CS 410 Final Project Documentation: Team Lightning Mcqueen
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Overview:

My project involves performing sentiment analysis on any given topic on Youtube. A user will simply have to provide a search, and my program will provide a visual and analytic summary of sentiments shared within the top videos relevant to the topic.

How to Use Software:

1. Install python3

2. Clone/download and navigate to the Final_Project Folder

3. Install dependencies by running `pip install -r requirements.txt`

4. Start your Flask instance by executing `flask run` (Mac/Linux) from your terminal within the Final_Project directory. If you are in windows, type `python -m flask run`

5. Navigate to `127.0.0.1:5000` on your internet browser (check terminal for correct port).

6. Have fun!

Software Implementation:

The entire project is written in python, and is executed through a Flask instance hosted on the local machine.

1. User gives an input topic (enters it into the webpage)

2. Software makes requests to top 30 video titles from YouTube relevant to the topic input.

3. Youtube returns back titles.

4. Code combines titles into a string, and performs unigram sentiment analysis on the returned titles. Also constructs WordCloud and PlotLy chart images to return back to the user.

5. A new webpage **analysis.html** containing the generated charts is loaded.

The illustration on the next page clarifies my software implementation