Python Twitter API

Session 2, Oct 25th, 2014
Twitter API – Getting Started

Twitter API Project

• Twitter authentication
• Download the Twitter API Project and extract all files
• Enter your API information
• Test the Twitter API code with twitter1.py
Mentor Check Off

• Run twitter1.py

• Status Indicator
  • Red not checked
  • Green for done!
Twitter API

- Tweepy (twee – pie)
- Documentation
- Remember to save your file before trying to run it!
Twitter API

• `api.home_timeline`
• `tweet.text`
• `tweet.user`
• `user.screen_name`
• `user.followers_count`
public_tweets = api.home_timeline(count=100)
for tweet in public_tweets:
    print tweet.text

• What does it do?

• What more can we do with this?
• Grabs the usernames of your followers

```python
print user.screen_name + " has " + str(user.followers_count) + " followers."

print "They include these 100 people: "

for friend in user.friends(count=100):
    print friend.screen_name
```
public_tweets = api.search("data science", count=20)

for tweet in public_tweets:
    print (tweet.user.screen_name + "\t" +
    str(tweet.created_at) + "\t" + tweet.text)

• Note that a lot of names are intuitive, this increases readability
  • Very helpful for large projects with many contributors
output_file = codecs.open("MY_DATA.tsv", "w", "utf-8")

public_tweets = api.search("data science", count=10)

for tweet in public_tweets:
    print >>output_file, tweet.user.screen_name + "\t" + str(tweet.created_at) + "\t" + tweet.text

• What would a line in the output file look like?
class StreamListener(tweepy.StreamListener):
    def on_status(self, tweet):
        print(tweet.user.screen_name + '\t' +
              tweet.text.encode('ascii', 'ignore'))

    def on_error(self, status_code):
        print('Error: ' + repr(status_code))
        return False

l = StreamListener()
streamer = tweepy.Stream(auth=auth, listener=l)
streamer.sample()

keywords = ['python', 'perl']
streamer.filter(track=keywords)

• Grabs tweets in real time!
Next steps

• twitterfun.py

• Altered from twitter2.py to see if a user is “popular”
Next steps

• Play and have fun!

• Decide what you want to do with the information you collect
  • Sort information, filter with keywords(hashtags/users), pattern recognition, basically whatever you can think of

• Ask yourself what’s required of the code to do what you want
  • Recall the skills you gained from previous sessions: variables, if, elif, and else statements, loops

• Manipulate existing code or write your own.
  • Refer to documentation, your peers, and your mentors

• Consider yourself a coder!