
What's API?

API stands for Application Interface, which is provided and maintained by IT company as an official approach to automatically fetch data from their servers. Almost all IT giants like Twitter, Facebook and Google have their APIs. Therefore, knowing how to API is a very critical capacity for anyone who aims to do social media analytics.

How to use API?

In order to use API service, you need first to apply for permission from IT company. After your application is passed, you can create multiple applications, each one coming with their specific "API token." API token will be used as the authentication key to call data.

How to apply for Twitter API Token?

Requisite: One twitter account that has been used for a while with substantial posts so that it won't be taken as a fake bot.

Step 1. Open URL: <https://developer.twitter.com/en/apply/user>

Step 2. Verify email address [if you have done this before, skip this step]

Step 3. Go back to application website

Add your account details

Who are you requesting access for?

☐ I am requesting access for my organization
I plan to use Twitter's developer platform for projects owned by / in affiliation with a business, organization or institution. Ex: SaaS product, proof of concept, academic research, etc. To enable collaboration, this selection includes additional tools to support team development.

☒ I am requesting access for my own personal use
I plan to use Twitter's developer platform for projects unaffiliated with an existing business, organization or institution. Ex: Side project, hobby, etc. Personal use accounts do not include team development tools.

Step 4. Account details:

- Q1. "Who are you requesting access for?" -> Select "I am requesting access for my own personal use."
- Q2. Input an account name and Select "Hong Kong" as your operating region.
- Continue to next page.

Step 5. Use case details:

- Q1: "What use case(s) are you interested in?" -> Select at least "**Student project/Learning to code**" and the other topics that you are interested in.
- Q2: Describe in your own words what you are building
We here provide an answer template for your reference. In order to pass the test, you need to somehow revise the text in your own words.
 1. I'm taking a course on social media analytics, where I learn Application Interface is a major way of collecting online data and how it operates. To practice the knowledge I've learned in class and also to finish assignments, I need to write some commands to use Twitter APIs under the direction of my supervisor.
 2. I plan to analyze:
 - a. Tweets to understand the time trend of some hashtags of interests. For example, #metoo and #heforshe;
 - b. Tweets' meta-data, i.e. like, comment and share counts, to understand the popularity of a given post;
 - c. Twitter users in aggregate to understand the gender distribution, geographical distribution, verification information and popularity distribution of the followers as well as the followees of mine;
 - d. However, I won't touch on users' content for the sake of privacy concerns.
 3. No, I won't use API to post or like content.
 4. I'm using Twitter APIs only for academic purpose, i.e. to help grasping the critical know-how knowledge about APIs. I will only present data in front of my classmates. Before presentation, I will mindfully remove all users' identifiers (like profile pics, handles and screen names) to make sure their real identity will not be disclosed. Besides, our assignments are deliberately designed to analyze aggregate data like time trend of certain hashtag, popularity of key posts and count of followers. So, there is no need to look into a specific user's profile.
- Q3: "Will your product, service, or analysis make Twitter content or derived information available to a government entity?" -> Select "No."

Step 6. Accept Terms of Service

Step 7. Submit your application.

You need to wait for one or two weeks for your application to be assessed.

Reminder: after several days, you may receive an email asking for details about your expected usage of Twitter API. It's normal. No worry. The questions in this email are more or less overlapping with questions listed in application web page, which can hopefully be answered by above template after some tiny revisions.

How to Generate Twitter API Token?

After you get the permission, to generate API key you need to:

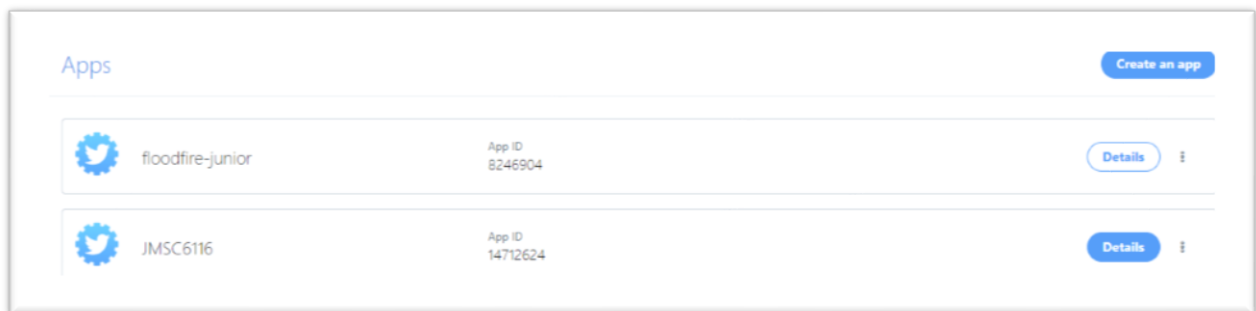
Step 1. Open URL: <https://developer.twitter.com/en/apps>

Step 2. Create an app

Step 3. Fill in App's Information

- Name your app as you like
- Write some words as description
- Give it a link. Any link works. If you have no idea which link you should leave, you can just use JMSC's website link: <http://jmsc.hku.hk/>.
- Callback URL: <http://127.0.0.1:1410>
- Name, description and link are required, but they are not "important" as they can be changed anytime you like. But Callback URL is worth noting. You should input the right address so that the token can be appropriately used.

Step 4. Open the "Details" page of your app



Step 5. Switch to "Keys and Tokens" panel

- The Consumer Key, Consumer Secret Key, Access token and Access token secret are four values you need in order to call Twitter API.