**Scraper Documentation**

The scraper code, both the premium 30-day search and free standard search, relies heavily upon Tweepy, the Twitter API accessor. (<https://docs.tweepy.org/en/latest/>) The Twitter API is specifically how the scraper is able to access tweets and the search features to find said tweets, but currently will not work as the API keys were removed as they were owned by a private user on the team. Later in the document, there will be a guide for BlackSwan to obtain its own API Keys to continue progress in developing this product. Generally, most functions or accesses into a tweets data can be found at Twitter’s documentation of their developer site. (<https://developer.twitter.com/en/docs>)

A more minor feature to the scraper is the geolocation which is implemented with GeoPy. (<https://geopy.readthedocs.io/en/stable/>) The below code first accesses the GeoPy and then find the location name based upon the given latitude and longitude. The next block of code finds the Geo of a specific post in a priority of exact longitude and latitude, then an address name of the post location, and finally the listed address name the user attached to their account.

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**Obtaining Twitter API Keys**

* To obtain Twitter API Keys, you will need a Twitter Developer account (<https://developer.twitter.com/en>)
  + To have a Twitter Developer account, you will also need a standard Twitter account and then request developer access.
* Once you have a developer account, you will need to create an application explaining the use for product.
  + For this product there may be extra required steps, when I made mine with student access it was almost instant, but I know that is not the case for business requests.
* Then, once access is granted, you can access the Twitter Developer Portal to your projects and applications.
  + You will need to create a project for in the portal to then get access to keys.
* Finally with a project created, you can select the key icon and generate the keys necessary for the project, these keys should be stored elsewhere for full protection.
* In addition to these steps to get the standard scrape, the premium scrape features can be found under the products tab and need to get a Dev Environment set up to be able to run
  + There are paid subscriptions to these premium searches, but one can be used for free with very limited use.