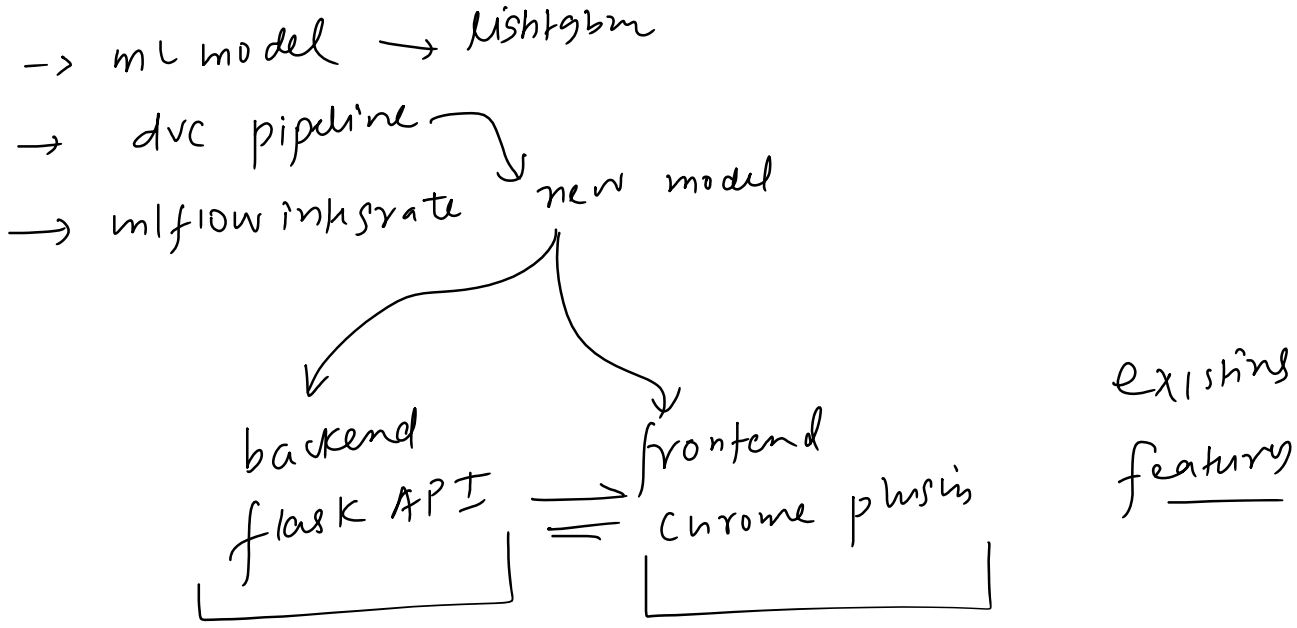
Recap and Plan of Attack

30 October 2024 08:25

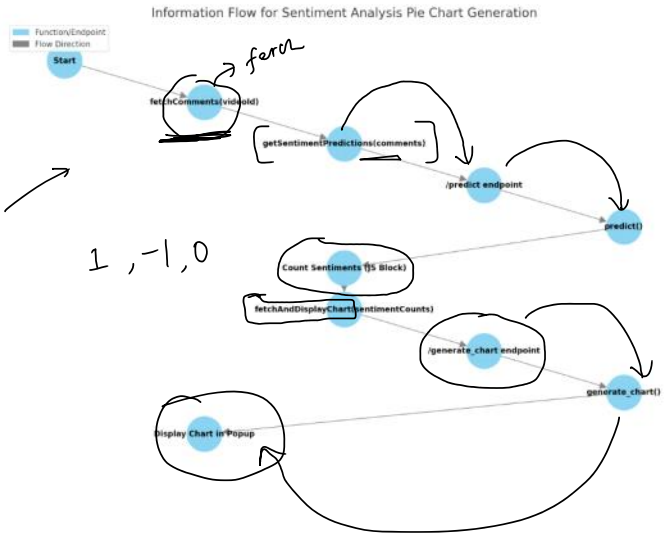


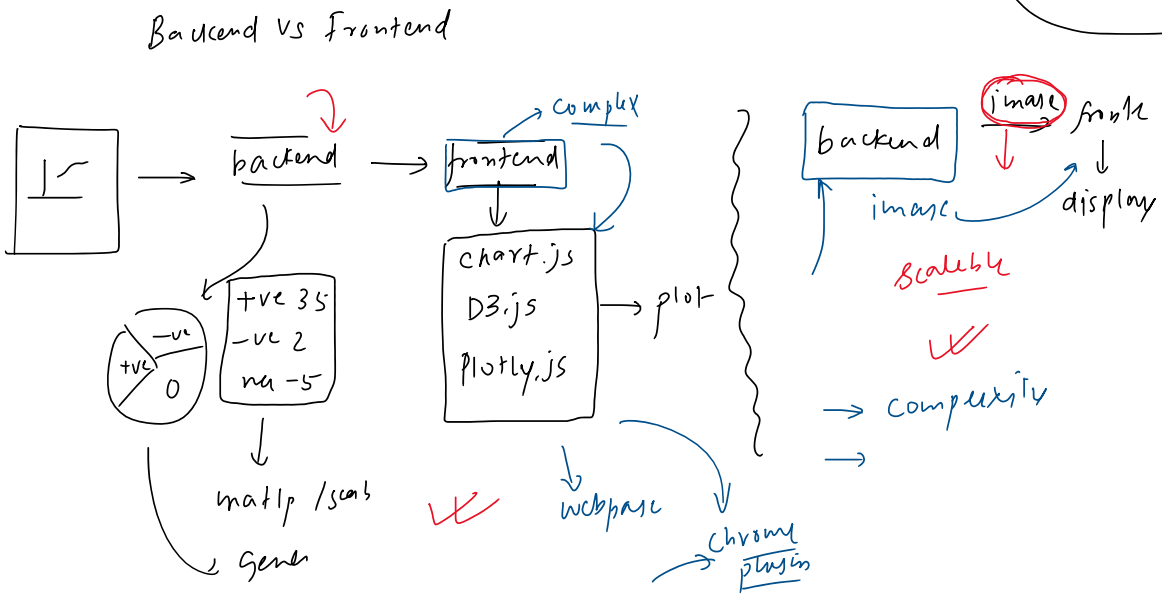
Sentiment Distribution Pie Chart

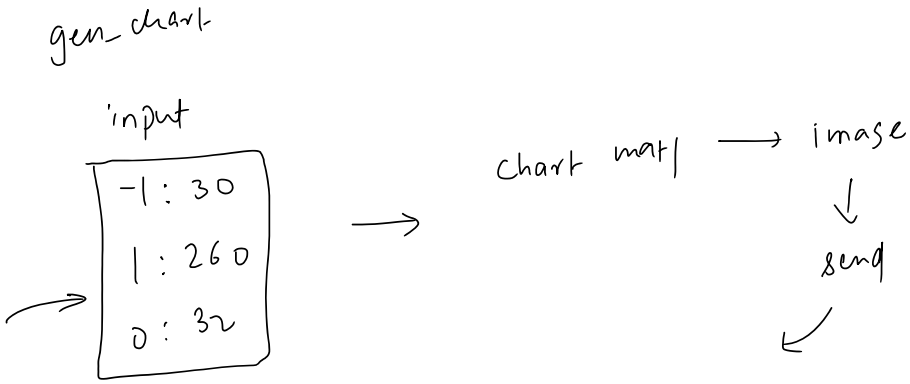
30 October 2024 09:00

Summary Table of Key Functions and Endpoints

Step	Function/Endpoint	Location	Purpose
1. Fetch Comments	`fetchComments(videoId)`	Frontend	Collect comments from YouTube API.
2. Sentiment Prediction	`/predict`	Backend	Endpoint for sentiment analysis.
	`getSentimentPredictions()`	Frontend	Send comments to `/predict` endpoint.
	`predict()`	Backend	Processes and predicts sentiment for each comment.
3. Count Sentiments (Frontend)	(JavaScript block)	Frontend	Counts Positive, Neutral, and Negative sentiments.
4. Generate Chart	`/generate_chart`	Backend	Endpoint to create the pie chart.
	`fetchAndDisplayChart()`	Frontend	Send counts to `/generate_chart` for chart generation.
	`generate_chart()`	Backend	Generates and returns the pie chart image.
5. Display Chart (Frontend)	`fetchAndDisplayChart()`	Frontend	Displays pie chart image in the popup interface.

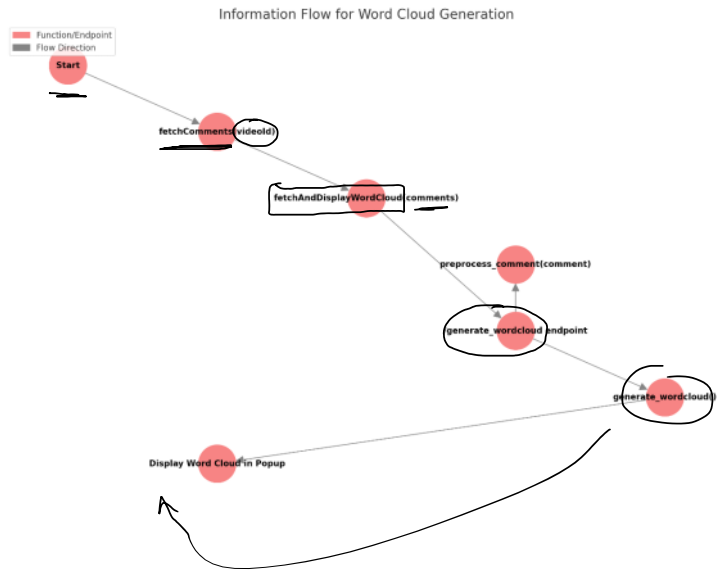




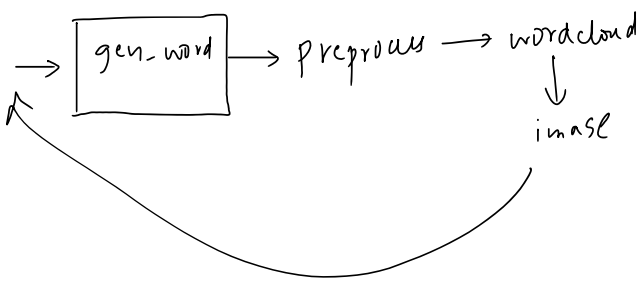


Word cloud

30 October 2024 11:40



Step	Function/Endpoint	Location	Purpose
1. Collect Comments from YouTube	`fetchComments(videoId)`	Frontend	Collect comments from YouTube API.
2. Send Comments to Backend	`fetchAndDisplayWordCloud(comments)`	Frontend	Send comments to the backend for word cloud generation.
3. Preprocess Comments	`preprocess_comment(comment)`	Backend	Process comments by removing unwanted words and applying transformations.
4. Generate Word Cloud	`/generate_wordcloud` endpoint	Backend	Generate a word cloud image from the preprocessed comments and return it as a response.
5. Display Word Cloud	`fetchAndDisplayWordCloud()`	Frontend	Fetch the generated word cloud image from the backend and display it in the popup interface.



api
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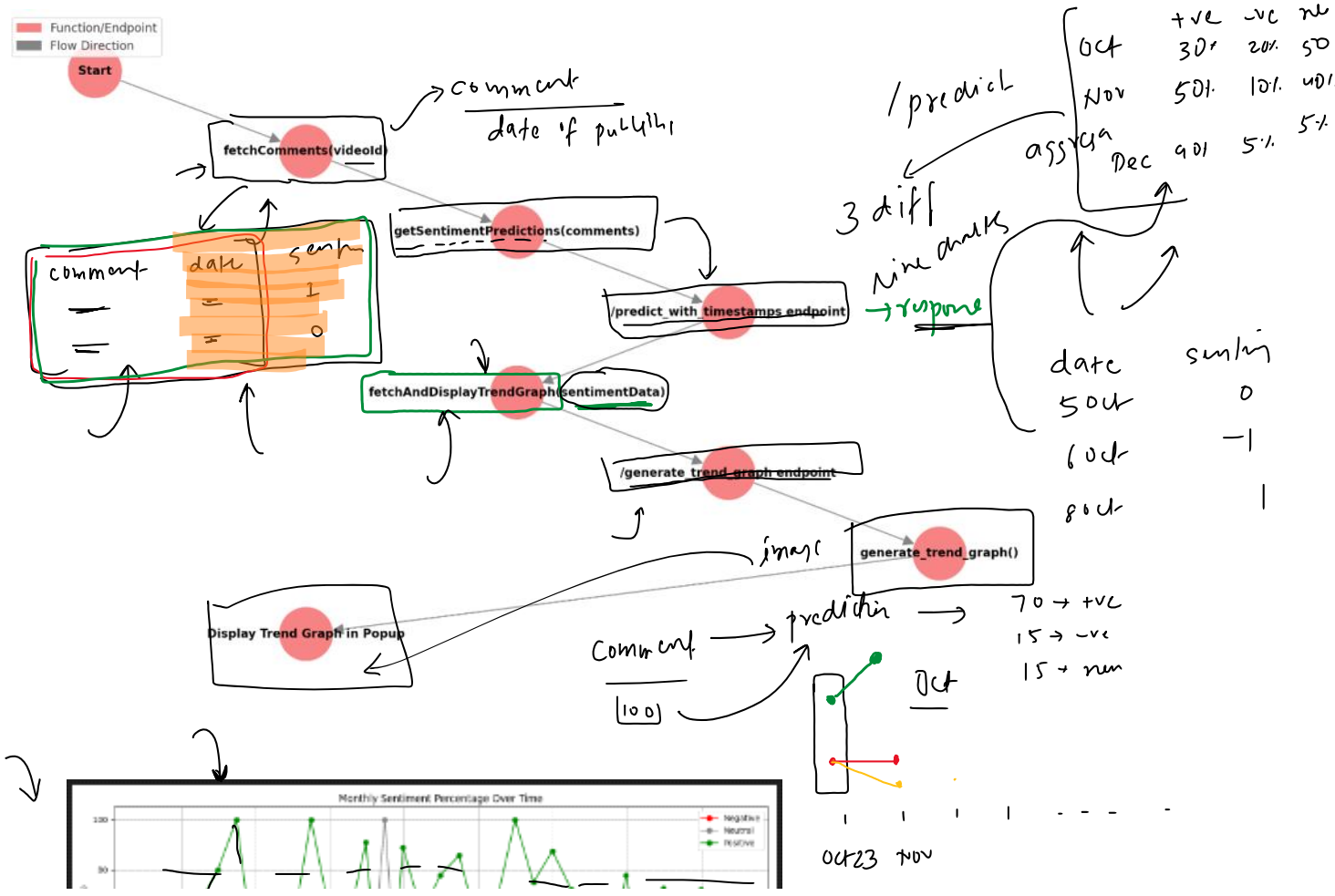
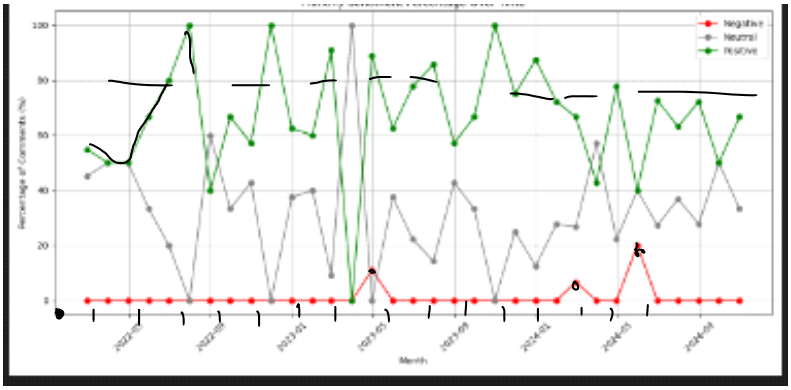
Trend Chart

30 October 2024 12:29

Step	Function/Endpoint	Location	Purpose
1. Collect Comments from YouTube	`fetchComments(videoId)`	Frontend	Collect comments with timestamps from YouTube API.
2. Send Comments for Sentiment Analysis	`getSentimentPredictions(comments)`	Frontend	Send comments and timestamps to the `/predict_with_timestamps` endpoint.
3. Sentiment Prediction with Timestamps	`/predict_with_timestamps` endpoint	Backend	Process each comment, returning sentiment predictions with timestamps for each comment.
4. Prepare Data for Trend Graph	`fetchAndDisplayTrendGraph(sentimentData)`	Frontend	Pass the timestamped sentiment data to the `/generate_trend_graph` endpoint.
5. Generate Sentiment Trend Graph	`/generate_trend_graph` endpoint	Backend	Aggregate, resample, and plot monthly sentiment percentages, returning the trend graph image.
6. Display Trend Graph	`fetchAndDisplayTrendGraph(sentimentData)`	Frontend	Fetch and display the sentiment trend graph image in the popup interface.





→ month

Oct23 Nov

100 → 80 +ve

15 -ve

5 num

Average Sentiment Score

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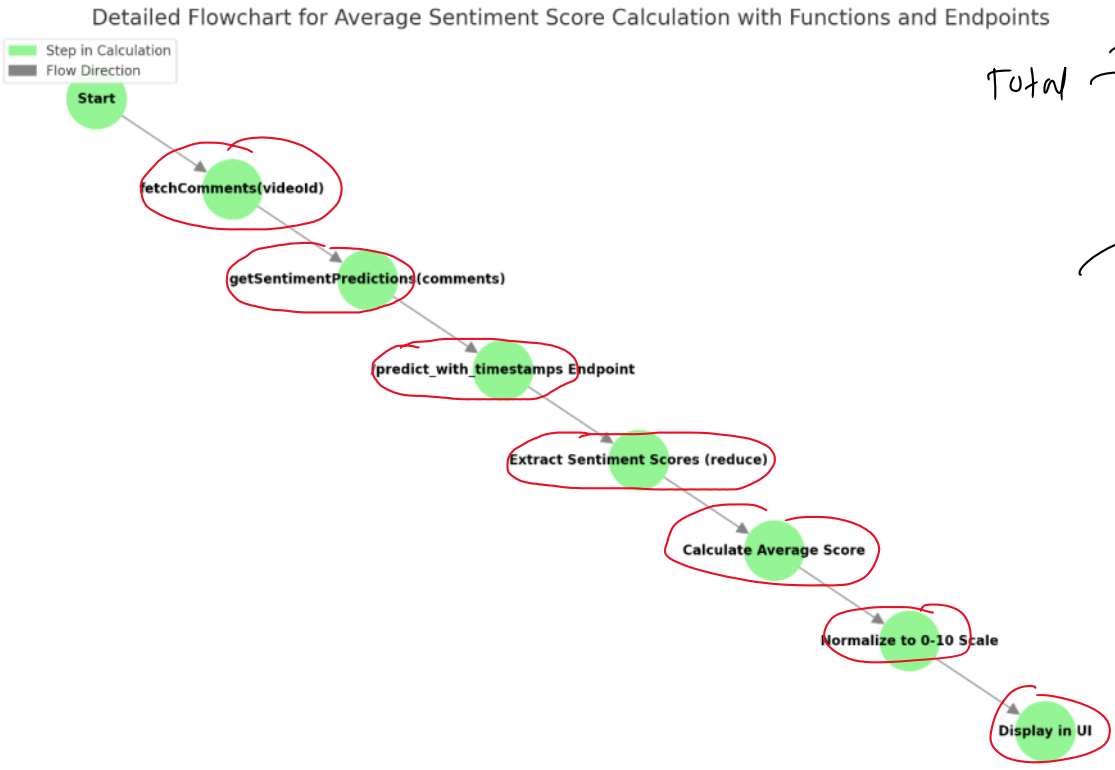
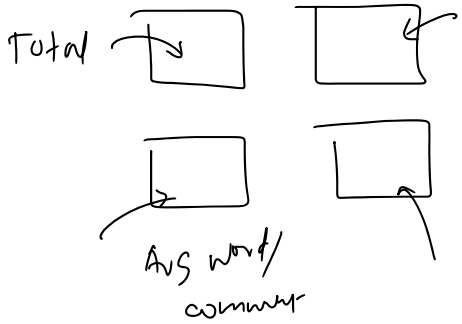
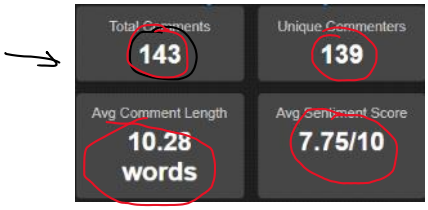
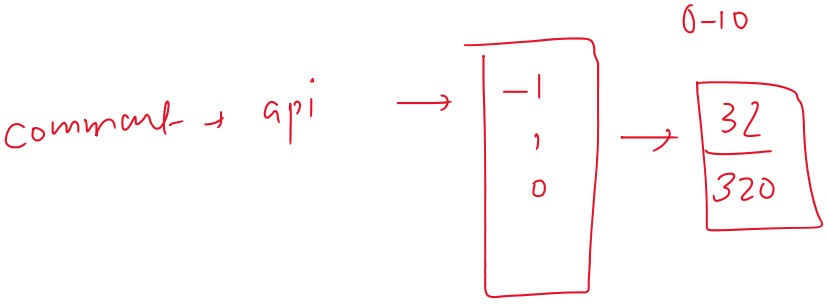




backend/
JS / html





What next?

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