

Priyansh Pachauri

Tanay Sharma

Vaibhav Raj

Pranav Pande

















INTRODUCTION:

Have you ever searched for a YouTube video seeking for a review or a full explanation of a topic, only to find after watching the entire video that it was not what you were looking for in the first place?

Previously, YouTube had a dislike button that helped you assess whether the video was useful or not, but the feature has been removed. However, there is a hack that can still help us determine whether the video is useful or not, and that is the **COMMENTS**.



#1 on Trending

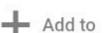
YouTube Rewind 2018: Everyone Controls Rewind |

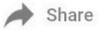
#YouTubeRewind



YouTube Spotlight

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Agorapulse Review 🧶 The all in one tool for social media...

Andrew and Pete 5.8K views • 2 years ago



Quit social media | Dr. Cal Newport | TEDxTysons

TEDx Talks ② Recommended for you



Solo sailing Los Angeles to Hawaii on 23ft boat

Sam Holmes Sailing Recommended for you



Admiral McRaven Leaves the Audience SPEECHLESS | One ...

MotivationHub Recommended for you



Carson Can't Keep Up with Rodney Dangerfield's Non-Sto...

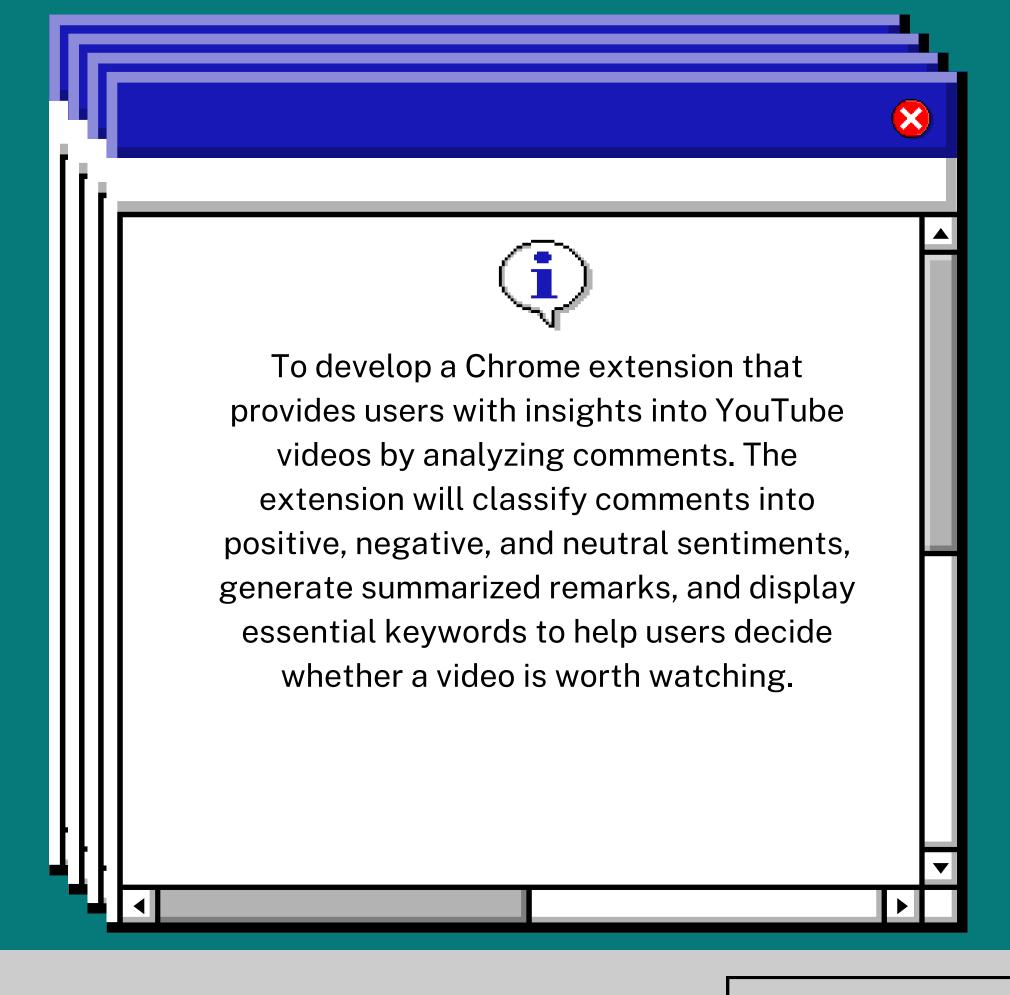
Rodney Dangerfield ② Recommended for you

Agoranulse Review 2019 — Full



Problem Statement:





















PROPOSED SOLUTION

KTY: KNOW THE VIDEO

This chrome extension allows the user to receive data about the desired video as to how helpful it is and whether it is worth devoting the

The KTV uses the Comments as a mean to get the average review of how the viewers felt after watching it and what all aspect it covers.

Firstly, the data fetched from the comments is classified into <u>Positive</u>, <u>Negative</u> and <u>Neutral</u> and a proportional data is displayed.



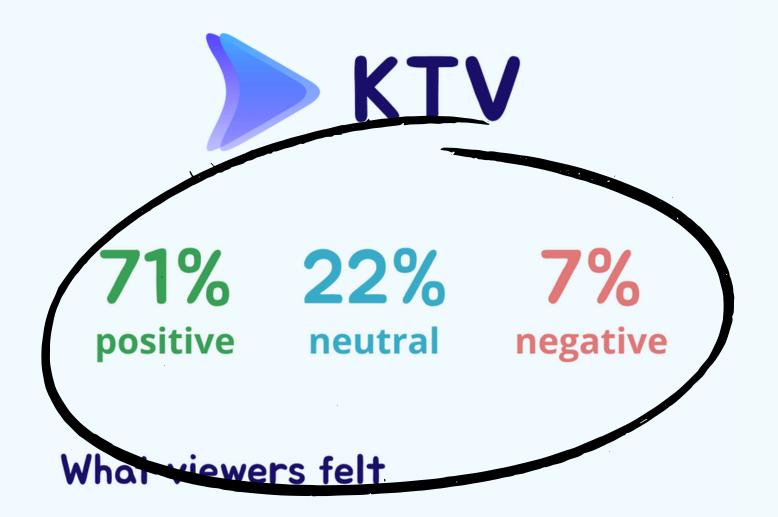


Core Components:

- Data Collection: Fetching comments using the YouTube API.
- Sentiment Analysis: Classifying comments using ML models (e.g., twitter- ... roberta-base-sentiment from Hugging Face).
- Summary Generation: Creating summarized remarks based on all comments.
- 4. Keyword Extraction: Displaying important keywords from the comments.
- 5. Front-End Development: Building a user-friendly Chrome extension interface.

Back to Agenda Page





Viewers say that the video is helpful but the solution differs system to system

Essential keywords

works best explanation

easy to follow

old

very slow

Also, a summarized remark based on all the comments is generated that gives a <u>Highlight</u> of what the viewers had to say And finally, the important and essential keywords used by the viewers are displayed

A YouTube link opened in browser

Extension gets triggered and sends this YouTube link to the backend in a fetch request which awaits a response containing the ai generated values and statistics

The backend receives the request and triggers the function to fetch the YouTube comments from the API

The Architecture

This data is then received by Your paragraph text the extension and then used to display to the statistics and the generated text to the user with a pleasing UI

These comments are then fed to the Al models including LLM for:

- 1. Text generation
- 2. Sentiment analysis
- 3. Keywords Identification

Frontend Layer - Chrome Extension

Backend Layer - Python FastAPI

TOOLS AND TECHNIQUES USED:

- Data fetching via YouTube api
- Extensions and API
- Machine Learning and Generative AI

