

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>

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API Manager Library

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Google Maps JavaScript API
Google Places API for Android
Google Places API for iOS
Google Maps Roads API
More

 Google Apps APIs
Drive API
Calendar API
Gmail API
Sheets API
Google Apps Marketplace SDK
Admin SDK
More

 Mobile APIs
Google Cloud Messaging
Google Play Game Services
Google Play Developer API
Google Places API for Android

 Social APIs
Google+ API
Blogger API
Google+ Pages API
Google+ Domains API

 YouTube APIs
YouTube Data API
YouTube Analytics API
YouTube Reporting API

 Advertising APIs
AdSense Management API
DCM/DFA Reporting And Trafficking API
Ad Exchange Seller API
Ad Exchange Buyer API
Doubleclick Search API
DoubleClick Bid Manager API

 Other popular APIs
Analytics API
Translate API
Custom Search API
URL Shortener API
PageSpeed Insights API
Fusion Tables API
Web Fonts Developer API

Dashboard

Library

Credentials

About this API

The YouTube Data API v3 is an API that provides access to YouTube data, such as videos, playlists, and channels.

Documentation Try this API in APIs Explorer

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](#)



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](#)



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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