YouTube API frame,comment Extraction with Keywords for Publicly Traded Companies

Introduction

This report documents the process of extracting frames ,comments from videos related to Keywords listed for publicly traded companies

Methodology

1. Extracting Frames and Comments

I used the YouTube API to extract frames (video thumbnails) and comments from videos related to to Keywords listed for publicly traded companies

- Authentication: Authenticated with the YouTube API to gain access to video data.

- Video Search: Conducted searches for Keywords listed for publicly traded companies

- Frame Extraction: For each video found,extracted frames (video thumbnails) to create a visual representation of the video content.

- Comment Extraction: retrieved comments associated with these videos to gather user-generated content and sentiment data.

2. Company wise extraction

I completed frame,comment extraction for 15 companies . Progress is updated in done column of company excel

-I observed that there are ticker ,name mismatches and also there is not much data if company is small

Future Work

I will continue for already provided list and do frame extraction for rest of the companies

Conclusion

I will continue to automate this process of url collection. I faced error like quota exhausted:

<HttpError 403 when requesting
https://youtube.googleapis.com/youtube/v3/search?q=A+Bankruptcy&type=video&maxResults=5&part=id

%2Csnippet&key=AIzaSyARmVRNZqk5ZA4PYOZryQZS2TEe9Wp4OCM&alt=json returned "The request cannot be completed because you have exceeded your quota.". Details: "[{'message': 'The request cannot be completed because you have exceeded your quota.', 'domain': 'youtube.quota', 'reason': 'quotaExceeded'}]">

-Working on optimizing code and making the process faster for rest of the companies

-Observed that the url's fetched were not that accurate working on that

-Finished for 15 companies so far ,working on rest.