Sathish_Kumar_Rajendiran_Week9.5_Sentiment_Analysis

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Task: Week 9: 9.5 Sentiment Analysis
Date: 8/26/2020

[18]:
```
# Downloads
# !pip install textblob
# nltk.download('vader_lexicon')
# nltk.download('averaged_perceptron_tagger')
# nltk.download('brown')
```

```
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     /Users/sathishrajendiran/nltk_data…
[nltk_data]   Package averaged_perceptron_tagger is already up-to-
[nltk_data]       date!
[nltk_data] Downloading package brown to
[nltk_data]     /Users/sathishrajendiran/nltk_data…
[nltk_data]   Unzipping corpora/brown.zip.
```

[18]:
```
True
```

[13]:
```
#import libraries

# standard library
import os
import sys
from datetime import datetime
import time

# text tokenization & Sentiment Analysis
import nltk
import re
from nltk.sentiment.vader import SentimentIntensityAnalyzer
from textblob import TextBlob

#MongoDB libraries
import pymongo
from pymongo import MongoClient

os.getcwd()
```

[13]:
```
'/Users/sathishrajendiran/ist652-python'
```

[9]:
```
#  sample text
sentences = ['This was a really good book.', 'This movie was so bad.'
             ,"I like to hate Michael Bay films, but Icouldn't fault this one"]
```

[10]:
```
#Sentiment Analyzer
sid = SentimentIntensityAnalyzer()
for sentence in sentences:
    print(sentence)
    ss = sid.polarity_scores(sentence)
    for k in sorted(ss):
        print('{0}: {1}, '.format(k, ss[k]), end='')
    print()
```

```
This was a really good book.
compound: 0.4927, neg: 0.0, neu: 0.556, pos: 0.444,
This movie was so bad.
compound: -0.6696, neg: 0.529, neu: 0.471, pos: 0.0,
I like to hate Michael Bay films, but Icouldn't fault this one
compound: 0.3153, neg: 0.157, neu: 0.534, pos: 0.309,
```

[16]:
```
#TextBlob

text = '''
The titular threat of The Blob has always struck me as the ultimate movie
monster: an insatiably hungry, amoeba-like mass able to penetrate
virtually any safeguard, capable of--as a doomed doctor chillingly
describes it--"assimilating flesh on contact.
Snide comparisons to gelatin be damned, it's a concept with the most
devastating of potential consequences, not unlike the grey goo scenario
proposed by technological theorists fearful of
artificial intelligence run rampant.
'''
blob = TextBlob(text)

#Tags from Blob
blob.tags
```

[16]:
```
[('The', 'DT'),
 ('titular', 'JJ'),
 ('threat', 'NN'),
 ('of', 'IN'),
 ('The', 'DT'),
 ('Blob', 'NNP'),
 ('has', 'VBZ'),
 ('always', 'RB'),
```

```
('struck', 'VBN'),
('me', 'PRP'),
('as', 'IN'),
('the', 'DT'),
('ultimate', 'JJ'),
('movie', 'NN'),
('monster', 'NN'),
('an', 'DT'),
('insatiably', 'RB'),
('hungry', 'JJ'),
('amoeba-like', 'JJ'),
('mass', 'NN'),
('able', 'JJ'),
('to', 'TO'),
('penetrate', 'VB'),
('virtually', 'RB'),
('any', 'DT'),
('safeguard', 'NN'),
('capable', 'JJ'),
('of', 'IN'),
('as', 'IN'),
('a', 'DT'),
('doomed', 'JJ'),
('doctor', 'NN'),
('chillingly', 'RB'),
('describes', 'VBZ'),
('it', 'PRP'),
('assimilating', 'VBG'),
('flesh', 'NN'),
('on', 'IN'),
('contact', 'NN'),
('Snide', 'JJ'),
('comparisons', 'NNS'),
('to', 'TO'),
('gelatin', 'VB'),
('be', 'VB'),
('damned', 'VBN'),
('it', 'PRP'),
("'s", 'VBZ'),
('a', 'DT'),
('concept', 'NN'),
('with', 'IN'),
('the', 'DT'),
('most', 'RBS'),
('devastating', 'JJ'),
('of', 'IN'),
('potential', 'JJ'),
```

```
 ('consequences', 'NNS'),
 ('not', 'RB'),
 ('unlike', 'IN'),
 ('the', 'DT'),
 ('grey', 'NN'),
 ('goo', 'NN'),
 ('scenario', 'NN'),
 ('proposed', 'VBN'),
 ('by', 'IN'),
 ('technological', 'JJ'),
 ('theorists', 'NNS'),
 ('fearful', 'NN'),
 ('of', 'IN'),
 ('artificial', 'JJ'),
 ('intelligence', 'NN'),
 ('run', 'NN'),
 ('rampant', 'NN')]
```

[19]:
```
#Blob Phrases
blob.noun_phrases
```

[19]:
```
WordList(['titular threat', 'blob', 'ultimate movie monster', 'amoeba-like
mass', 'snide', 'potential consequences', 'grey goo scenario', 'technological
theorists fearful', 'artificial intelligence run rampant'])
```

[20]:
```
#Polarity Analysis
for sentence in blob.sentences:
    print(sentence.sentiment.polarity)
```

```
0.06000000000000001
-0.34166666666666673
```