

Attachment 1

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#####
#  INSTITUTE TECHNOLOGY OF BANDUNG                                     #
#  School of Architecture, Planning, and Policy Development           #
#  Research on HBW Trip Production Modeling by                        #
#  Doctoral Student: Rempu Sora Rayat                                #
#  Script Name: Retrieving Twitter Streaming Data                     #
#  Purpose: Find Username, Timestamp, Location, Tweet and Save      #
#  Programmer: Richard Shiawase                                       #
#####

import twitter
import pymongo
import csv
import time
import re
import pandas as pd
class bcolors:
    HEADER = '\033[95m'
    OKBLUE = '\033[94m'
    OKGREEN = '\033[92m'
    WARNING = '\033[93m'
    FAIL = '\033[91m'
    ENDC = '\033[0m'
    BOLD = '\033[1m'
    UNDERLINE = '\033[4m'

num_results = 250
outfile = "Wall30921.csv"
config = {}
exec(open("config.txt").read(), config)
print(config["consumer_key"])
api = twitter.Api(consumer_key=config["consumer_key"],
                  consumer_secret=config["consumer_secret"],
                  access_token_key=config["access_key"],
                  access_token_secret=config["access_secret"],
                  tweet_mode='extended')

    # open a file to write (mode "w"), and create a CSV writer object
csvfile = open(outfile, 'w')
csvwriter = csv.writer(csvfile)

    # add headings to our CSV file
row = ["Name", "Created At", "Profile Url", "Latitude", "Longitude", "Google
Maps", "Tweet"]
csvwriter.writerow(row)
result_count = 0
last_id = None

# PYMONGO
client = pymongo.MongoClient("mongodb://localhost:27017/")
database = client["TwStreaming"]
collection = "Walantaka"
mongodb_insert = database[collection]

while result_count < int(num_results):
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        # perform a search based on latitude and longitude
        query = api.GetSearch(raw_query="q=&geocode=-
6.149243,106.211806,5km&lang=id")
        print([s.place["bounding_box"]["coordinates"][0][0][1] for s in
query])
        for result in query:
            if result.geo or result.place:
                user = result.user.screen_name
                created_at = time.strftime('%Y-%m-%d %H:%M:%S',
time.strptime(result.created_at,'%a %b %d %H:%M:%S +0000 %Y'))
                text = result.full_text
                text = text.encode('ascii', 'replace')
                latitude =
result.place["bounding_box"]["coordinates"][0][0][1]
                longitude =
result.place["bounding_box"]["coordinates"][0][0][0]
                url = 'https://twitter.com/%s' % user
                gurl = 'https://maps.google.com/?q=' + str(latitude) + ','
+ str(longitude)

                # now write this row to our CSV file
                row = [user, created_at, url, latitude, longitude,gurl,
text]
                print('-----')
                print (' ')
                print (bcolors.OKGREEN + 'Name:      ' + bcolors.ENDC, user)
                print (bcolors.OKGREEN + 'Timestamp:   ' + bcolors.ENDC,
created_at)
                print (bcolors.OKGREEN + 'Profile Url: ' + bcolors.ENDC, url)
                print (bcolors.OKGREEN + 'Latitude:    ' + bcolors.ENDC,
latitude)
                print (bcolors.OKGREEN + 'Longitude:   ' + bcolors.ENDC,
longitude)
                print (bcolors.OKGREEN + 'Google Maps: ' + bcolors.ENDC,
gurl)
                print (bcolors.OKGREEN + 'Tweet:       ' + bcolors.ENDC,
text)
                print (' ')
                csvwriter.writerow(row)
                result_count += 1
                # mongodb dictionary
                kamus = {"Name": user, "Created At": str(created_at),
                        "Profile Url": url, "Latitude": str(latitude),
                        "Longitude": str(longitude),
                        "Google Maps": gurl,
                        "Tweet": text}
                # insert to mongodb
                print("Inserting to mongodb..")
                mongodb_insert.insert_one(kamus)
                time.sleep(.35)
                last_id = result.id
            # let the user know where we're up to
            if result_count == 1:
                print (bcolors.WARNING + "Got %d result" % result_count +
bcolors.ENDC)
                csvfile.close()
                print (bcolors.WARNING + "Saved to ", outfile + bcolors.ENDC)
            elif result_count == 0:
                print (bcolors.WARNING + "Didn't get any results try another
Latitude and Longitude" + bcolors.ENDC)

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else:
    print (bcolors.WARNING + "Got %d results" % result_count +
bcolors.ENDC)
    csvfile.close()
    print (bcolors.WARNING + "Saved to ", outfile + bcolors.ENDC)

# we're all finished, clean up and go home.
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