Project Proposal: Youtube Sentiment Analysis

Team Information:

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Summary:

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. This project is extremely interesting because it will allow users to understand the polarity of a topic on YouTube before even watching! My tool will also allow the input of a single video link to provide individual sentiment analysis as well.

My approach is as follows: A user will navigate to my web-hosted project. They then can provide a search for a topic they are interested in on Youtube (or just a link). On the backend, my code performs sentiment analysis on the top ten results if the input is a search (just one if it's a link), and provides a user-friendly analysis on the web page!

I will most likely be using the following to develop my project:

Python (packages from nltk, youtube_transcript_api, textblob, matplotlib, youtube-transcript-api, Flask)

Evaluation:

I will be evaluating my work by determining how accurate my project is on numerous topics. I will have human evaluators determine the sentiment of the videos, and compare it to my system's output.

WorkLoad:

Since this is a solo-project, I am anticipating it to take a minimum of 30-40 hours. Creating the user interface, coding the analysis, and evaluating my project will take a substantial amount of time.