

## **What does your project do?**

Make a search on the New York Times ArticleSearch API for a list of information and cache it. Define a class Article and sort the list of Article instances by the article's keywords from the most to the least, breaking ties alphabetically by article title. Find the 5 with the most keywords. Get the longest word of each abstract of the 5 articles with the most keywords. For each of those words, make a search on Flickr for photos tagged with that word. Define a class Photo. Request to get data about each of at least 20 photos that resulted from the Photo Search to Flickr. Create a list of Photo instances, and sort that list of instances by the number of tags each photo has. Write a .CSV file about those photos with clear headers.

## **List of documents?**

final\_project.py

Article.py (class)

Photo.py (class)

Five cached data JSON files

-final\_project\_cached\_data\_flickr\_Accelerating.json

-final\_project\_cached\_data\_flickr\_Accelerating\_detailed.json

-final\_project\_cached\_data\_flickr\_country's.json

-final\_project\_cached\_data\_flickr\_country's\_detailed.json

-final\_project\_cached\_data\_mountains.json

-final\_project\_cached\_data\_environmental.json

-final\_project\_cached\_data\_environmental\_detailed.json

-final\_project\_cached\_data\_subspecies.json

-final\_project\_cached\_data\_subspecies\_detailed.json

-final\_project\_cached\_data\_photojournalists.json

-final\_project\_cached\_data\_photojournalists.json

Four csv output files

-Photo\_Records\_Accelerating.csv

-Photo\_Records\_country's.csv

-Photo\_Records\_photojournalists.csv

-Photo\_Records\_subspecies.csv

README

## **Python modules?**

requests

pandas

sys

## **How to run codes?**

Run the final\_project.py. But make sure that final\_project.py, Article.py, Photo.py are in the same folder.

### **Technical requirements?**

Get and cache data from 2 REST APIs:

Line 14, 36, 64 are where the functions to get & cache data begin

Line 99,100,101 are where they are invoked.

Define at least 2 classes, each of which fulfill the listed requirements:

Class Article:

Instance variables: keywords, headline, snippet, url.

Methods: \_\_str\_\_, longest\_word\_in\_abstract, get\_full\_text, get\_title, get\_keywords

Class Photos:

Instance variables: tags, description, title, owner

Methods: \_\_str\_\_,

Functions are from Line 88, Line 113, Line 120 respectively.

Two CSV file about those photos, with headers: Photo title (if any), Username of person who posted the photo, all the tags (careful about commas, if you want tags in the same cell in the spreadsheet!), the number of tags the photo has.

### **Other things:**

One of my friends helped me with final\_project.py Line 22-33, Line 90-95. And I used similar codes as Line 22-33 to Line 47-59 and Line 73-85.