INSTAPY

PYTHONIC TOOL FOR AUTOMATED INSTAGRAM INTERACTIONS

by Tim Grossmann

UPCOMING CONTRIBUTION

METHODOLOGY FOLLOWED
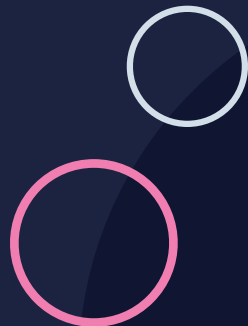
STEP 1

Check with github issues section for asked features.

Analyse the need for new features by checking with the entire code & documentation.

STEP 2

Rank possible contributions based on the ease of undertaking each one.

UPCOMING CONTRIBUTION

Insert target users,
hashtags etc from text files.

WHY THOUGH?

1

There is need for automation.

2

Multiple functions will be affected.

3

Implementation was clear in mind.

AFFECTED FUNCTIONS

21 functions in instapy.py

story_by_user, story_by_tag

like_by_tags, follow_by_tags

follow_user_followers, follow_user_following

follow_likers, follow_commenters, follow_by_list

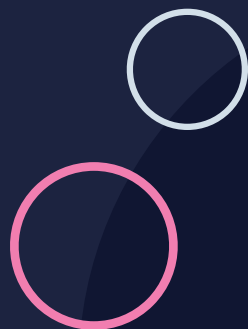set_skip_users, set_ignore_users, set_dont_include

interact_by_users, interact_by_users_tagged_posts

interact_user_followers, interact_user_following

interact_by_comments, set_comments, set_comment_replies
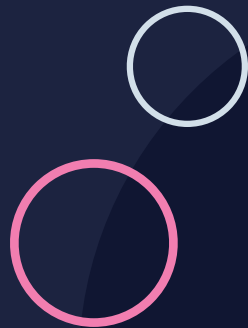
set_mandatory_words, unfollow_users

STEPS FOLLOWED

STEP 1

Open an issue on GitHub suggesting adding the ability of using already-made lists of target values.

STEP 2

Request to be entrusted with the implementation suggested.

STEP 1

Insert target users, hashtags etc from text file #5396

⊘ Open **IreneArapogiorgi** opened this issue 2 days ago · 3 comments

IreneArapogiorgi commented 2 days ago

Hello, I would like to contribute to InstaPy as part of a university course of mine, called Software Engineering in Practice, in which we are supposed to contribute to an open source project of our choice.

Expected Behavior

Amongst other feature ideas, I thought it would be useful for most users to have the ability to import a text file with their target users, hashtags etc. This implementation will especially benefit businesses using InstaPy as they could store users/hashtags etc in already-made target lists as text files and parse each one of them depending on their campaigns.

Current Behavior

For all existing functions accepting lists as given parameters, simple user is obliged to edit those lists inside the script, which complicates code comprehension & requires time.

Possible Solution

Implement the option of reading a text file for each function which accepts lists as given parameters.

I will be thrilled if you accept my upcoming contribution & I hope we'll have a great collaboration. PS: Any advice is more than welcomed.

STEP 2

breuerfelix commented 35 minutes ago   Collaborator

> ... I chose InstaPy for being well-written in Python ...

i don't know if i can sign this :D in germany we say 'Too many cooks spoil the broth.'. But yeah i guess that's the same for every big OS project :)

We already talked about your project. There is just one tip i got for you. Don't change the existing functions. Just program new functions which take a path to a list as a param, parse the list and pass the parsed list to the already existing function :) you can then also pass all other params to the existing function with `*args` and `**kwargs` . Just some suggestions that comes to my mind!

breuerfelix assigned **IreneArapogiorgi** 35 minutes ago

breuerfelix added `enhancement` `Feature` `idea` `in progress` and removed `idea` labels 34 minutes ago

STEPS FOLLOWED

STEP 3

Build the project locally with pip install -e . & create a new branch to work on.

STEP 4
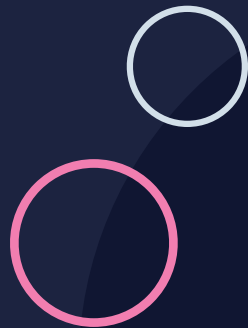
Try to interfere in the existing code simply by printing Hello world!

STEP 4

instapy.py

```python
""" Quickstart script for InstaPy usage """

# imports
from instapy import InstaPy
from instapy import smart_run
from instapy import set_workspace

# set workspace folder at desired location (default is at your home folder)
set_workspace(path=None)

# login credentials
insta_username = 'your instagram username'
insta_password = 'your instagram password'

# get an InstaPy session!
session = InstaPy(username=insta_username,
                 password=insta_password,
                 headless_browser=False)

with smart_run(session):
    # general settings example
    # session.set_dont_include(["userX", "userY"])

    # activity example
    # session.like_by_tags(["hashtag"], amount=10)

    # call hello_world & repr functions
    session.hello_world()
    print(repr(session))

# print Hello World
print("Hello world!")
```

```python
    def hello_world(self):
        """ Print Hello World as log message """
        self.logger.info("Hello world!")

    def __repr__(self):
        """ Print Hello World """
        return "\nHello world!"
```

STEP 4

```
irene@LAPTOP-SL23CI1H MINGW64 ~/GitRepositories/InstaPy (text_file_reading)
$ python quickstart.py
  ._.  ._.  ._.  ._.  ._.  ._.  ._.  ._.  ._.  ._.
No any custom workspace provided.       ~using existing..   new branch
InstaPy Version: 0.6.8
  ._.  ._.  ._.  ._.  ._.  ._.  ._.  ._.  ._.
Workspace in use: "C:/Users/irene/InstaPy"
OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
INFO [2020-04-08 14:53:00] [irene_arp]  Session started!
OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
INFO [2020-04-08 14:53:00] [irene_arp]  -- Connection Checklist [1/3] (Internet Connection Status)
INFO [2020-04-08 14:53:01] [irene_arp]  - Internet Connection Status: ok
INFO [2020-04-08 14:53:01] [irene_arp]  - Current IP is              and it's from "Greece/GR"
INFO [2020-04-08 14:53:01] [irene_arp]  -- Connection Checklist [2/3] (Instagram Server Status)
INFO [2020-04-08 14:53:09] [irene_arp]  - Instagram WebSite Status: Currently Up
INFO [2020-04-08 14:53:09] [irene_arp]  - Instagram Response Time: 139.162 ms
INFO [2020-04-08 14:53:09] [irene_arp]  - Instagram Reponse Code: 200
INFO [2020-04-08 14:53:09] [irene_arp]  - Instagram Server Status: ok
INFO [2020-04-08 14:53:09] [irene_arp]  -- Connection Checklist [3/3] (Hide Selenium Extension)
INFO [2020-04-08 14:53:09] [irene_arp]  - window.navigator.webdriver response: True
WARNING [2020-04-08 14:53:09] [irene_arp]  - Hide Selenium Extension: error
Cookie file not found, creating cookie...
...................................................
INFO [2020-04-08 14:53:33] [irene_arp]  Logged in successfully!
...................................................
INFO [2020-04-08 14:53:33] [irene_arp]  Saving account progress...
INFO [2020-04-08 14:53:49] [irene_arp]  Hello world!

Hello world!

INFO [2020-04-08 14:53:50] [irene_arp]  Sessional Live Report:
        |> No any statistics to show

On session start was FOLLOWING 379 users & had 1397 FOLLOWERS
[Session lasted 57.24 seconds]
OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
INFO [2020-04-08 14:53:50] [irene_arp]  Session ended!
OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO


Hello world!
```
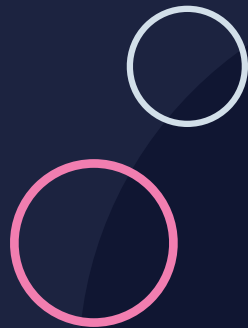
STEPS FOLLOWED

STEP 5

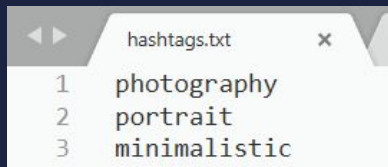Implement reading a text file inside quickstart.py.

STEP 6

Execute the script from the command line & check if it works.

STEP 5

```python
""" Quickstart script for InstaPy usage """

# imports
from instapy import InstaPy
from instapy import smart_run
from instapy import set_workspace

# set workspace folder at desired location (default is at your home folder)
set_workspace(path=None)

# login credentials
insta_username = 'your instagram username'
insta_password = 'your instagram password'

# get an InstaPy session!
session = InstaPy(username=insta_username,
                  password=insta_password,
                  headless_browser=False)

# open and read text file
with open("C:\\Users\\irene\\Desktop\\Uni\\Τεχνολογία Λογισμικού στην Πράξη\\InstaPy\\hashtags.txt", "r") as f:

    # extract file's lines in list
    elements = [line.strip("\n").strip().lower() for line in f.readlines() if line != "\n"]

with smart_run(session):

    # like posts based on hashtags
    session.like_by_tags(elements, amount=11)
```

quickstart.py

hashtags.txt

```
hashtags.txt                    ×
1   photography
2   portrait
3   minimalistic
```

STEP 6

```
.....................................................
INFO [2020-04-09 17:54:05] [irene_arp]  Logged in successfully!
.....................................................
INFO [2020-04-09 17:54:05] [irene_arp]  Saving account progress...
INFO [2020-04-09 17:54:19] [irene_arp]  Tag [1/3]
INFO [2020-04-09 17:54:19] [irene_arp]  --> b'photography'
INFO [2020-04-09 17:54:29] [irene_arp]  desired amount: 11  |  top posts [disabled]: 9  |  possible posts: 549182362
INFO [2020-04-09 17:54:36] [irene_arp]  Like# [1/11]
INFO [2020-04-09 17:54:36] [irene_arp]  https://www.instagram.com/p/B-w6JWIA_vC/


INFO [2020-04-09 18:02:08] [irene_arp]  Tag [2/3]
INFO [2020-04-09 18:02:08] [irene_arp]  --> b'portrait'
INFO [2020-04-09 18:02:17] [irene_arp]  desired amount: 11  |  top posts [disabled]: 9  |  possible posts: 116876942
INFO [2020-04-09 18:02:23] [irene_arp]  Like# [1/11]
INFO [2020-04-09 18:02:23] [irene_arp]  https://www.instagram.com/p/B-w7CXlA4VA/


INFO [2020-04-09 18:09:52] [irene_arp]  Tag [3/3]
INFO [2020-04-09 18:09:52] [irene_arp]  --> b'minimalistic'
INFO [2020-04-09 18:10:01] [irene_arp]  desired amount: 11  |  top posts [disabled]: 9  |  possible posts: 2864536
INFO [2020-04-09 18:10:08] [irene_arp]  Like# [1/11]
INFO [2020-04-09 18:10:08] [irene_arp]  https://www.instagram.com/p/B-w73yYllmM/
```
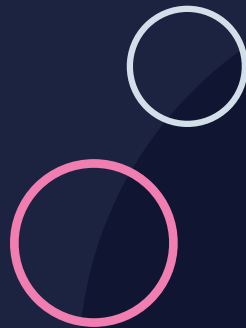
STEPS FOLLOWED

STEP 7

Create a new function which handles text files & use it with all relevant functions.

STEP 8

Check functionality.

STEP 7

```python
5929    def file_handling(self, file):
5930        """ Extracts text file's elements """
5931        elements = []
5932
5933        try:
5934            with open(file, "r") as f:
5935                # extract file's lines in list
5936                elements = [line.strip("\n").strip().lower() for line in f.readlines() if line != "\n"]
5937        except FileNotFoundError:
5938            self.logger.warning("No such file or directory: " + file + "\n")
5939
5940        return elements
```

instapy.py

STEP 7

```python
""" Quickstart script for InstaPy usage """

# imports
from instapy import InstaPy
from instapy import smart_run
from instapy import set_workspace

# set workspace folder at desired location (default is at your home folder)
set_workspace(path=None)

# login credentials
insta_username = 'your instagram username'
insta_password = 'your instagram password'

# get an InstaPy session!
session = InstaPy(username=insta_username,
                 password=insta_password,
                 headless_browser=False)

with smart_run(session):

    # like posts based on hashtags
    hashtags = session.file_handling("C:\\Users\\irene\\Desktop\\Uni\\Τεχνολογία Λογισμικού στην Πράξη\\InstaPy\\hashtags.txt")
    session.like_by_tags(hashtags, amount=11)
```

quickstart.py

STEP 8


```
.................................................
INFO [2020-04-11 02:12:49] [irene_arp]  Logged in successfully!
.................................................

INFO [2020-04-11 02:12:49] [irene_arp]  Saving account progress...
INFO [2020-04-11 02:13:05] [irene_arp]  Tag [1/3]
INFO [2020-04-11 02:13:05] [irene_arp]  --> b'photography'
INFO [2020-04-11 02:13:14] [irene_arp]  desired amount: 10  |  top posts [disabled]: 9  |  possible posts: 549882764
INFO [2020-04-11 02:13:21] [irene_arp]  Like# [1/10]
INFO [2020-04-11 02:13:21] [irene_arp]  https://www.instagram.com/p/B-0YBI4FVJn/
```

Successful

```
.................................................
INFO [2020-04-12 00:29:59] [sirynoir]  Logged in successfully!
.................................................

INFO [2020-04-12 00:29:59] [sirynoir]  Saving account progress...
WARNING [2020-04-12 00:30:11] [sirynoir]  No such file or directory: C:\Users\irene\Desktop\hashtags.txt
```
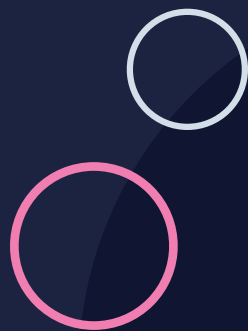
Unsuccessful

TO-DO NEXT

STEP 9

Run all necessary tests & make improvements.

STEP 10

Commit & push to local working branch, merge with master & make a pull request to the original repository.

STEP 11

Update documentation.

UPCOMING CONTRIBUTION

Check if user's account
is not private.

WHY THOUGH?

```
49        # Get followers count
50        followers_count, _ = get_relationship_counts(browser, username, logger)
51
52        if grab != "full" and grab > followers_count:
53            logger.info(
54                "You have requested higher amount than existing followers count "
55                " ~gonna grab all available"
56            )
57            grab = followers_count
58
59        # TO-DO: Check if user's account is not private
60
```

To-do comments inside get_followers & get_following functions in file relationship_tools.py

UPCOMING CONTRIBUTION

Add comments on feed posts.

WHY THOUGH?

Missing feature/function of commenting on feed posts in file feed_util.py

```python
""" Module that handles the like features """
from .util import update_activity

from selenium.common.exceptions import NoSuchElementException

LIKE_TAG_CLASS = "coreSpriteHeartOpen"


def get_like_on_feed(browser, amount):
    """
        browser - the selenium browser element
        amount - total amount of likes to perform

        ----------------------------------------
        The function takes in the total amount of likes to perform
        and then sends buttons to be liked, if it has run out of like
        buttons it will perform a scroll
    """
```

THANK YOU

Serene