

- This is the class being used to get the twitter data `GetUserTweets`
- HERE IS A VISUAL REPRESENTATION OF THE WAY ITS FETCHING DATA AND GETTING TO RETURN IT FOR THE FRONT END

URL :: `/api/twit/user-analysis-specific`

1)

```

twitter_app > views.py > GetUserTweets > get
438
439 # SNSCRAPE!!!!
440
441 import snsrape.modules.twitter as sntwitter
442 import pandas as pd
443 import advtools as adv
444 import json
445 from urllib.parse import unquote
446
447 from authentication.permissions import IsSubscribed
448 You, 2 minutes ago | 1 author (You)
449 class GetUserTweets(APIView):
450
451     permission_classes = (IsAuthenticated, IsSubscribed)
452     def get(self, request):
453         tweets_list1 = []
454         x_data = []
455         tweets_list_analysis = []
456         finalData = {}
457         query = Settings.objects.get(name='count')
458         limit = query.value
459
460         try:
461             username = request.GET.get('username', '')
462             keyword = request.GET.get('keyword', '')
463             hashtag = request.GET.get('hashtag', '')
464             country = request.GET.get('country', '')
465             date = request.GET.get('date', '') #THIS IS REQUIRED ALWAYS
466             dateFrom = request.GET.get('dateFrom', '')#THIS IS REQUIRED ALWAYS
467             dateTo = request.GET.get('dateTo', '')#THIS IS REQUIRED ALWAYS
468
469             q=""
470             if username and not (keyword or hashtag or country):
471                 if username: q+=f"from:{unquote(username)} "
472             else:
473                 if username: q+=f"{unquote(username)} "
474                 if keyword: q+=f"#{keyword} "
475                 if hashtag: q+=f"#{hashtag} "
476                 if country: q+=f"geocode:{country} "
477                 q += f"since:{dateFrom} until:{dateTo}"
478
479             """
480             1st lap 'from:jack #mostr since:2022-12-15 until:2023-01-10'
481             from:Morecambebob1 #THIS GUY IS FROM AUSTRIA
482
483             """
484             # loc = '12.828215, 47.0360217 ,1000km'
485             # 'geocode:{}'"".format(loc)
486
487
488

```

Annotations in the image:

- Red box around lines 461-467: `username = request.GET.get('username', '')` to `dateTo = request.GET.get('dateTo', '')#THIS IS REQUIRED ALWAYS`. Arrow points to: **GET THE INPUTS PAYLOAD FROM THE FRONTEND API**
- Red box around lines 469-477: `q=""` to `if country: q+=f"geocode:{country} "`. Arrow points to: **ASSIGN THE VARIOUS INPUTS FIELDS TO A SINGLE STRING TO BE USED FOR SEARCHING THROUGH THE ((SNSCRAPE API))**

2)

```
twitter_app > views.py > TwitAnalysis > post
484
485
486
487 # loc = '12.820215, 47.0360217, 1000km'
488 # 'geocode:{}'}.format(loc)
489
490 for i, tweet in enumerate(sntwitter.TwitterSearchScraper(q.format(country)).get_items()):
491     if i > int(limit):
492         break
493
494 # , tweet.coordinates.longitude, tweet.coordinates.latitude, tweet.place.name
495 __json = json.loads(json.dumps(tweet.json()))
496 likes = __json['likeCount']
497 retweets = __json['retweetCount']
498 comments = __json['replyCount']
499 bookmark = __json['bookmarkCount']
500
501 # print(f'likes {likes} , retweets {retweets} , comments {comments}')
502 total_engagement = likes + retweets + comments + bookmark
503 date_time_str = str(tweet.date)
504 dt = parse(date_time_str, fuzzy=True)
505 s = str(dt.year) + '-' + str(dt.month) + '-' + str(dt.day)
506 __json['user']['id']
507
508 dat = {
509     'created_at': tweet.date,
510     'created_at_formatted': s,
511     'date': tweet.date,
512     'id': tweet.id,
513     'text': tweet.rawContent,
514     'json': __json,
515     'username': __json['user']['username'],
516     'userid': __json['user']['id'],
517
518     'statuses_count': __json['user']['statusesCount'],
519     'profile_image': __json['user']['profileImageUrl'],
520     'friends_count': __json['user']['friendsCount'],
521     'views_count': __json['viewCount'],
522     'followers_count': __json['user']['followersCount'],
523     'country': __json['user']['location'],
524     'likes': __json['likeCount'],
525     'retweets': __json['retweetCount'],
526     'comments': __json['replyCount'],
527     'totalengagements': total_engagement
528 }
529
530 tweets_list.append(dat)
531 tweets_list_analysis.append(tweet.rawContent)
532
533 word_freq = (adv.word_frequency(tweets_list_analysis))
534
```

FETCH THE TWITTER DATA

ASSIGNMENT OF THE DATA RECEIVED TO RELEVANT VARIABLES

ASSIGNMENT OF THE VARIABLES TO BE RETURNED TO THE API

3)

```
twitter_app > views.py > TwitAnalysis > post
532
533 word_freq = (adv.word_frequency(tweets_list_analysis))
534
535 words_analysis = json.loads(word_freq.to_json(orient='records'))
536
537 # EMOJI ANALYSIS
538
539 emoji_analy = adv.extract_emoji(tweets_list_analysis)
540 ttp = emoji_analy['top_emoji']
541 emojiAnalysis = []
542
543 for i in ttp:
544     data2 = {
545         "emoji": i[0],
546         "count": i[1]
547     }
548
549     emojiAnalysis.append(data2)
550
551
552 hashtag_summary = adv.extract_hashtags(tweets_list_analysis)
553 hst_sm = hashtag_summary['top_hashtags']
554
555 hashtagAnalysis = []
556 for i in hst_sm:
557     data2 = {
558         "hashtag": i[0],
559         "count": i[1]
560     }
561     hashtagAnalysis.append(data2)
562
563 finalData = {
564     'words_analysis': words_analysis,
565     'emoji_analysis': emojiAnalysis,
566     'hashtag_analysis': hashtagAnalysis
567 }
568
569 # Display data grouped by grade
570 data = []
571 for key, value in groupby(tweets_list, key = itemgetter('userid')):
572
573     data2 = []
574     for k in value:
575         print('ooooooooo')
576         print(k)
577         data2.append(k)
578     data.append(data2)
579
580
581 for i in data:
582     number_of_tweets = len(i)
583     for x in i:
```

EMOJI, HASHTAG AND WORDS ANALYSIS FOR THE RESULT GIVEN

4)

```
twitter_app > views.py > TwitAnalysis > post
567
568
569 # Display data grouped by grade
570 data = []
571 for key, value in groupby(tweets_list1, key = itemgetter('userid')):
572
573     data2 = []
574     for k in value:
575         print('ooooooooo')
576         print(k)
577         data2.append(k)
578     data.append(data2)
579
580
581 for i in data:
582     number_of_tweets = len(i)
583     for x in i:
584
585         followers = x['followers_count']
586         number_of_tweets = x['statuses_count']
587         reach = number_of_tweets * followers
588         x['reach'] = reach
589         x_data.append(x)
590
591
592 except Exception as e:
593     print(e)
594     pass
595
596
597 # UPDATE USER SEARCH INFORMATION
598 UserSearch.objects.create(user=request.user, total_search =1, total_count=len(x_data))
599
600 return JsonResponse({'tweets':x_data, 'analysis':finalData}, safe=False)
601
602
603
604
605
```

tweets\_list2 Aa ab \* No results ↑ ↓ ☰ ×

FINALISE ON ANALYSIS OF THE TWEETS RESULT AND RETURNING THE DATA TO THE API FOR VISUALISING IT ON THE FRONTEND