

## Creating (good) social bots

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### 1. Usefulness

**Consider creating a bot to solve or partly solve a problem you care about — maybe not poverty or crime or income inequality. In other words create a tool to address a need. Provide an argument in your report for the reason your Twitter bot is useful.**

I created a bot called @timeforabreak\_. The purpose is to give users reminders while they're on Twitter to stop mindlessly scrolling and start being more present. As well as, give users positive affirmations to promote self-kindness. Also, the tweets are mostly blank spaces to create a break in the users' Twitter feed. Many, myself included, are guilty of spending too much time on social media. This bot will help users be more aware of their actions and remind them to live in the real world instead of on their phones.

### 2. Originality/Innovation

**Express yourself, be creative. Alternatively, consider improving a pre-existing solution or tool. Provide an argument in your report for the reason your Twitter bot is original or innovative.**

My bot is innovative because although there are a few bots that give reminders to take a break from Twitter. Mine includes the empty space as a way to clear the mind for a few seconds and allow them to think about the reminder and the right action for them to take instead of just being able to scroll by and ignore it.

The tweets that my bot posts are composed of a header/attention-grabbing phrase, such as "REMINDER:". Then, many empty lines to give the user a Twitter consumption break. Lastly, a final reminder, such as "Stop mindlessly scrolling." The headers and reminders are stored in .txt files. I randomly choose one line from each and create the final tweet message. I check if the final tweet has already been tweeted and ensure it is less than the maximum characters that Twitter allows (280 characters) and have the bot post the tweet every 30 minutes.

I ran the script for about 12 hours and you can see the tweets @timeforabreak\_ on Twitter.

```
1 import tweepy
2 import os
3 import random
4 from time import sleep
5
```

```
6
7 CONSUMER_KEY='O2se0zpXDNsozClRlCrXfVlZK'
8 CONSUMER_SECRET='cDjPlrXgFSIGF9RfWUsf0bCWWsa5QuxhGvOzmaUoDClNrKrlmL'
9 ACCESS_TOKEN='ACCESS_TOKEN'
10 ACCESS_TOKEN_SECRET='ACCESS_TOKEN_SECRET'
11 WAIT_TIME_HOURS = 0.5
12 TWEETS = []
13
14 # function to authorize bot account
15 def authorize_twitter_application(consumer_key, consumer_secret):
16     #based on: https://developer.twitter.com/en/docs/authentication/
    oauth-1-0a/pin-based-oauth
17     '''
18     Authorize twitter application to perform task on behalf of user
19     .
20     Returns access_token and access_token_secret
21     '''
22     #consumer_key='O2se0zpXDNsozClRlCrXfVlZK'
23     #consumer_secret='
cDjPlrXgFSIGF9RfWUsf0bCWWsa5QuxhGvOzmaUoDClNrKrlmL'
24     #credit on twitter bot: https://twittercommunity.com/t/multiple-bot
    -accounts/128332
25     #credit: https://gist.github.com/hezhao/4772180#gistcomment-2583970
    , https://gist.github.com/hezhao/4772180#gistcomment-3213988
26     auth = tweepy.OAuthHandler(consumer_key, consumer_secret, callback=
    'oob')
27     # get access token from the user and redirect to auth URL
28     auth_url = auth.get_authorization_url()
29     print('Visit this authorization URL from your browser: ' + auth_url
    )
30
31     # ask user to verify the PIN generated in browser
32     verifier = input('PIN: ').strip()
33     auth.get_access_token(verifier)
34     print('ACCESS_KEY = "{}".format(auth.access_token)')
35     print('ACCESS_SECRET = "{}".format(auth.access_token_secret)')
36
37     client = tweepy.Client(consumer_key=CONSUMER_KEY,
38     consumer_secret=CONSUMER_SECRET,
39     access_token=auth.access_token,
40     access_token_secret=auth.access_token_secret)
41     return client
42
43 # function for first "Hello, World!" tweet from the guide
44 def post_first_tweet():
45     client = tweepy.Client(consumer_key=CONSUMER_KEY,
```

[illegible]

```
83         response = client.create_tweet(text=tweet)
84     except tweepy.TweepError as e:
85         print(e.reason)
86         sleep(60*60*WAIT_TIME_HOURS)
87
88 if __name__ == "__main__":
89     #authorize_twitter_application(CONSUMER_KEY, CONSUMER_SECRET)
90     #post_first_tweet()
91     #get_tweet_text('/Users/sofiahuang/Desktop/TwitterHeading.txt', '/
92     Users/sofiahuang/Desktop/TwitterBody.txt')
93     tweet_text()
```

**Listing 1:** Twitter bot Python script

## References

- BotWiki <https://botwiki.org/bots/open-source/>
- Step-by-Step Guide to create a Twitter Bot [https://github.com/anwala/teaching-web-science/blob/main/fall-2022/week-10/data\\_440\\_03\\_f22\\_mod\\_10\\_twitter\\_bot.ipynb](https://github.com/anwala/teaching-web-science/blob/main/fall-2022/week-10/data_440_03_f22_mod_10_twitter_bot.ipynb)
- Github - Twitter bot example <https://github.com/dhaitz/twitter-bot/blob/master/bot.py>