# **Google Trends Download Tool ReadMe**

# **Google Trends Download Tool**

This  $\underline{\textbf{READ.ME}}$  is to describe the usage of Google Trends Download Tool

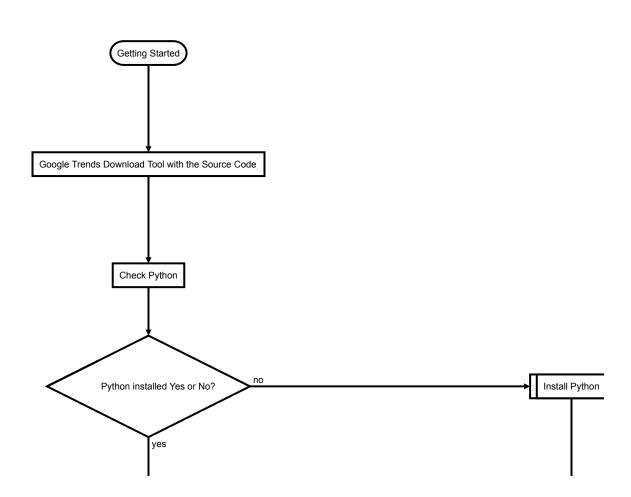
# o. Quick Start

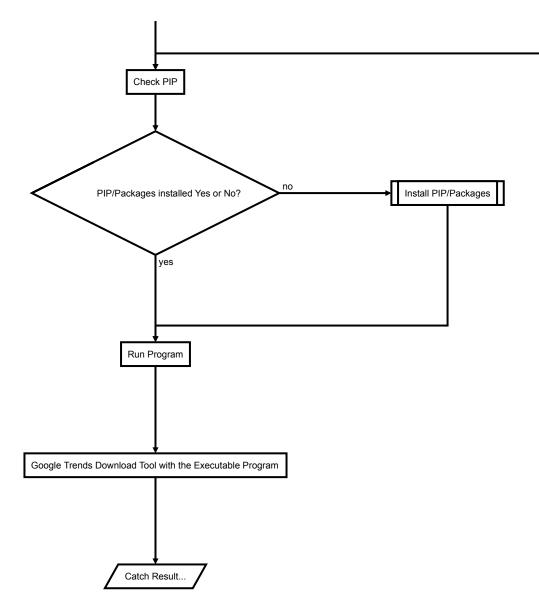
- 1. Store the execuateble file and the <u>keywords.txt</u> into same folder.
- 2. Double tick the execuatable file.
- 3. (Option) Change the parameters
- 4. Tick Go! botton
- 5. Leave it alone
- 6. Repeat step 4-6 in the next day until finish the work
- 7. Find the result in the data folder (same path of keywords.txt)

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# 1.1. WorkFlow





# 2. Getting Started

Here are two way to use the **Google Trends Download Tool**:

- 1. Google Trends Download Tool with the Executable Program
- 2. Google Trends Download Tool with the Source Code

# 2.1. Google Trends Download Tool with the Executable Program

This instructions will tell you the usage of Google Trends Download Tool with the Executable Program. And the usage of it is very simple:

- Keep the Executable file(normally call gui.exe for windows and gui for macOS) and <u>keywords.txt</u> file in one same folder(call <u>Folder</u> hereafter).
- · And double tick the Executable file to run.
- And the Following Instruction please see the  $\bf Step~3$  and  $\bf Step~4$  in the  $\underline{\bf Running~code}$

# 2.2. Google Trends Download Tool with the Source Code

If you choose to use this way to download Google Search Volume Data, then you need prepare the Source Code environment: <a href="Python 2.7">Python 2.7</a> and install related packages. Please see <a href="Installation">Installation</a>

### 2.2.1.Installation

• Check Python and PIP version or Download Python/PIP.

This Source Code is developed via the <a href="Python 2.7">Python 2.7</a>. Thus if to use Source code, make sure the computer install the <a href="Python 2.7">Python 2.7</a>.

Thus, first thing is to check the Installation of Python.

For Mac OS X or OSX or macOS, the  $\underline{Python~2.7}$  have already installed. But you still can check it

whether is available.

For Windows, <u>Python 2.7</u> environment normally is not installed. So Windows Users must download <u>Python 2.7</u> and related packages.

• Check the installation of Package management tool and required packages or install them

pip is the python package management tool, which is to fast install packages and deploy the code environment.

#### For Mac

Mac users are easy to start, because the python normally is already installed. Thus, the Mac users can skip the <u>Install Python</u> Step and driectly see <u>Install pip</u> Step.

#### Install Python

For checking Python installation in the Macbook /Pro/Air, you may follow this instruction:

- 1. Open the Terminal, which is located in the Utilities folder within the Applications folder.
- 2. Type the following command:

```
1 python -V
```

#### Install pip

To check installation of Package management tool (pip) and Packages

- 1. As the same with <u>last step</u>, you should open the <u>Terminal</u> firstly.
- 2. Type the command:

```
1 bash <(curl -s https://raw.githubusercontent.com/sn0wfree/data-collection-and-api/master/Tool/install-requirments.sh)
```

3. You may receive the following symbol and the output with Requirement already satisfied labels or Successfully installed XXXX labels:

```
1 % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed
2 100 1558k 100 1558k 0 0 3453k 0 --:--:- --:-- 3524k
3 ....
```

That means the pip and required packages are already installed in your Mac.

#### For Window

Windows Users need a fully step of installation Python and PIP, becasue Windows do not bind the python as the default component.

- To install  $\underline{Python\ 2.7}$  and  $\underline{pip}$ , please follow  $\underline{the\ instruction\ of\ Python.org}$  and  $\underline{pip}$ .
- After installation of Python and PIP, please type into the following commands:

```
1 pip install requests
2 pip install requests_cache
3 pip install pandas
```

- When finish these commands, the Environment and packages should be installed.
- Then you can go through and Running code.

### 2.2.2. Running code

- 1. Then you should be ready to use the Source Code.
- The Source Code includes two files:  $\underline{gui.py}$  and  $\underline{GoogleTrendsCollectionToolWithGui.pyc}$ . I recommand to put them in one empty folder (let's call it as  $\underline{Folder}$  hereafter) and one  $\underline{keywords.txt}$  file as well (see  $\underline{File}$   $\underline{Format/Location}$   $\underline{Explanation}$ ).
- And then you can use the <u>Terminal</u> (for Windows user is called Command-line,see <u>CMD</u>) to jump to the Folder by typing the following command into <u>Terminal</u> (for Windows user is called Command-line,see <u>CMD</u>):

```
1 cd /path/to/yourfolder
```

Here, /path/to/yourfolder is the path of your folder: <u>Folder</u>. It might requires your password, that
password is your login password, normally.

And last step, type the following command into <u>Terminal</u> (for Windows user is called Commandline,see <u>CMD</u>) to run the Source Code:

1 python gui.py

3. Just wait several seconds, you may see a window with a commandable console. The window like this:

<ul> <li>GoogleTrendsIndex-Download APP(Simple Interface)</li> </ul>							
Key Parameter Area							
Start Year or Period/Date:	2004						
Keywords:	/Users/sn0wfree/Documents	Browse					
Category:	7						
Geography:	World-wide						
Go!	Stop	Quit					

- This is the Interface of Download Tool.
- If the <u>keywords.txt</u> file has been put into correct loaction (same loaction with code or execuatable file), see
   <u>File Format/Location Explanation</u>. The program may automatically detect the path of it. If not, it will show
   "Not Found". You may need to manually choose the path by ticking the "Browse" button, or type in the full
   path by hands.
- And the parameters have been pre-set completely. You can change these paremeters as you need. Except
  the Start Year and Keywords (the first and second parameters), other parameters are not well tested
  and debuged, thus do not recommand to change it. See <a href="Parameters Explanation">Parameters Explanation</a>
- 4. If all have been set. Then you need is just to tick 'Go!' bottun to start running program and wait it to grab the results.

Attention: Because of Google Policy, each IP only can request 500-1500 requests per day (about 20-75 projects, depend on the recent request frequency). Hence, this program can collect max 75 projects information per day. It will automatically stop when the quota limit is reach and print out the status ("Quota limit Reach") in the *commandable console*. Then you can tick 'Quit' botton to exit or leave it alone. And re-run it in the Next Time

5. Result will be stored in the data folder which own the same path of keywords.txt file.

The <u>keywords.txt</u> also will be amend for the continue function. The number of keywords in this file will reduce with the process continuing. That means when the have completed the task, the <u>keywords.txt</u> should be the empty file.

### 3. Parameters Explanation

This program requires 4 parameters, and all own the per-set value.

These parameters include:

- $\bullet \ \ ({\rm 1}) \, \textit{Start Year or Period/Date}; \\$
- (2) Keywords;
- (3) Category
- (4) Geography.

#### **Explanation**

Start Year or Period/Date: is the Start year of your period. And it will include the date from the
first day of start year to Now, if the data is avaiable. You can change to others like 2010 or
2014, please do type in the future year.

Futhermore, you also can type date like 20141015, but it only recevies the month (10) and ingore the day (15). In this case: 20141015, the program will create the request with the date from 2014/Oct/01 to now.

• *Keywords*: is the path of the keywords file, which includes the keywords you want to search. The file format is .txt and requires one keyword in one line.

Detail/example please see  $\underline{\text{example}}$ 

 Category: the searching industry, has been pre-set to 7, that is the symbol for the Financial Industry.

You also can change it to others, please find the Category code in the <u>GoogleTrendsPage</u> by changing label of category and inspect the number change in the webaddress after ?cat=.

 $\bullet \ \ \, \textbf{\textit{Geography}} \colon \text{is the searching region/area, has been pre-set into the World-Wide.} (malfunctional)$ 

Attention: This function has been disabled for reducing bugs. Thus, this parameter is waiting further

development	and	please	leave	it	alone.

# 4. File Format/Location Explanation

This part will explain the  $\underline{\text{keywords.txt}}$  file format/location and output/result file format/location.

# 4.1. Keywords File

The keywords file requires:

- Location: you can put the keywords.txt file into any where you want, but it is recommanded to put the same location of code file or excuatable file.
- Format: A txt file format
- And the data format is one keyword one line.

You can find the example <u>here</u>.

### 4.2. Output/Result File

The Output/Result file will be generated as:

- Location: stored at the location which is same with the location of keywords file.
  - The output/result will be stored in the location same with the path of keywords file.
- Format: csv file in the One Folder called data, one cache file for Backup (ingore it)

Each keyword with the target period will generate one csv file in the data folder and also will be backup into the sqlite database

# 5. Precautions

This program is currently still in the beta test. Hence, there might be some unexpected errors happen. For most errors, it will automatically ingore and try again with sleep 30 seconds. All information will print out in the **console**. However, there might be some situations triggering the Flash Crash. If you unfortunately meet the Flash Crash, please contact me by <a href="email me">email me</a> or submit a commit in the <a href="this repository">this repository</a>

### 6. Authors

• snowfree - - O; Email

# 7. License

This project is licensed under the GPL-2.0 License -