

Developer Manual

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System Requirements

Recommended System Requirements

Processors:

- Intel® Core™ i5 processor 4300M at 2.60 GHz or 2.59 GHz (1 socket, 2 cores, 2 threads per core), 8 GB of DRAM
- Intel® Xeon® processor E5-2698 v3 at 2.30 GHz (2 sockets, 16 cores each, 1 thread per core), 64 GB of DRAM
- Intel® Xeon Phi™ processor 7210 at 1.30 GHz (1 socket, 64 cores, 4 threads per core), 32 GB of DRAM, 16 GB of MCDRAM (flat mode enabled)

Disk space: 2 to 3 GB

Operating systems: Windows® 10, macOS*, and Linux*

Minimum System Requirements

Processors: Intel Atom® processor or Intel® Core™ i3 processor

Disk space: 1 GB

Operating systems: Windows* 7 or later, macOS, and Linux

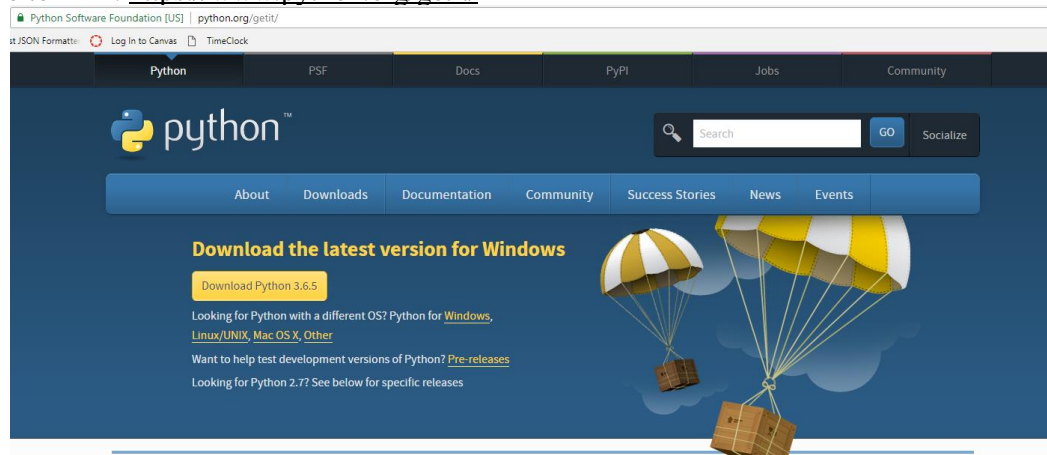
Tools and Technologies

- Python - 3.6.X
- Google Docs
- Microsoft Visual Studio Code
- Python packages
 - Tweepy – 3.6.0
 - Twarc – 1.6.1
 - NLTK - 3.3

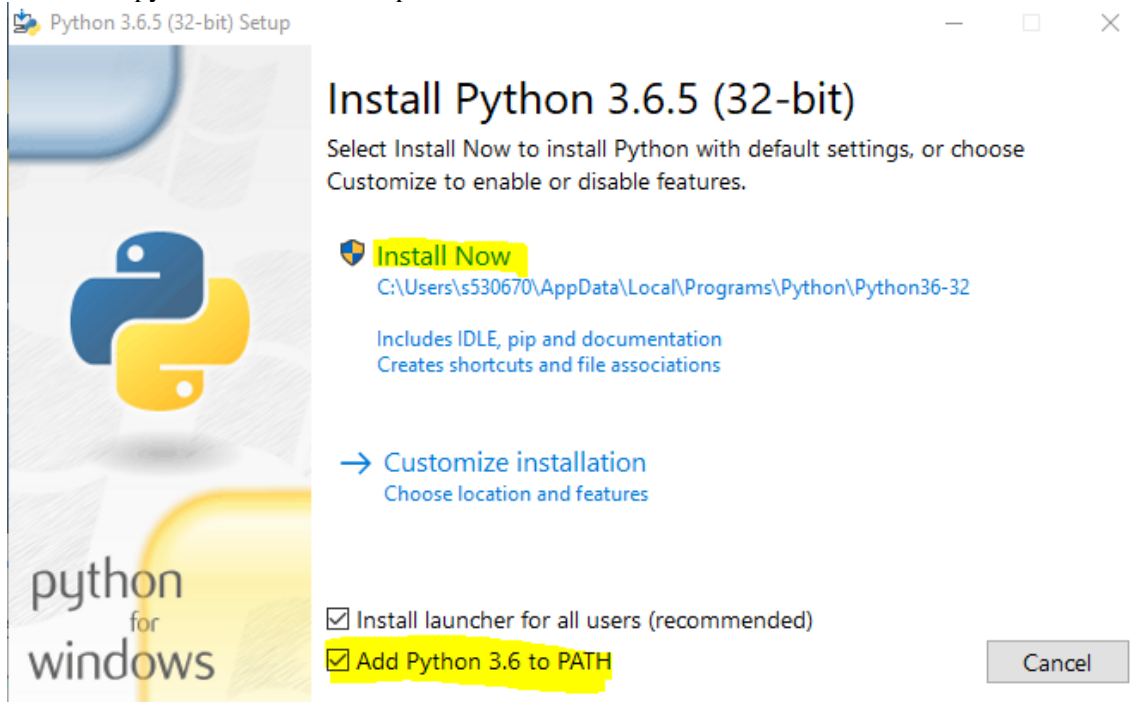
Installation Instructions

Python Installation

- a. Go to Link: <https://www.python.org/getit/>



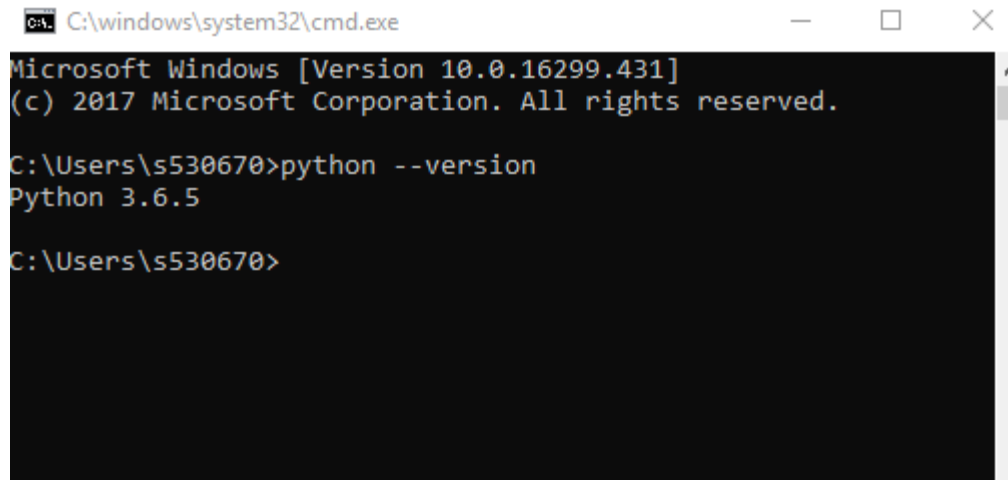
- b. Click on the Download the Python 3.6.5 button.
- c. A file starts downloading.
- d. Open the downloaded file
- e. Mark Add python 3.6 to PATH option and click on **Install now**



- f. After successful installation you will see below screen



- g. Open GitBash terminal or Command prompt anywhere on desktop and check the version by entering command **python --version**



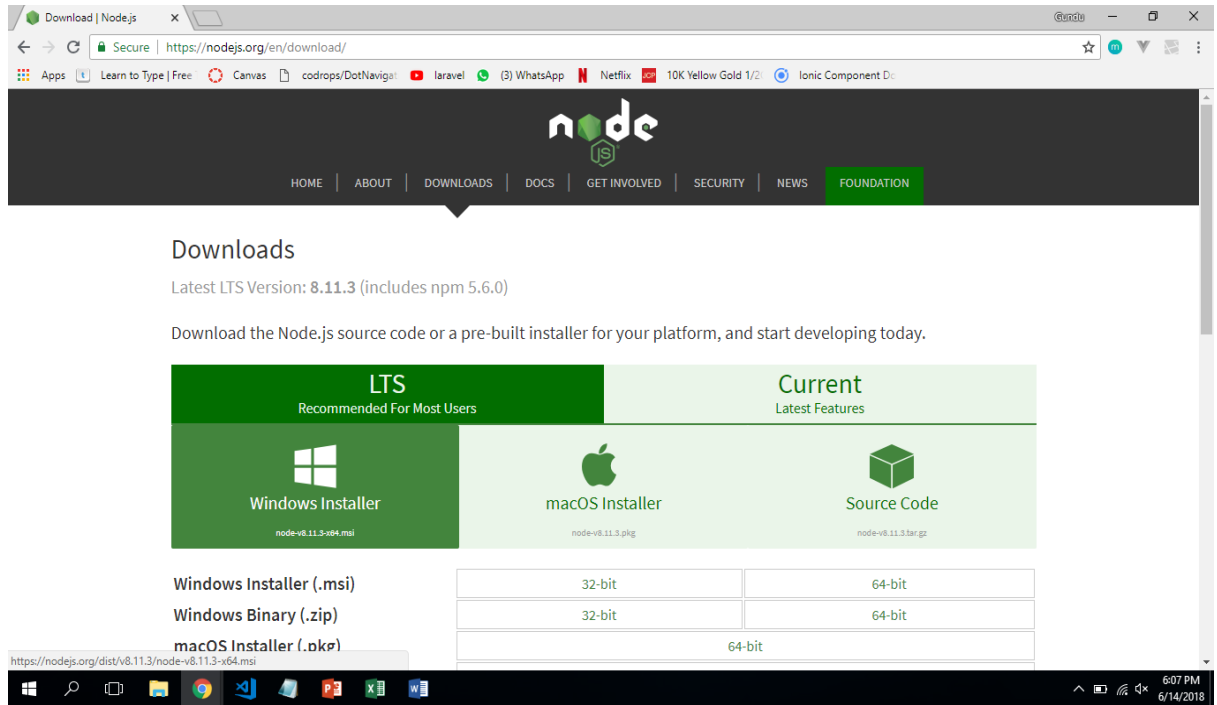
```
C:\windows\system32\cmd.exe
Microsoft Windows [Version 10.0.16299.431]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\s530670>python --version
Python 3.6.5

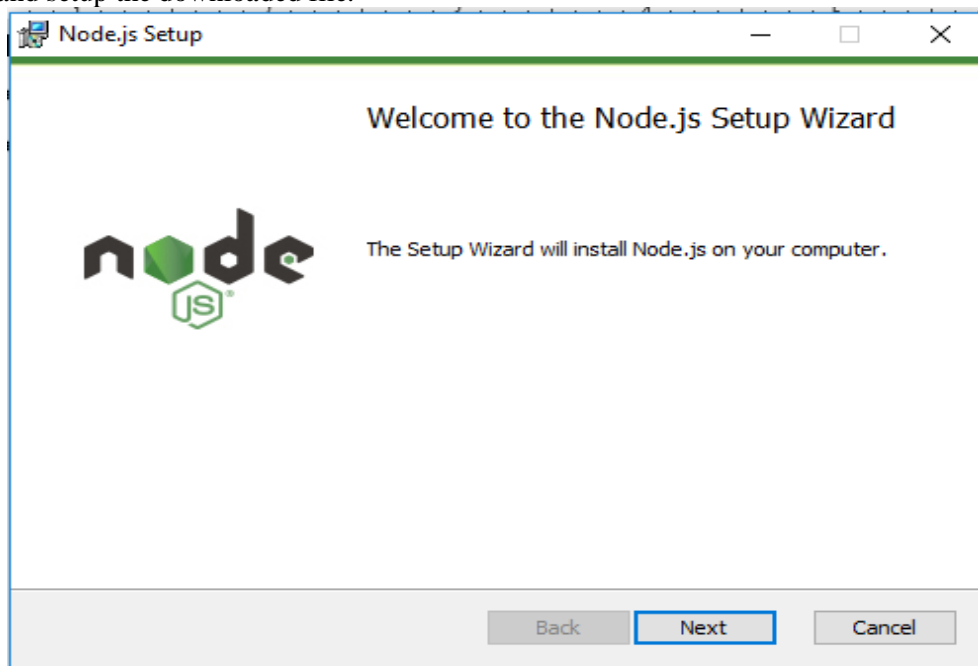
C:\Users\s530670>
```

NodeJS Installation

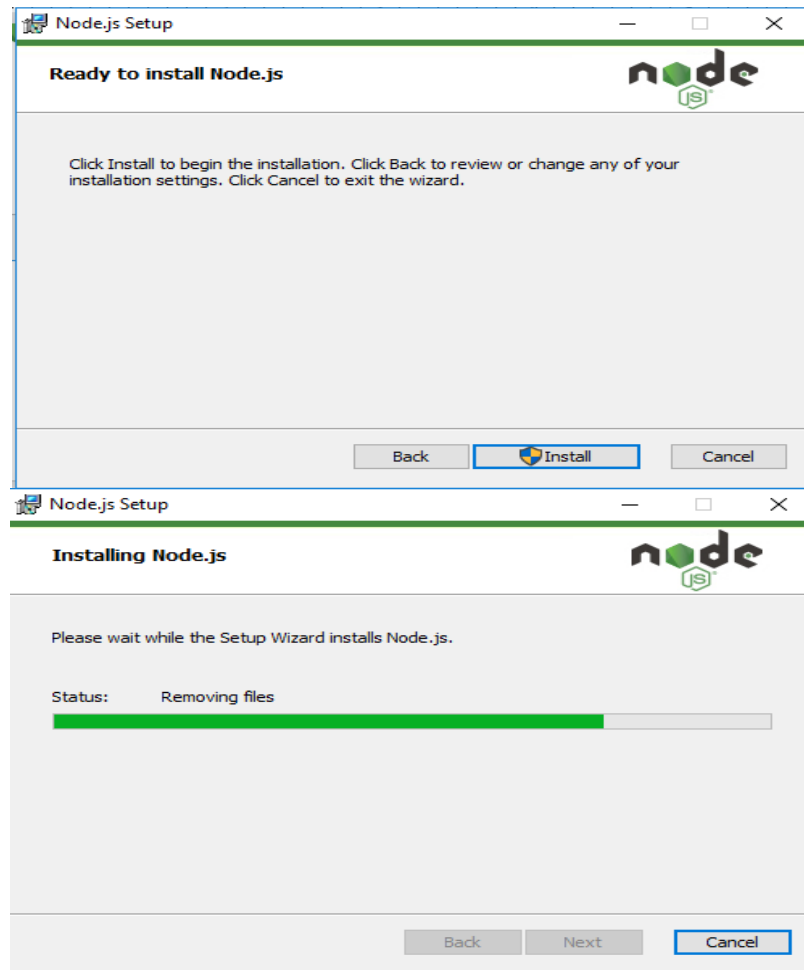
- h. Go to Link: <https://nodejs.org/en/download/>



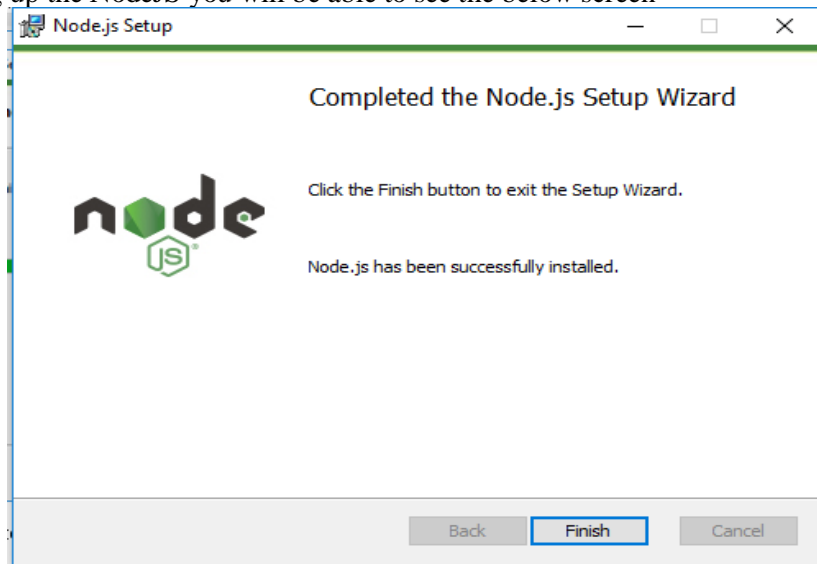
- i. Select Windows Installer and you will be able to notice a file starts downloading.
- j. Open and setup the downloaded file.



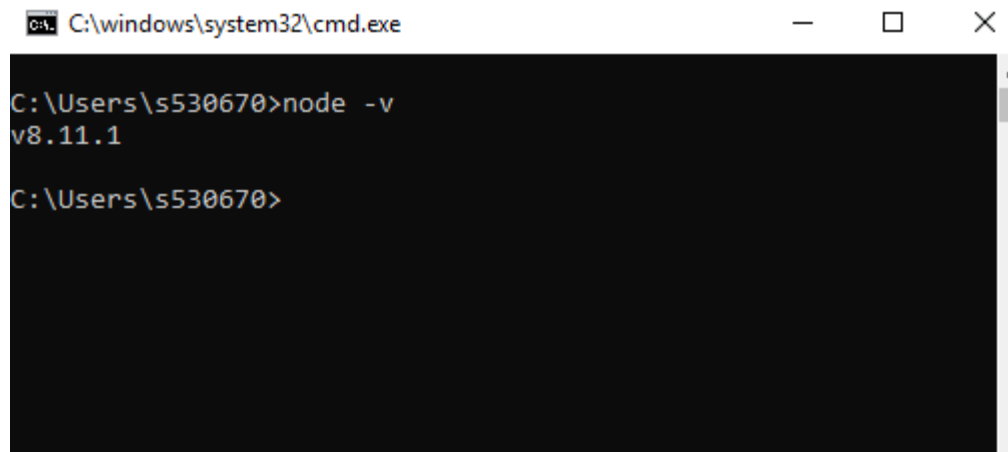
- k. Proceed till you install the NodeJS



1. After setting up the NodeJS you will be able to see the below screen



- m. Open GitBash terminal or Command prompt anywhere on desktop and check the version by entering command `$node -v`

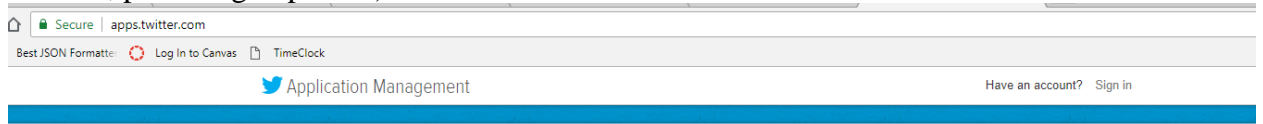


A screenshot of a Windows Command Prompt window. The title bar at the top reads "C:\windows\system32\cmd.exe" and includes standard window controls (minimize, maximize, close). The command prompt shows the user's current directory as "C:\Users\s530670". The user has entered the command "node -v", and the output "v8.11.1" is displayed on the next line. The prompt is ready for the next command.

```
C:\windows\system32\cmd.exe
C:\Users\s530670>node -v
v8.11.1
C:\Users\s530670>
```


Twitter Developer Account Setup

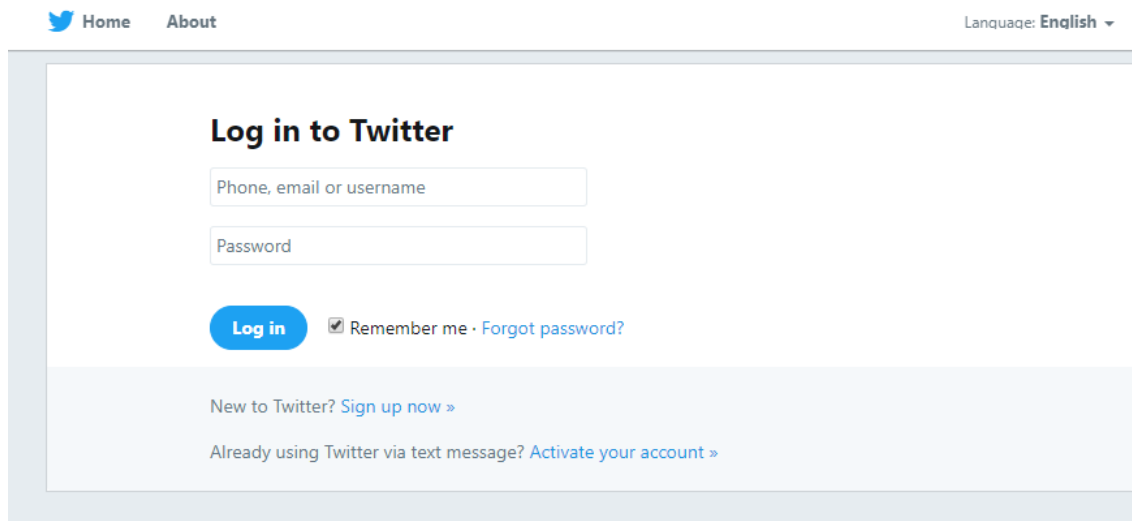
- a. Go to Link: <https://apps.twitter.com> and click on sign in. (If you don't have twitter account, please sign up for it).



Twitter Apps

Please [sign in](#) with your Twitter Account to create and maintain Twitter Apps.

- b. Sign in with your Twitter account



- c. Click on **Create New App**



- d. Fill in application details

Create an application

Application Details

Name *

Your application name. This is used to attribute the source of a tweet and in user-facing authorization screens. 32 characters max.

Description *

Your application description, which will be shown in user-facing authorization screens. Between 10 and 200 characters max.

Website *

Your application's publicly accessible home page, where users can go to download, make use of, or find out more information about your application. This fully-qualified URL is used in the source attribution for tweets created by your application and will be shown in user-facing authorization screens. (If you don't have a URL, yet, just put a placeholder here but remember to change it later.)

Callback URLs

Where should we return after successfully authenticating? OAuth 1.0a applications must explicitly specify their oauth_callback URL(s) here, as well as include the one of the URLs below in the request token step. To restrict your application from using callbacks, leave this field blank.

[Add a Callback URL](#)

Developer Agreement

☒ Yes, I have read and agree to the [Twitter Developer Agreement](#).

[Create your Twitter application](#)

- e. You can able to see the app details as shown below

Application Management

My Test app 123132

Test OAuth

Details Settings Keys and Access Tokens Permissions

Testing app

http://www.google.com/

Organization

Information about the organization or company associated with your application. This information is optional.

Organization	None
Organization website	None

Application Settings

Your application's Consumer Key and Secret are used to [authenticate](#) requests to the Twitter Platform.

Access level	Read and write (modify app permissions)
Consumer Key (API Key)	qp2gvIP1MOKPa8gYap8azki9a (manage keys and access tokens)
Callback URL	None
Sign in with Twitter	Yes
App-only authentication	https://api.twitter.com/oauth2/token
Request token URL	https://api.twitter.com/oauth/request_token
Authorize URL	https://api.twitter.com/oauth/authorize

- f. Go to **Keys and Access Tokens** Tab
- g. Look for **Create and my access token** button and click on it

Your Access Token

You haven't authorized this application for your own account yet.

By creating your access token here, you will have everything you need to make API calls right away. The access token generated will be assigned your application's current permission level.

Token Actions

Create my access token

- h. Make a note of OAuth Settings
- Consumer Key
 - Consumer Secret
 - OAuth Access Token
 - OAuth Access Token Secret

Steps for execution

1. Fork the repo - <https://github.com/GDP-MI7/socio-analyzer.git> and clone it.
2. Go to custom_analyzer folder
3. Open command prompt / Gitbash with current directory
4. Run **python dictionary_generation.py**
5. Run **python analyzer.py**
6. You will get output_analyzer.csv file.

Glossary of Errors

1. Rate limit exceeded error

This error occurs due to twitter API limit for each 15 minutes window.

```
S530670@nw40129 MINGW64 /c/Personal/Python Projects/SentimentAnalysis/data_pull (master)
$ python twar_api.py
WARNING:root:rate limit exceeded: sleeping 438.2711160182953 secs
WARNING:root:rate limit exceeded: sleeping 406.20541071891785 secs
WARNING:root:rate limit exceeded: sleeping 442.90397238731384 secs
WARNING:root:rate limit exceeded: sleeping 447.54904985427856 secs
Traceback (most recent call last):
  File "twar_api.py", line 12, in <module>
    for tweet in t.hydrate(open('./ids.txt')):
  File "C:\Users\S530670\AppData\Local\Programs\Python\Python36-32\lib\site-packages\tw
6, in hydrate
    tweets = resp.json()
  File "C:\Users\S530670\AppData\Local\Programs\Python\Python36-32\lib\site-packages\re
850, in json
```

2. Module not found error

Solution: `pip install <module_name>` `pip install pyquery`

```
File "C:\Users\S530465\Desktop\GetOldTweets-python\got3\manager\__init__.py", line 2, in <module>
    from .TweetManager import TweetManager
File "C:\Users\S530465\Desktop\GetOldTweets-python\got3\manager\TweetManager.py", line 3, in <module>
    from pyquery import PyQuery
ModuleNotFoundError: No module named 'pyquery'
PS C:\Users\S530465\Desktop\GetOldTweets-python> python Exporter.py -h
Traceback (most recent call last):
  File "Exporter.py", line 6, in <module>
    import got3 as got
  File "C:\Users\S530465\Desktop\GetOldTweets-python\got3\__init__.py", line 2, in <module>
    from . import manager
  File "C:\Users\S530465\Desktop\GetOldTweets-python\got3\manager\__init__.py", line 2, in <module>
    from .TweetManager import TweetManager
  File "C:\Users\S530465\Desktop\GetOldTweets-python\got3\manager\TweetManager.py", line 3, in <module>
    from pyquery import PyQuery
ModuleNotFoundError: No module named 'pyquery'
PS C:\Users\S530465\Desktop\GetOldTweets-python> █
```