

Vader Sentimental

Sentiment text analysis on YouTube
comments

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What is Vader?

From the library's description:

“VADER (Valence Aware Dictionary and sEntiment Reasoner) is a lexicon and rule-based sentiment analysis tool that is specifically attuned to sentiments expressed in social media.”

In short: Evaluates social media text and outputs percentage of

- Positivity - How much of the text is positive
- Negativity - How much of the text is negative
- Neutral - How much of the text is neutral
- Compound - normalized, weighted composite score

Project: Evaluating YouTube comments

Objective: Compare Vader's output on comments to the Likes and Dislikes of the video

Approach:

- Use Selenium and BeautifulSoup to scrape YouTube and gather comments and # of likes/dislikes.
- Run each comment through the Vader library
- Use Matplotlib to graph the output in Pie Charts

Pseudocode part 1/2

```
driver = new Selenium webdriver
set driver.window_size to 1024x768
driver.get(url)

while( time < 25 seconds or page==bottom ):
    scroll()

bs = BeautifulSoup( driver.page_source )

comments = bs.find_all_youtube_comments()
votes = bs.find_all_likes_and_dislikes()
```

Pseudocode part 2/2

```
foreach comment:  
    score = vader_analyzer( comment )  
  
averages = score.calculate_all_averages()  
percentages = averages.calculate_percentages()  
  
matplotlib.piechart(percentages)
```

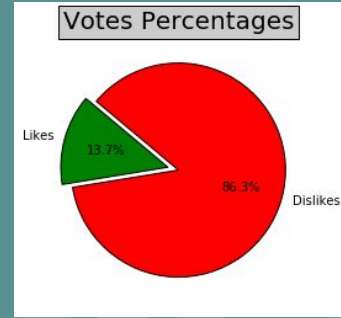
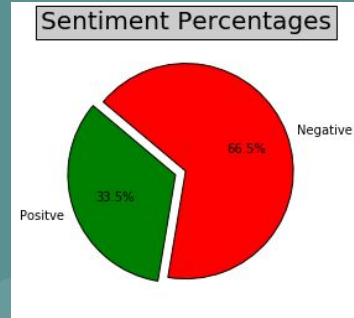
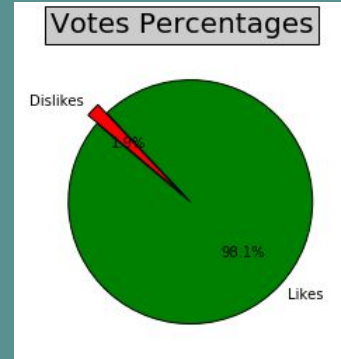
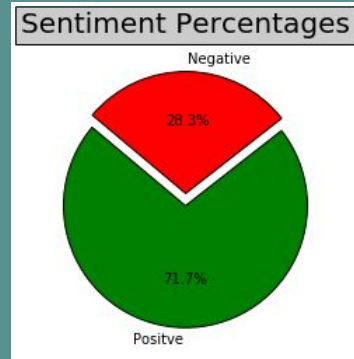
Demo

Results:

The Likes/Dislikes are somewhat consistent with the positivity/negativity in comments.

The library mostly plays it safe and usually marks most comments as neutral

Avengers Endgame Trailer:



Youtube Rewind 2018

Resources

- <https://github.com/cjhutto/vaderSentiment>
- <http://t-redactyl.io/blog/2017/04/using-vader-to-handle-sentiment-analysis-with-social-media-text.html>
- <https://medium.com/analytics-vidhya/simplifying-social-media-sentiment-analysis-using-vader-in-python-f9e6ec6fc52f>

Code References

- Continuously scrolling with Selenium -
<https://stackoverflow.com/questions/55400703/how-to-scroll-down-in-youtube-using-selenium>
- Matplotlib pie chart -
<https://pythonspot.com/matplotlib-pie-chart/>