

Staff Lecture: Python + Twitter



Announcements

Fill out course evaluations!

- we care a lot about what you think!
- due Wednesday, 4/18

Today

- staff lectures

Plan for Today

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Use Python to grab and analyze data on a specific hashtag from Twitter

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- good for plotting data
- "not the best out there, but easy to use" - Amrit

Let's get started!

Step 1: Starter Code

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Have the slides? Great! Starter code is [here](#).

Don't have the slides? No problem! Go to <https://tinyurl.com/398-pyt>

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`bot.py` contains starter code for the Python program

`secret.py` will hold your API keys and tokens

- you want to keep your API keys secret, which is why they are placed in a separate file from your program.
- if you choose to put your project on GitHub, DO NOT commit `secret.py`

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- sign into Twitter, then click "Create New App" in the upper right
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- under the name of your application, find and click the "Keys and Access Tokens" tab

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Consumer Keys

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Access Tokens

- scroll down and click "Authorize my Application"
- located under "Your Access Token"
- copy and paste these keys into `secret.py`

Why?

Why?
Verification!

Step 3: Let's get coding!

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TODO: import libraries

- `import tweepy`
- `import matplotlib`
- `from secret import *`

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TODO: create a new Twitter session

- check out the tweepy documentation on [getting started](#)
- use keys/tokens from `secret.py` to create the session

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TODO: user input

- ask the user (you) what hashtag to search

Step 4: Twitter

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TODO: search for hashtag

- create new Tweet objects for each result
- we only need the time each tweet was posted, but other data may be useful for debugging or other data analysis

Step 5: Let's graph it!

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TODO: graph timestamps from tweets in a histogram

- check out the matplotlib documentation on [histograms](#) and [subplots](#)
- this is just one analysis you could do on Twitter data
- try something on your own!

Congratulations!

You now know how to grab data from Twitter and display it in a meaningful way.

