
covid*dailyDocumentation*

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CHAPTER 1

Introduction

Coronavirus (COVID-19) Daily Data from Worldometers with Python

CHAPTER 2

Installation

In order to get this package working you will need to **install it via pip** (with a Python3.5 version or higher) on the terminal by typing:

```
$ pip install covid_daily
```


CHAPTER 3

Documentation

You can find the **complete developer documentation** at: https://covid_daily.readthedocs.io/, hosted on [Read the Docs](#) and generated using [sphinx](#) with the theme [sphinx_rtd_theme](#) which is the standard Read the Docs theme for sphinx.

4.1 Retrieve the World overview

```
import covid_daily

overview = covid_daily.overview(as_json=False)

print(overview.head())
```

As already mentioned, this function retrieves an overview of the COVID-19 from all the available countries as indexed in [Worldometers.info/coronavirus](https://www.worldometers.info/coronavirus)

	Country,Other	TotalCases	NewCases	TotalDeaths	NewDeaths	...	Serious,Critical	
	↪ TotCases/1M pop	Deaths/1M pop	TotalTests	Tests/1M pop				
0	World	4,125,046	+26,758	280,957	+733	...	47,637	↵
	↪ 529	36.0	NaN	NaN				
1	USA	1,347,325	+16	80,041	+4	...	16,816	↵
	↪ 4,070	242	8,918,345	26,943				
2	Spain	264,663	+1,880	26,621	+143	...	1,741	↵
	↪ 5,661	569	2,467,761	52,781				
3	Italy	218,268	NaN	30,395	NaN	...	1,034	↵
	↪ 3,610	503	2,514,234	41,584				
4	UK	215,260	NaN	31,587	NaN	...	1,559	↵
	↪ 3,171	465	1,728,443	25,461				

4.2 Retrieve chart's data from every country

```
import covid_daily

data = covid_daily.data(country='spain', chart='total-currently-infected-linear', as_
↪ json=False)
```

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```
print(data.head())
```

Which returns a `pandas.DataFrame` containing all the information provided by Worldometers related to the total amount of infected people because of the COVID-19 in Spain, in this case.

Currently Infected	
Date	
2020-05-09	63148
2020-05-10	61603
2020-05-11	63553
2020-05-12	62130
2020-05-13	60764

Note that this functions lets the user change the country and the chart type from which data will be retrieved, containing different statistics. All the available countries can be found at [AVAILABLE_COUNTRIES](#) and all the available chart types at [AVAILABLE_CHARTS](#).

4.3 Retrieve & Plot all the available charts

```
import covid_daily
from covid_daily.constants import AVAILABLE_CHARTS

import matplotlib.pyplot as plt

fig, axs = plt.subplots(3, 3, figsize=(20,15))

from itertools import product

pairs = list(product((range(3)), (range(3))))

for idx, available_chart in enumerate(AVAILABLE_CHARTS):
    data = covid_daily.data(country='spain', chart=available_chart, as_json=False)
    data.plot(ax=axs[pairs[idx]], title=available_chart)

fig.tight_layout()
fig.show()
```

The resulting figure containing all the data (charts) from Spain, as previously retrieved, is shown below, generated after the previous code block.

5.1 covid_daily.covid

`covid_daily.covid.data(country, chart, as_json=False)`

This function will retrieve the coronavirus data overview from all the available countries from [worldometers.info/coronavirus/](https://www.worldometers.info/coronavirus/), which contains real time data and statistics from multiple features related to the virus. For more information, please visit: <https://www.worldometers.info/coronavirus/>

Parameters

- **chart** (str) – name of the country to retrieve the COVID data from (available values at: `covid_daily.constants.AVAILABLE_COUNTRIES`)
- **chart** – name of the chart to retrieve the COVID data from (available values at: `covid_daily.constants.AVAILABLE_CHARTS`)
- **as_json** (bool) – set to *True* if overview wants to be retrieved as json, if not, leave default value (*False*).

Returns

pandas.DataFrame - data This function returns a `pandas.DataFrame` by default (if `as_json` parameter is set to *False*, if *True* a json is returned), containing the COVID data of the introduced chart from the introduced country.

Raises

- `ValueError` – raised if any of the introduced parameters is not valid
- `ConnectionError` – raised if connection with Worldometers failed

`covid_daily.covid.overview(as_json=False)`

This function retrieves the coronavirus data overview from all the available countries from [worldometers.info/coronavirus/](https://www.worldometers.info/coronavirus/), which contains real time data and statistics from multiple features related to the virus. For more information, please visit: <https://www.worldometers.info/coronavirus/>

Parameters **as_json** (bool) – set to *True* if overview wants to be retrieved as json, if not, leave default value (*False*).

Returns

pandas.DataFrame - overview This function returns a `pandas.DataFrame` by default (if `as_json` parameter is set to *False*, if *True* a `json` is returned), containing the world overview coronavirus data.

Raises

- `ValueError` – raised if any of the introduced parameters is not valid
- `ConnectionError` – raised if connection with Worldometers failed

CHAPTER 6

Contribute

As this is an open source project it is **open to contributions, bug reports, bug fixes, documentation improvements, enhancements and ideas**. There is an open tab of [issues](#) where anyone can open new issues if needed or navigate through them in order to solve them or contribute to its solving. Remember that **issues are not threads to describe multiple problems**, this does not mean that issues can't be discussed, but so to keep a structured project management, the same issue should not describe different problems, just the main one and some nested/related errors that may be found.

When citing this repository on your publications please use the following **BibTeX** citation:

```
@misc{
  covid_daily,
  author = { Alvaro Bartolome del Canto },
  title = { covid_daily - Coronavirus (COVID-19) Daily Data from Worldometers with ↵
↵Python },
  year = { 2020 },
  publisher = {GitHub},
  journal = {GitHub Repository},
  howpublished = {\url{https://github.com/alvarobartt/covid-daily}}
}
```


CHAPTER 8

Credits

This repository has been generated using [pypackage-cookie](#)

CHAPTER 9

Indices and tables

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- `modindex`
- `search`

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