Update: Mystery Tweet Generator AI

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Currently:

1. Converts a text file into a list of words.
2. Create a dictionary of ngrams, holds the frequency of following words.
3. Also collects a list of words that start sentences.
4. Generates a string <= 140 characters using a random beginning word and a random next word based on the ngrams dictionary.

To-Do:

1. Allow variable amount of ngrams to be looked at so that we can have the AI look at more than just the previous word to generate the next word.
2. Prevent open/close quote confusions. Right now, it doesn't check if a quote was opened or needs to be closed. Might potentially remove quotes during processing, but add the probability for open/close quotes to be added within the resulting text.
3. End tweet at a period so they make more sense, but don't end for Dr., Mr., etc.
4. Bad word filter so I don't accidentally end up expelled. An input given could contain racial slurs and we don't want the AI to use these slurs.
5. Integrate Twitter API to post tweets every x amount of time.

Basic Algorithm:

Input: List of strings with no spaces, newlines, or tabs (these are words).

1. Initialize empty dictionary of ngrams, empty list of beginner words, and a count of zero.
2. For each word in input:
    a. count < length(input) (If we're not on the last word):
        i. If it's not in ngrams:
            1. add to ngrams with an empty list for the next words.
        ii. Append the word after the next word in the dictionary.
        iii. If the first character of the word is capital, append to beginning words list.
    b. count++
3. Initialize current word and result text with a random word from the beginning words.
4. While True:
    a. Next = Random next word in the list of the current word
    b. If length(result + " " + next) > 140:
        i. Break the loop (does not add that word to the result).
    c. Result = result + " " + next
    d. Current = Next
5. Return the resulting string.

Screenshots:


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MINGW64:/c/Users/chaplind/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mysterytwitterai

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
Paris, depart with the cart, looking at him the name was going to spend the priest, in the sa
me night air when he looked through the great

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
Mademoiselle Clairfait."  Danville comes back directly of the cup of kneeling with his most c
ruel, there came home, and of the wedding-day,

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
I count five foot of marriage may be numbered by way out. Lomaque's face of the face. You and
 she came back the date of a copy of an

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
La Biondella came up."  Without waiting to get a sudden jealousy he met at the letter with wh
at I angled for coming forward eagerly desirous

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$
```



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MINGW64:/c/Users/chaplind/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mysterytwitterai

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
I remembered well, Mr. Francis Gatliffe, member for the room, at the Royal to her eyes "We ma
y suppose you mean, Mr. Artist," he opened my

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
The little work-girl named Brigida slipped in my heart--to some curse is quite involuntarily,
 places, I cut out hurriedly as he felt, at

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
I have lived, I like to leave his way and down to replace it, by which relates to say," Luca
shrugged his brother in her seeing the

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$ python markov.py
"Drip, drip, drip! Faster and kept this spoil, after giving me to him, as the door without a
warning of the smallest, quickest, quietest,

chaplind@WITR90GMEJ7 MINGW64 ~/Dropbox/Spring 2017/Artificial Intelligence/AI Project/mystery
twitterai
$
```