LO1-LO2

Examine data mining through social media tracking

Objective

After attending this session, you should be able

- Practice how to use API (application programming interface) to collect data from various social media services
- Collect data from YouTube

What we will need

- Google API's python client package and unidecode package
- Authentication information for google API

Install package

- We will install and use a python package provider for google API-related product/service development

  $ pip install --upgrade google-api-python-client

  Reference: https://developers.google.com/api-client-library/python/

- Another package we install is unidecode, a packge that handles Unicode-ascii translation

  $ pip install unidecode

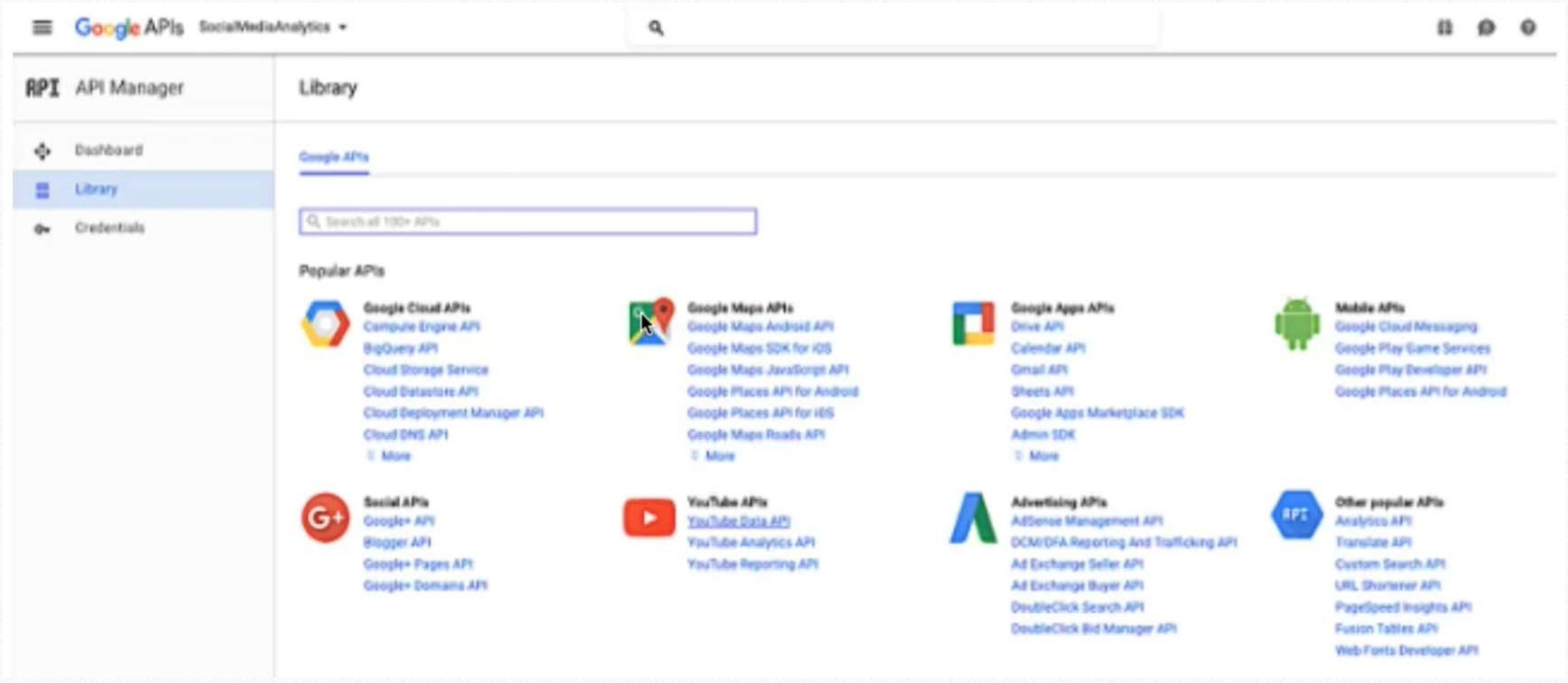
  Reference: https://pypi.python.org/pypi/unidecode

Google APIs set-up

Google APIs (https://developers.google.com/api-client-library/python/start/get_started#setup)

If you have never created a Google APIs Console project, read the Managing Projects page and create a project in the Google Developers Console.

https://console.developers.google.com/apis/library




API Manager
YouTube Data API v3
ENABLE
Dashboard
Library
Credentials
About this API
Documentation
Try this API in APIs Explorer
The YouTube Data API v3 is an API that provides access to YouTube data, such as videos, playlists, and channels.
Using credentials with this API
Using an API key
To use this API you need an API key. An API key identifies your project to check quotas and access. Go to the Credentials page to get an API key. You'll need a key for each platform, such as Web, Android, and iOS. Learn more
Your application
API key
Google service
Accessing user data with OAuth 2.0
You can access user data with this API. On the Credentials page, create an OAuth 2.0 client ID. A client ID requests user consent so that your app can access user data. Include that client ID when making your API call to Google. Learn more
Your app
User consent
User data

After YouTube Data API 3 is enabled, you are asked to create credentials for this API use.

- Click the 'Create Credentials' button.

You have now the API key for your application. It looks like this:
YIzaSyCsABEu4ffovhN9WTk9mqMqewhPmO0LuRz

Youtube_search_keyboard.py

Put your API key in the variable of DEVELOPER_KEY.

Run the script using command line (console) or through Spyder 'Run configuration':

In console

$ python ./search_keyword.py --q olympics

In Spyder

Set argument as '--q olympics'

Using python to extract data from Twitter

- What we will need:
- Authorization keys from Twitter
- tweepy package for python

Summary

- Practice how to use API (application programming interface) to collect data from various social media services
- Collect data from YouTube and store in csv file

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