Realtime Stock Documentation

Release 1.0.0

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Jun 25, 2018

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Realtime Stock

Realtime Stock is a Python package to gather realtime stock quotes from Yahoo Finance. The package enables you to handle single stocks or portfolios, optimizing the nunber of requests necessary to gather quotes for a large number of stocks.

- Repository: https://github.com/condereis/realtime-stock
- Free software: MIT license

1.1 Features

Stock class

- Method to get stock's latest price.
- Method to get all stock's information provided by Yahoo Finance.
- Method get stock's daily historical information.
- Method download stock's historical data from Yahoo Finance.

Utility functions

- Function to request recent quotes about a list of tickers.
- Function to get stock's daily historical information.
- Function to download historical data about a list of tickers.

1.2 Credits

This package was created with Cookiecutter and the audreyr/cookiecutter-pypackage project template.

CHAPTER 2

Installation

2.1 Stable release

To install Realtime Stock, run this command in your terminal:

```
$ pip install realtime-stock
```

This is the preferred method to install Realtime Stock, as it will always install the most recent stable release.

If you don't have pip installed, this Python installation guide can guide you through the process.

2.2 From sources

The sources for Realtime Stock can be downloaded from the Github repo.

You can either clone the public repository:

```
$ git clone git://github.com/condereis/realtime-stock
```

Or download the tarball:

```
$ curl  -OL https://github.com/condereis/realtime-stock/tarball/master
```

Once you have a copy of the source, you can install it with:

```
$ python setup.py install
```

CHAPTER 3

Usage

3.1 Stock Class

To use Realtime Stock in a project:

```
>>> from rtstock.stock import Stock
>>> stock = Stock('AAPL')
```

This will create a new instance of `rtstock.stock.Stock` using the 'AAPL' (Apple) ticker. The main methods of the Stock class are:

- get_historical(start_date, end_date)
- get_info()
- get_latest_price()
- save_historical(output_folder)

The exemple below shows *get_info* being called:

```
>>> stock.get_latest_price()
{
        'LastTradePriceOnly': '95.89',
        'LastTradeTime': '4:00pm'
}
```

3.2 Utility Functions

Another option is to use the functions from the `rtstock.utils` to perform the desired requests, for single or multiple stocks. Those functions are:

- download_historical(tickers_list, output_folder)
- request_historical(ticker, start_date, end_date)

- request_quotes(tickers_list, selected_columns=['*'])

The exemple below shows *request_historical* being called:

```
>>> from rtstock.utils import request_historical
>>> request_historical('AAPL', '2016-03-01', '2016-03-02')
[
        {
                'Close': '100.75',
                'Low': '99.639999',
                'High': '100.889999',
                'Adj_Close': '100.140301',
                'Date': '2016-03-02',
                'Open': '100.510002',
                'Volume': '33169600'
        },
        {
                'Close': '100.529999',
                'Low': '97.419998',
                'High': '100.769997',
                'Adj_Close': '99.921631',
                'Date': '2016-03-01',
                'Open': '97.650002',
                'Volume': '50407100'
        }
]
```

For further information on each individual method and function check rtstock.

CHAPTER 4

Contributing

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

You can contribute in many ways:

4.1 Types of Contributions

4.1.1 Report Bugs

Report bugs at https://github.com/condereis/realtime-stock/issues.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

4.1.2 Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with "bug" and "help wanted" is open to whoever wants to implement it.

4.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with "enhancement" and "help wanted" is open to whoever wants to implement it.

4.1.4 Write Documentation

Realtime Stock could always use more documentation, whether as part of the official Realtime Stock docs, in docstrings, or even on the web in blog posts, articles, and such.

4.1.5 Submit Feedback

The best way to send feedback is to file an issue at https://github.com/condereis/realtime-stock/issues.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

4.2 Get Started!

Ready to contribute? Here's how to set up *realtime-stock* for local development.

1. Fork the *realtime-stock* repo on GitHub.
2. Clone your fork locally:

```
$ git clone git@github.com:your_name_here/realtime-stock.git
```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

```
$ mkvirtualenv realtime-stock
$ cd realtime-stock/
$ python setup.py develop
```

4. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

   Now you can make your changes locally.

5. When you're done making changes, check that your changes pass flake8 and the tests, including testing other Python versions with tox:

```
$ flake8 rtstock tests
$ python setup.py test or py.test
$ tox
```

   To get flake8 and tox, just pip install them into your virtualenv.

6. Commit your changes and push your branch to GitHub:

```
$ git add .
$ git commit -m "Your detailed description of your changes."
$ git push origin name-of-your-bugfix-or-feature
```

7. Submit a pull request through the GitHub website.

4.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

1. The pull request should include tests.
2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring, and add the feature to the list in README.rst.
3. The pull request should work for Python 2.6, 2.7, 3.3, 3.4 and 3.5, and for PyPy. Check https://travis-ci.org/condereis/realtime-stock/pull_requests and make sure that the tests pass for all supported Python versions.

4.4 Tips

To run a subset of tests:

```
$ python -m unittest tests.test_rtstock
```

CHAPTER 5

Indices and tables

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