Python-Covid

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1 Python-Covid	1
1.0.1 Pre-requisite	1
1.1 To start the app	1
1.2 Made with	2
1.3 Features	2
1.4 Documentation	2
1.5 Versions	2
1.6 Authors	2
1.7 License	2
2 Class Index	3
2.1 Class List	3
3 File Index	5
3.1 File List	5
4 Class Documentation	7
4.1 cli.CLI Class Reference	7
4.1.1 Detailed Description	7
4.1.2 Member Function Documentation	8
4.1.2.1handle_cmd()	8
4.1.2.2 exec()	8
4.1.2.3 run()	9
4.2 cli.Command Class Reference	10
4.2.1 Detailed Description	10
4.3 request.Request Class Reference	10
4.3.1 Detailed Description	11
4.3.2 Member Function Documentation	11
4.3.2.1push_info()	11
4.3.2.2 export_response_to_excel()	12
4.3.2.3 get_all_data()	12
4.3.2.4 get_dpt_data()	13
5 File Documentation	15
5.1 src/app.py File Reference	15
5.1.1 Detailed Description	15
5.2 src/cli.py File Reference	15
5.2.1 Detailed Description	16
5.3 src/request.py File Reference	16
5.3.1 Detailed Description	17
Index	19

# **Python-Covid**

This project is a CLI application that gives information about the covid-pandemic evolution in France through the use of a public API.

### 1.0.1 Pre-requisite

To work with this project, you'll need...

• Python 3.7 or above installed

If you have Python installed and PiP ready, you can easily run the following command to install all the project dependencies at once :

```
pip install -r requirements.txt
```

On the other hand, you can install every requirement one by one :

- The "requests" module installed for Python: pip install requests
- The "tabulate" module installed for Python: pip install tabulate

## 1.1 To start the app

Just clone this repo and run py src/app.py and check that covid data!

If you wish to run this app on a computer using windows without having a python installation, you can download a release package that contains an executable made out of the source code using py2exe. (WIP)

2 Python-Covid

#### 1.2 Made with

• VS Code - A code editor that works well, made by Microsoft. Full of extensions made by the community, it supports a lot of languages, uses Git for merging and amending and a terminal is embedded in it.

- Py2exe An extension that allows python to build apps into windows executables.
- Doxygen An excellent tool for comments based documentation. It generates html content and a PDF.

## 1.3 Features

- A basic help page when typing covid -h that gives help about all the commands of the app
- A main function that gives a table full of data about today's status in every dept when typing covid
- A table containing data for a specific dept when typing <code>covid -dept <dpt\_nb></code>
- A table for a specific date when typing covid -date <dd-mm-yyyy>

#### 1.4 Documentation

Documentation for this project is available as a website or as a pdf file. All of it has been generated using Doxygen.

## 1.5 Versions

Last Stable Version: 1.0.2-d Last Version: 1.0.2-d

Versions list: Click here to see

Versions are named like: Version M.m.p-state

M is the major version number, m is the minor version number, p is the patch/hotfix number and state is the current version state, it could be: "d" -> dev, "a" -> alpha, "b" -> beta, nothing -> final product

#### 1.6 Authors

• Yanis ATTIA alias @yadev83

## 1.7 License

This project is under the GNU Public License (GPL) v3 license - see the file LICENSE.md for more information

# **Class Index**

## 2.1 Class List

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

cli.CLI	
A class made to create some CLI and commands interpretation	7
cli.Command	
A class made to create some commands with their names and aliases	10
request.Request	
A class made to create some API calls on "https://coronavirusapi-france.now.sh/"	10

4 Class Index

# File Index

## 3.1 File List

Here is a list of all documented files with brief descriptions:

src/app.py	
The main app file for the covid-python application	15
src/cli.py	
This file contains specification for a cli Class and its components	15
src/request.py	
The request class to be used for the Covid19-fr api	16

6 File Index

# **Class Documentation**

## 4.1 cli.CLI Class Reference

A class made to create some CLI and commands interpretation.

### **Public Member Functions**

- def \_\_init\_\_ (self, keyword)
- def exec (self, command)

Parses and executes the whole line.

• def run (self)

Tha main loop for the CLI to run.

### **Public Attributes**

shouldQuit

### **Private Member Functions**

```
    def __handle_cmd (self, instruction, param="")
    Take an instruction as a parameter (and the following parameter)
```

• def \_\_\_exec\_cmd (self, command, param="")

#### **Private Attributes**

- \_\_keyword
- \_\_api
- \_\_commands

## 4.1.1 Detailed Description

A class made to create some CLI and commands interpretation.

### 4.1.2 Member Function Documentation

### 4.1.2.1 \_\_handle\_cmd()

Take an instruction as a parameter (and the following parameter)

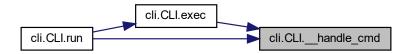
#### **Parameters**

instruction	the option to run (either –option or -alias)
param	the parameter to give to that specific option

Here is the call graph for this function:



Here is the caller graph for this function:



#### 4.1.2.2 exec()

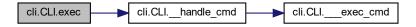
Parses and executes the whole line.

4.1 cli.CLI Class Reference 9

#### **Parameters**

command A string containing a full line of command

Here is the call graph for this function:



Here is the caller graph for this function:

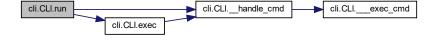


## 4.1.2.3 run()

```
cli.CLI.run ( self )
```

Tha main loop for the CLI to run.

Waits for an input and treat it Here is the call graph for this function:



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

src/cli.py

### 4.2 cli.Command Class Reference

A class made to create some commands with their names and aliases.

#### **Public Member Functions**

```
• def __init__ (self, name, alias, desc)
```

def get\_description (self)

returns the description of the command

def get\_name (self)

returns the complete name of the command

• def get\_alias (self)

returns the alias of this command

#### **Private Attributes**

- · \_\_description
- \_\_name
- \_\_alias

## 4.2.1 Detailed Description

A class made to create some commands with their names and aliases.

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

• src/cli.py

## 4.3 request.Request Class Reference

A class made to create some API calls on "https://coronavirusapi-france.now.sh/".

### **Public Member Functions**

- def \_\_init\_\_ (self)
- def print response (self)

This prints the self.response dictionnary as a table in the terminal.

def export\_response\_to\_excel (self, fname="output.xls")

This exports the contents of the result response to an xls file.

def get\_global\_data (self)

Throw a request that gets the data about the whole France.

def get\_all\_data (self, date="0000-00-00")

Throw a request that gets the data about every department of France altogether.

def get\_dpt\_data (self, dpt, date="0000-00-00")

Throw a request that gives data about a specific departement.

### **Public Attributes**

response

#### **Private Member Functions**

def \_\_push\_info (self, zone)
 This pushes an info into the response list.

#### **Private Attributes**

\_apiAddr

## 4.3.1 Detailed Description

A class made to create some API calls on "https://coronavirusapi-france.now.sh/".

### 4.3.2 Member Function Documentation

### 4.3.2.1 \_\_push\_info()

This pushes an info into the response list.

#### **Parameters**

zone This parameter is the json-formatted dictionnary for a specific department in france (or global)

This creates an element in the response dictionnary properly formatted Here is the caller graph for this function:



#### 4.3.2.2 export\_response\_to\_excel()

This exports the contents of the result response to an xls file.

#### **Parameters**

```
fname the name of the file to write to
```

#### 4.3.2.3 get\_all\_data()

Throw a request that gets the data about every department of France altogether.

#### **Parameters**

```
date The date from which we want the data. By default, this is today's date
```

Here is the call graph for this function:



Here is the caller graph for this function:



#### 4.3.2.4 get\_dpt\_data()

Throw a request that gives data about a specific departement.

#### **Parameters**

dpt	The department number to get
date	The date from which we want the data. By default, this is today's date

There is in the API a specific "url/LiveDataByDepartement?Departement={dpt}" call available. However, to be able to do a request with a specific date, it has to be a "AllDataByDate" call. So this function makes a get\_all\_data() call with a specific date and then filters the full request with only the wanted departement. Here is the call graph for this function:



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

src/request.py

# **File Documentation**

## 5.1 src/app.py File Reference

The main app file for the covid-python application.

## **Variables**

• app.interface = cli.CLI("covid")

## 5.1.1 Detailed Description

The main app file for the covid-python application.

**Author** 

Yanis ATTIA (@yadev83)

Version

0.1

Date

2021-01-08

Copyright

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## 5.2 src/cli.py File Reference

This file contains specification for a cli Class and its components.

16 File Documentation

### **Classes**

• class cli.CLI

A class made to create some CLI and commands interpretation.

· class cli.Command

A class made to create some commands with their names and aliases.

## 5.2.1 Detailed Description

This file contains specification for a cli Class and its components.

Author

Yanis ATTIA (@yadev83)

Version

0.2

Date

2021-01-10

Version 0.2 - Added documentation

Version 0.1 - File creation

Copyright

Copyright (c) 2021

## 5.3 src/request.py File Reference

The request class to be used for the Covid19-fr api.

### **Classes**

· class request.Request

A class made to create some API calls on "https://coronavirusapi-france.now.sh/".

## 5.3.1 Detailed Description

The request class to be used for the Covid19-fr api.

Author

Yanis ATTIA (@yadev83)

Version

0.3

Date

2021-01-08

Version 0.3 - Removes camel case notation

Version 0.2 - Adds getDptData and date parameter

Version 0.1 - File creation

Copyright

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18 File Documentation

## Index

```
__handle_cmd
    cli.CLI, 8
__push_info
    request.Request, 11
cli.CLI, 7
    __handle_cmd, 8
    exec, 8
    run, 9
cli.Command, 10
exec
    cli.CLI, 8
export_response_to_excel
    request.Request, 11
get_all_data
    request.Request, 12
get_dpt_data
    request.Request, 12
request.Request, 10
    __push_info, 11
    export_response_to_excel, 11
    get_all_data, 12
    get_dpt_data, 12
run
    cli.CLI, 9
src/app.py, 15
src/cli.py, 15
src/request.py, 16
```