SICSS-Rutgers 2021

Twitter API Tutorial

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06/15/2021

Agenda

- Collecting Twitter Data

- Twitter API (Standard vs. Academic)

- How to Apply

- Twitter API and R

  - A short tutorial on using the **rtweet package**

  - A short tutorial on using the **academictwitteR package**

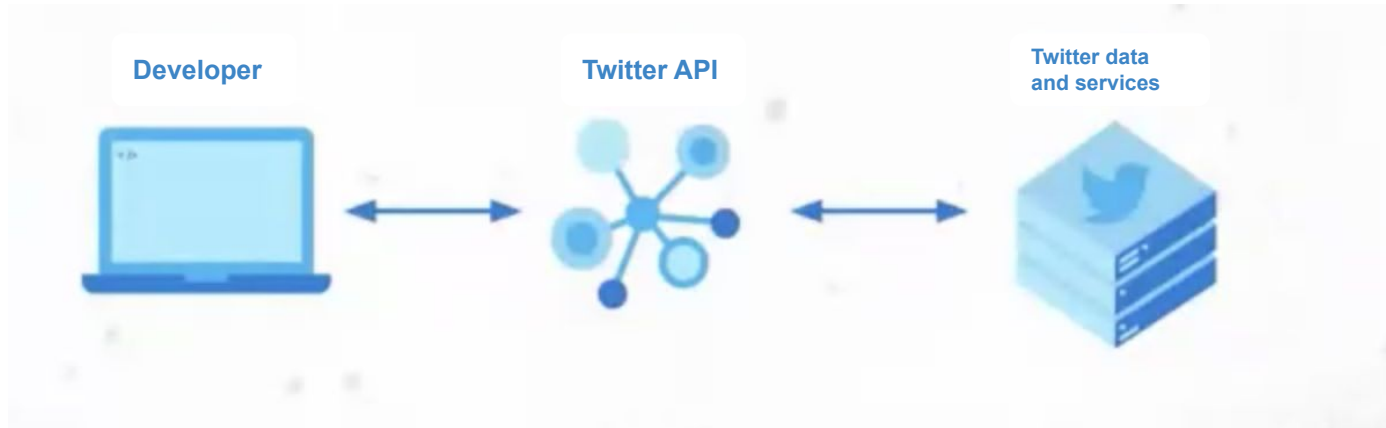 - Building queries

  - Returned objects

- Some Useful Links

Collecting Twitter Data

There are a variety of ways to collect Twitter data

- **Collection Data through Twitter APIs** Link

  - Standard API (Standard Product Track) Link

  - Academic Research API (Academic Research Product Track) Link

- Rehydrating Tweets Link

- Scraping Tweets Link

Collecting Twitter Data through Twitter API
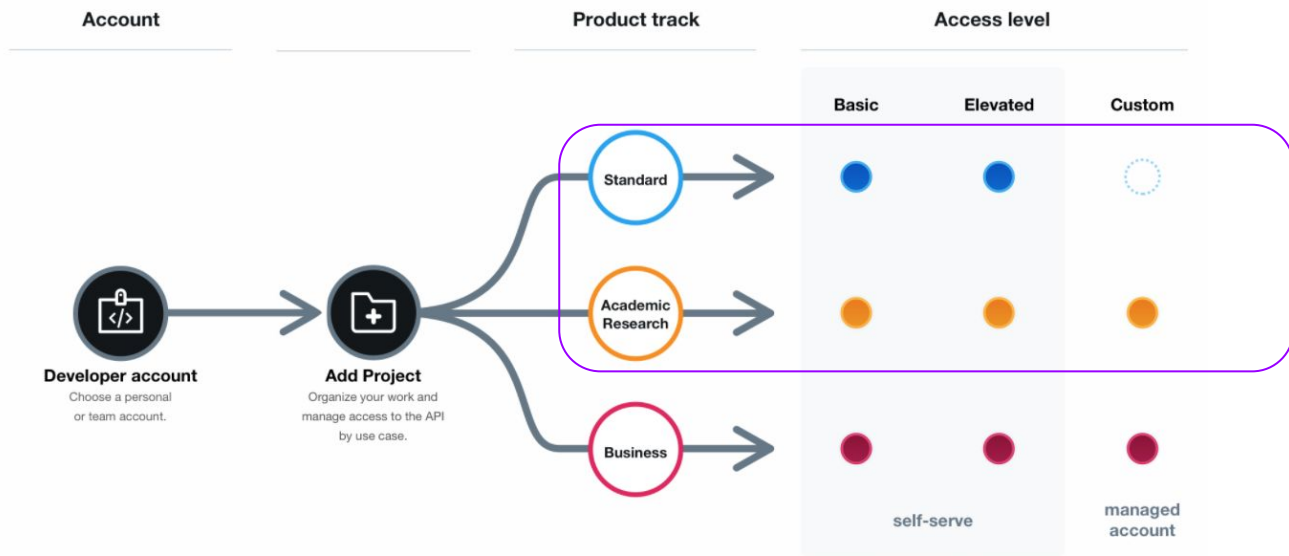
- Twitter provides researchers access to Twitter data through APIs (Application Programming Interface).

- The Twitter API is a programmatic way to interact with Twitter. It provides developers with the ability to access Twitter data and services.

Source: Twitter

Different Types of Twitter API

- Twitter provides distinct APIs to meet the needs of different developers.

  - Distinct APIs are associated with distinct "product tracks" with different access levels.

Source: Twitter

Standard vs. Academic API

- Previously, most researchers have been using the **Standard Track (Standard API)** if they were not part of paid enterprises or premium customers.
- The **Academic Research Product Track (Academic API)** announced in January, 2021.

Standard vs. Academic API: Main Differences

1. Standard API can retrieve **7 days** worth of tweets, Academic API has free access to the **full history** of public conservation
2. Standard API allows to collect **500,000 tweets per month**, Academic API allows to collect **10,000,000 tweets per month**.
3. Standard API has **limited filtering capabilities**, Academic API allows **more precise filtering capabilities** by supporting additional search operators (e.g. difference in query lengths, concurrent rules)
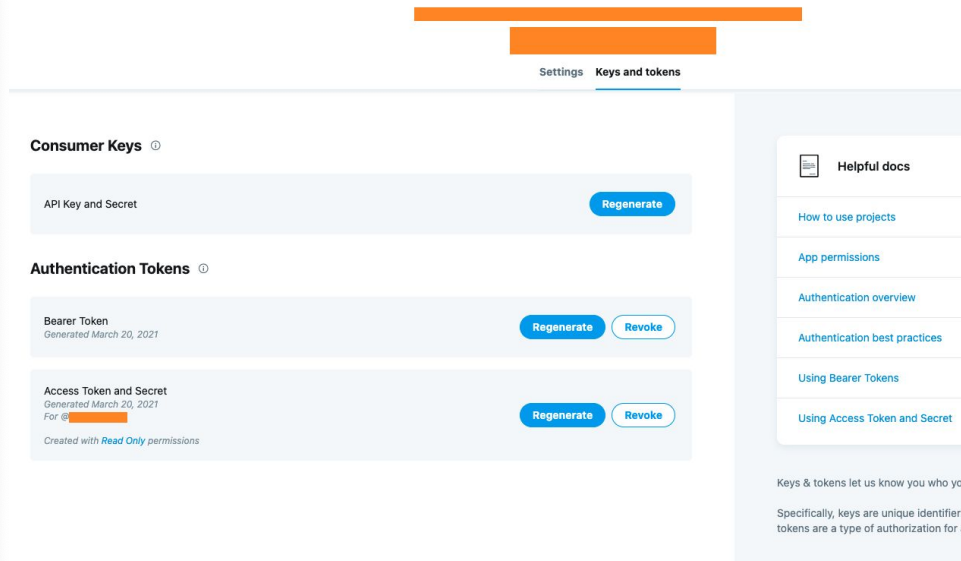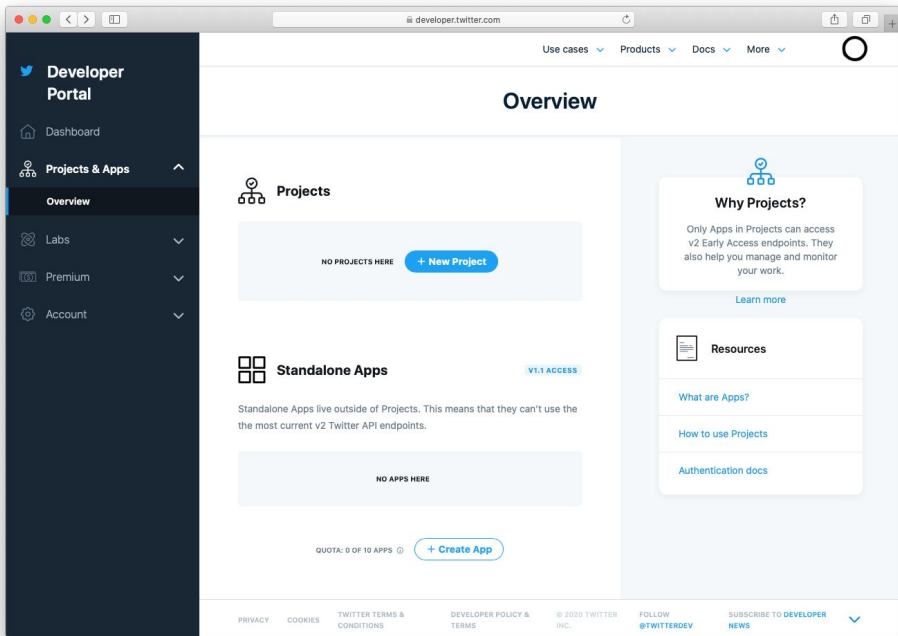
How to Apply

- Prepare a Twitter account **(Standard & Academic)**

- Prepare a webpage of your profile at your home institution for identification **(Only for Academic)**

- Detailed explanation of how you plan to use Twitter data and/or API, methodology for analyzing

  Twitter data, and how you will present your analysis (aggregated results vs. individual tweets).

  (Standard & Academic)

- Application link: https://developer.twitter.com/en/portal/petition/academic/is-it-right-for-you.

- Tips for Twitter developer access: Link

Let's continue with the application process!

Create a project & Save keys and tokens

Twitter API and R

We can use programming languages such as R to communicate with Twitter API

For Standard API

 rtweet package

For Academic API

- Existing packages such as rtweet is not built for Academic API.

 AcademictwitteR package

Let's continue with some sample code!

API Documentations

Standard API

- Build queries [Link](#)

- Returned objects [Link](#)

Academic API

- Build queries [Link](#)

- Returned objects [Link](#)

Some Useful Links

- rtweet tutorial [Link](#)

- academicTwitterR demos [Link](#) ; [Link](#)

- The Twitter developers' forum [Link](#)
  - This subsection is particularly for academic research and you can find many useful discussions.

- Tutorials, articles, and code samples of using academic API by Twitter [Link](#)

- Python libraries for data collection.
  - searchtweets library [Link](#)

Please feel free to reach out to us when you have any questions! Thank you!