file:



Classes

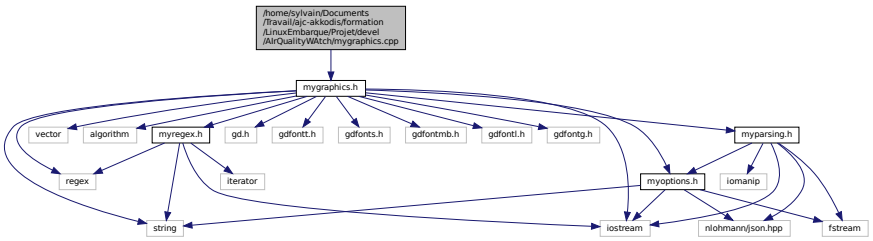
- struct response
- class myCurl

    # The myCurl class

4.5 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/mygraphics.cpp File Reference

```
#include "mygraphics.h"
```

Include dependency graph for mygraphics.cpp:

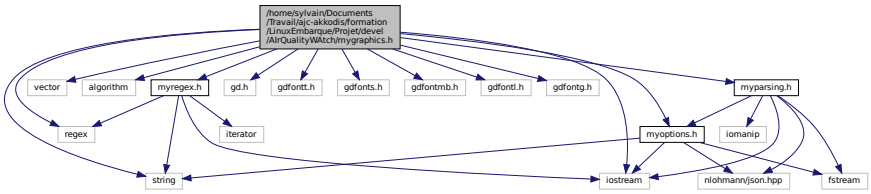


4.6 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/mygraphics.h File Reference

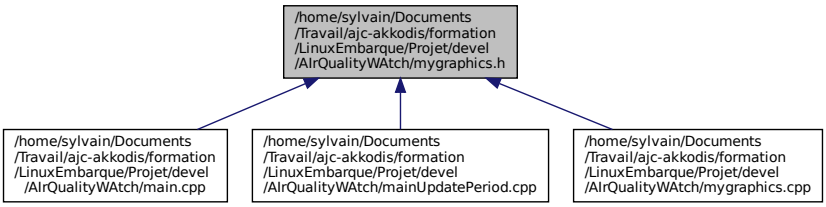
```
#include <iostream>
#include <string>
#include <vector>
#include <algorithm>
#include <regex>
#include <gd.h>
#include <gdfontt.h>
```

```
#include <gdfonts.h>
#include <gdfontmb.h>
#include <gdfontl.h>
#include <gdfontg.h>
#include "myoptions.h"
#include "myparsing.h"
#include "myregex.h"
```

Include dependency graph for mygraphics.h:



This graph shows which files directly or indirectly include this file:



Classes

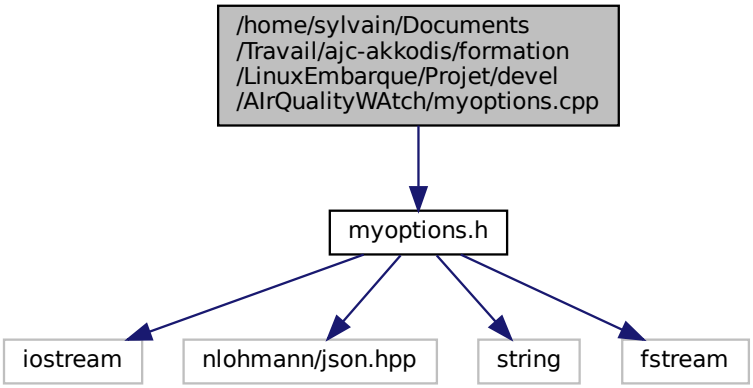
- struct Color
- struct DataElement
- struct dataSet
- struct CurveChartParams
- class myGraphics

  The myGraphics class.

4.7 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myoptions.cpp File Reference

```
#include "myoptions.h"
```

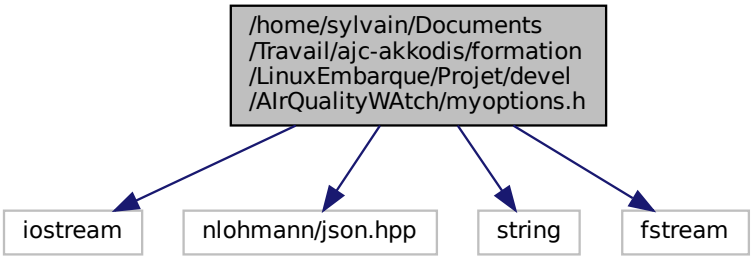
Include dependency graph for myoptions.cpp:



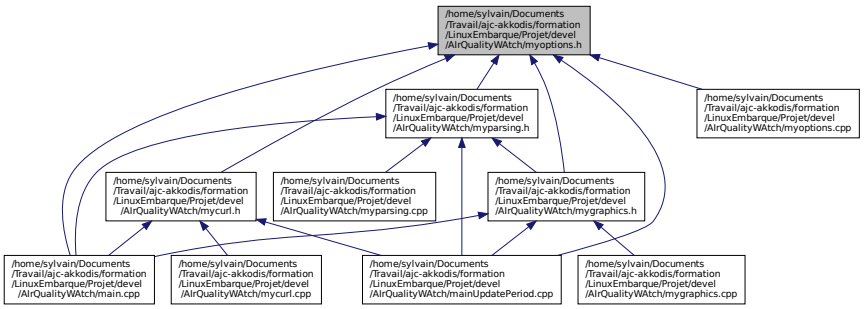
4.8 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myoptions.h File Reference

```
#include <iostream>
#include <nlohmann/json.hpp>
#include <string>
#include <fstream>
```

Include dependency graph for myoptions.h:



This graph shows which files directly or indirectly include this file:



Classes

- class myOptions

  The myOptions class.

Typedefs

- using json = nlohmann::json

4.8.1 Typedef Documentation

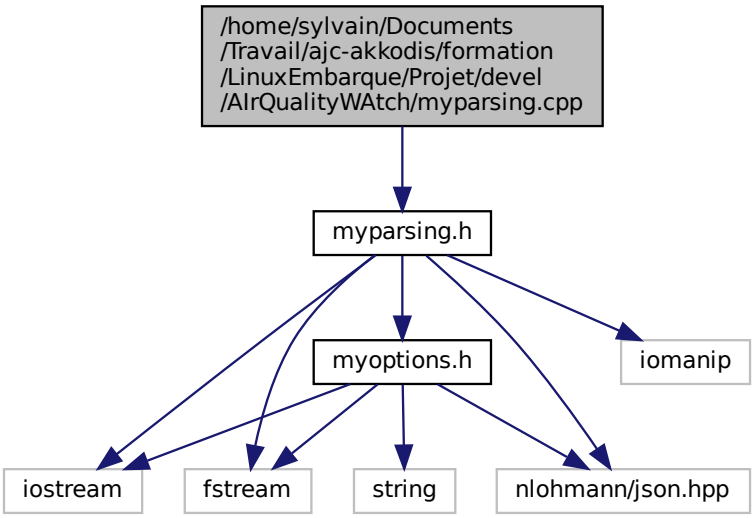
4.8.1.1 json

```
using json = nlohmann::json
```

4.9 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myparsing.cpp File Reference

```
#include "myparsing.h"
```

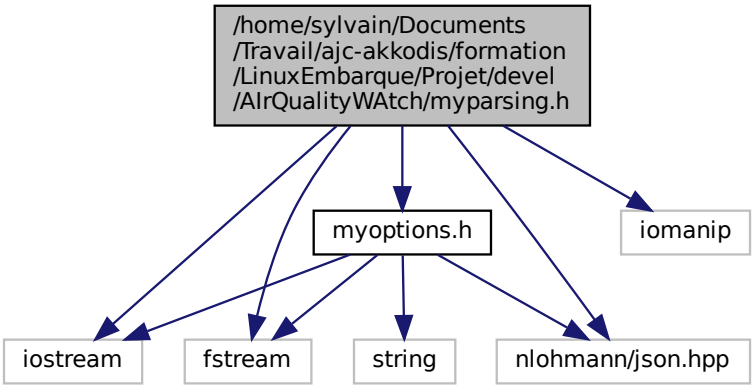
Include dependency graph for myparsing.cpp:



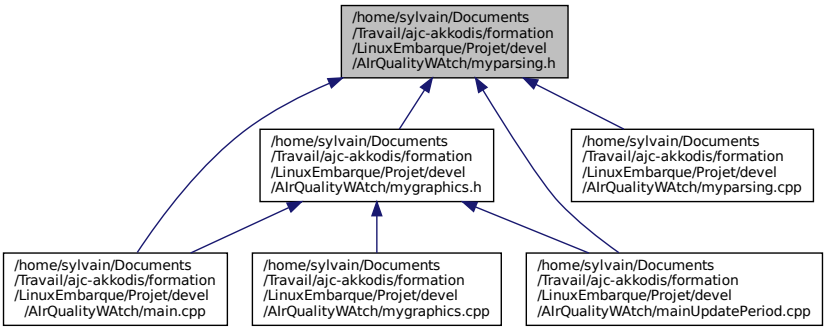
4.10 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myparsing.h File Reference

```
#include <iostream>
#include <fstream>
#include <iomanip>
#include <nlohmann/json.hpp>
#include "myoptions.h"
```

Include dependency graph for myparsing.h:



This graph shows which files directly or indirectly include this file:



Classes

- class myParsing

  The myParsing class.

Typedefs

- using json = nlohmann::json

4.10.1 Typedef Documentation

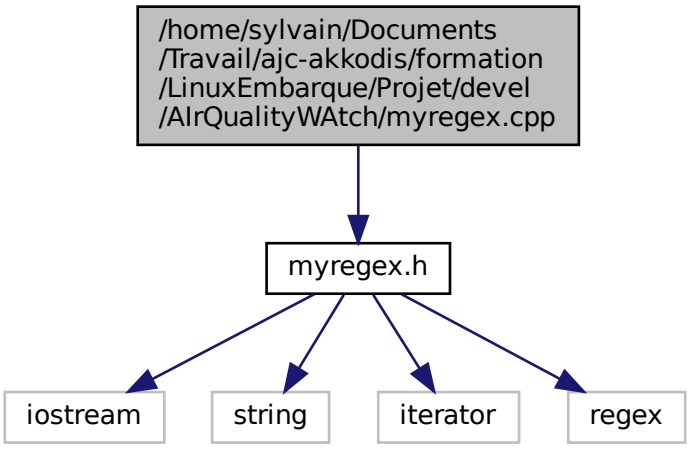
4.10.1.1 json

```
using json = nlohmann::json
```

4.11 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myregex.cpp File Reference

```
#include "myregex.h"
```

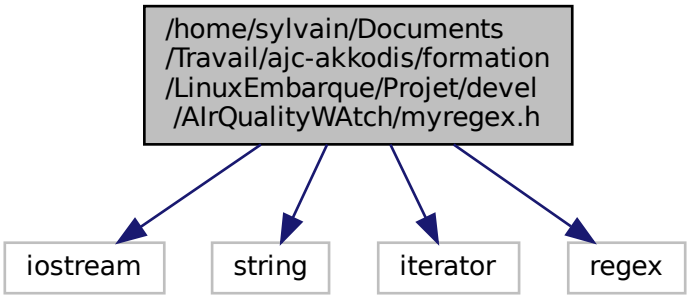
Include dependency graph for myregex.cpp:



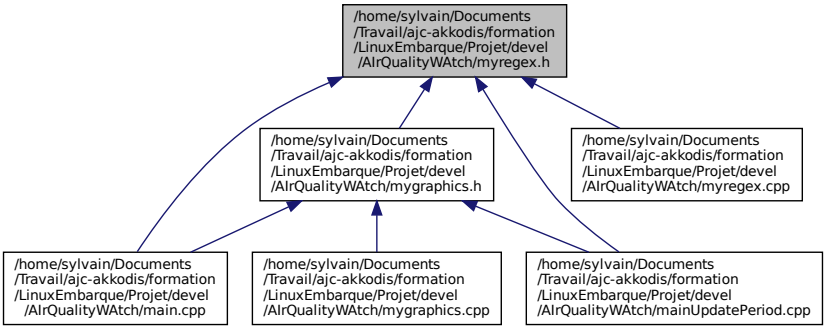
4.12 /home/sylvain/Documents/Travail/ajc-akkodis/formation/Linux↩ Embarque/Projet/devel/AIrQualityWAtch/myregex.h File Reference

```
#include <iostream>
#include <string>
#include <iterator>
#include <regex>
```

Include dependency graph for myregex.h:



This graph shows which files directly or indirectly include this file:



Classes

- struct updatedAt
- class myRegex

  The myRegex class.

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