Stock Sight Documentation

Read the readme before doing the following steps:

README.md

Follow the steps correctly

Open CMD and run these commands

(This step is a must for both local and Docker installation)

```
pip uninstall tweepy
```

```
pip install tweepy==3.10
```

Go to the Elasticsearch website

Download Elasticsearch

Download Elasticsearch or the complete Elastic Stack (formerly ELK stack) for free and start searching and analyzing in minutes with Elastic.

https://www.elastic.co/downloads/elasticsearch

Search. Observe. Protect.

elastic

Download the file depending on your OS

Go to this Kibana website and download its files

Download Kibana Free | Get Started Now

Download Kibana or the complete Elastic Stack (formerly ELK stack) for free and start visualizing, analyzing, and exploring your data with Elastic in minutes.

https://www.elastic.co/downloads/kibana

Search. Observe. Protect.

elastic

Create a Twitter developer account access its consumer keys and API keys and save it.

https://youtu.be/fQLa40L_BWA

Check this video access those keys and save it to notepad.

You can find config.sample.py copy that file paste it into the same folder and rename the copied files as config.py.

Add those keys in that config.py in their respective field.

Remember to update the consumer_key, and access_ tokens from Twitter API

Important Note: Make sure you have sufficient storage maybe more than 10 GB of space, I don't know the exact capacity. If it has less storage then it cannot allocate few resources and you will not get your username and password.

Now go to the elasticsearch directory and go to the bin folder and you will find the elasticsearch bat file Just run it in CMD and wait for a while. You will get a username and password and follow the below video to set up a few things.

https://youtu.be/kYXx0sq74Tc?si=p7Fc96TvuWKHRQbS

Then run these commands on CMD

🔗 Examples

Run sentiment.py to create 'stocksight' index in Elasticsearch and start mining and analyzing Tweets using keywords and the stock symbol TSLA

```
$ python sentiment.py -s TSLA -k 'Elon Musk',Musk,Tesla,SpaceX --d
```

Start mining and analyzing Tweets using keywords and the stock symbol TSLA and follow any url links in tweets and performing sentiment analysis on the link web page as well as the tweet

```
$ python sentiment.py -s TSLA -k 'Elon Musk',Musk,Tesla,SpaceX -l
```

Start mining and analyzing Tweets from feeds in config using cached user ids from file (if you change any of the twitter feeds in the config file, you need to delete this file and recreate it without -f)

```
$ python sentiment.py -s TSLA -f twitteruserids.txt --debug
```

Start mining and analyzing News headlines and following headline links and scraping relevant text on landing page

```
$ python sentiment.py -s TSLA --followlinks --debug
```

Run stockprice.py to add stock prices to 'stocksight' index in Elasticsearch

```
$ python stockprice.py -s TSLA --debug
```

🔗 Kibana

Load 'stocksight' index in Kibana. For index pattern you can use 'stocksight' if you only have the single index or 'stocksight-*', etc. For time-field name you will want to use the date/time field 'date'.

To import the saved exported visualizations/dashboard, go to Kibana, click on management, click on saved objects, click on the import button and import the export.json file.

Docker - Install

https://www.docker.com/products/docker-desktop/

Install the docker-desktop in your systems, it is available for Windows, Linux and mac

Docker Build

After the installation is completed go to the folder where the git repository is cloned and open in the terminal or CMD, Paste the below command to build

```
docker-compose build && docker-compose up
```

wait for the build to complete.

In another terminal in the same folder run this command

```
docker exec -it stocksight-stocksight-1 bash
```

Run the following Python commands :

```
python sentiment.py -s TSLA -k 'Elon Musk',Musk,Tesla,SpaceX --debug


python sentiment.py -s TSLA -k 'Elon Musk',Musk,Tesla,SpaceX -l --debug


python sentiment.py -s TSLA -f twitteruserids.txt --debug


python sentiment.py -s TSLA --followlinks --debug
```

```
python stockprice.py -s TSLA --debug
```

Important-note:

In the config.py make sure to change the name and port, as both docker and locall install use differently

For Docker:

```
elasticsearch_host = "elasticsearch"
elasticsearch_port = 9200
```

For Kibana:

```
elasticsearch_host = "localhost"
elasticsearch_port = 5601
```