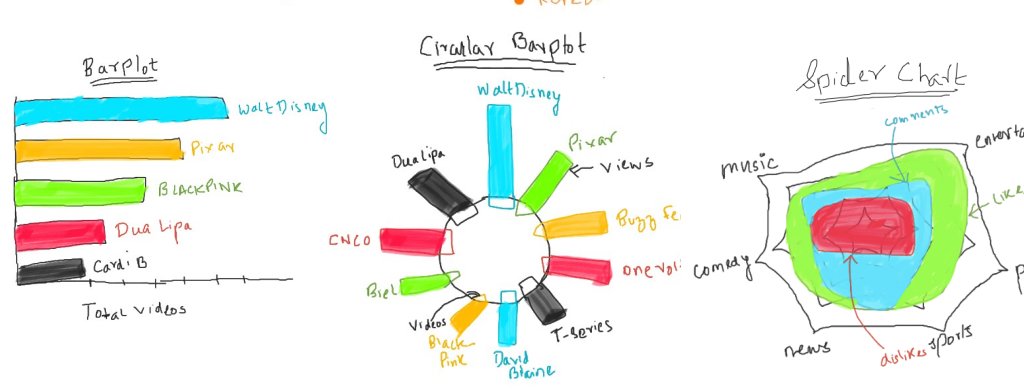
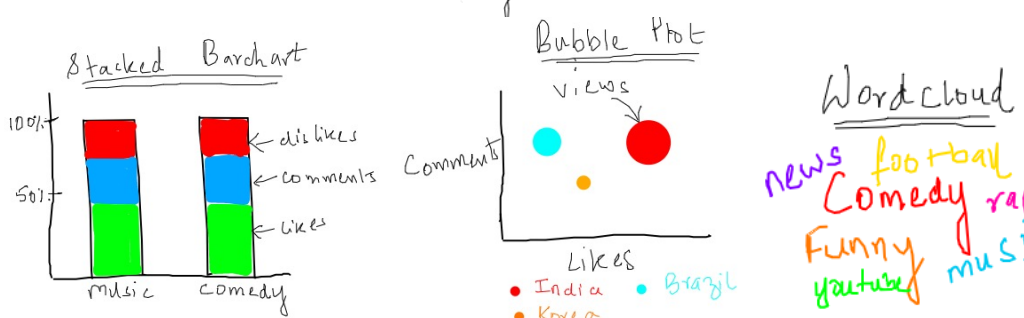
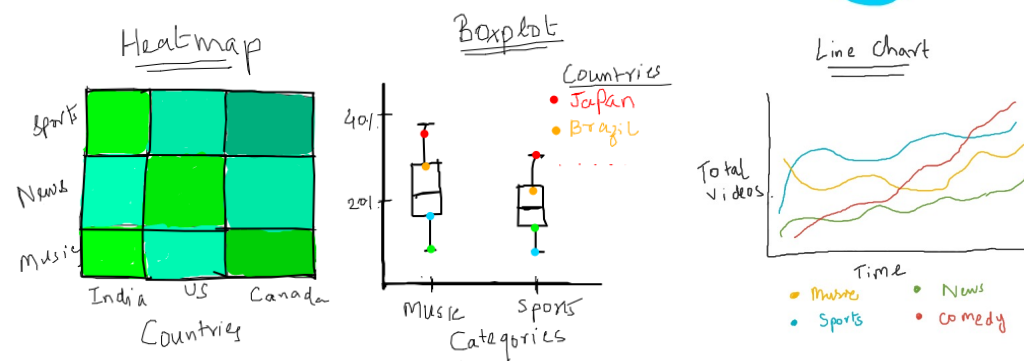


Overview of the dataset

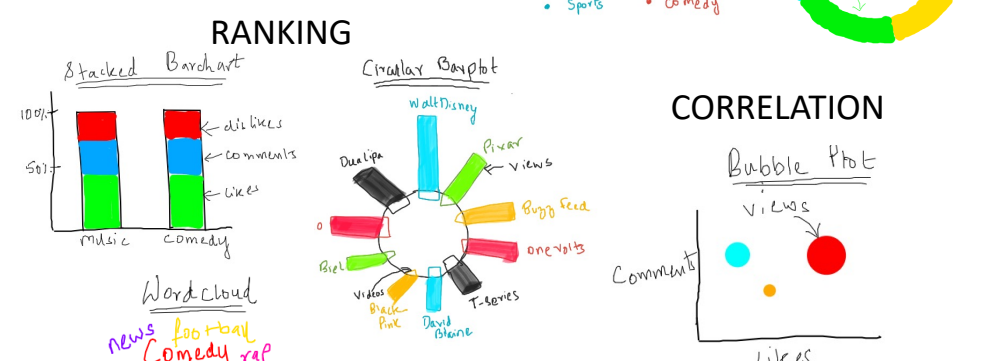
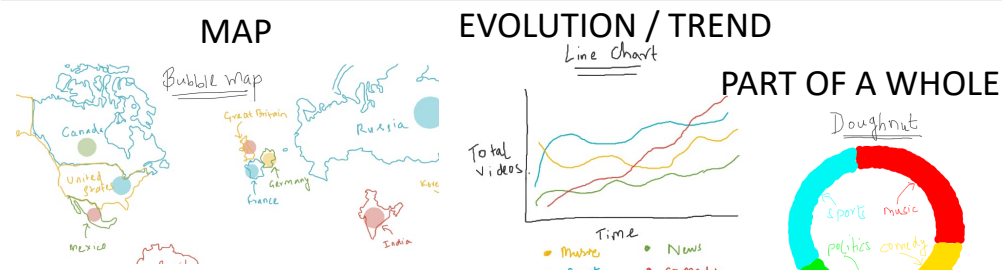
# Analyzing the trending videos on YouTube

- This project aims to study the YouTube trending videos dataset.
- From this project, we wish to analyze the:
  - ✓ Trending videos from a region and category dimension.
  - ✓ Correlation between likes, dislikes, views, and comments of trending videos.
  - ✓ Channels that upload these trending videos.

# 1. Ideas



# 2. Filter & Categorize



Reason for selecting visualizations:

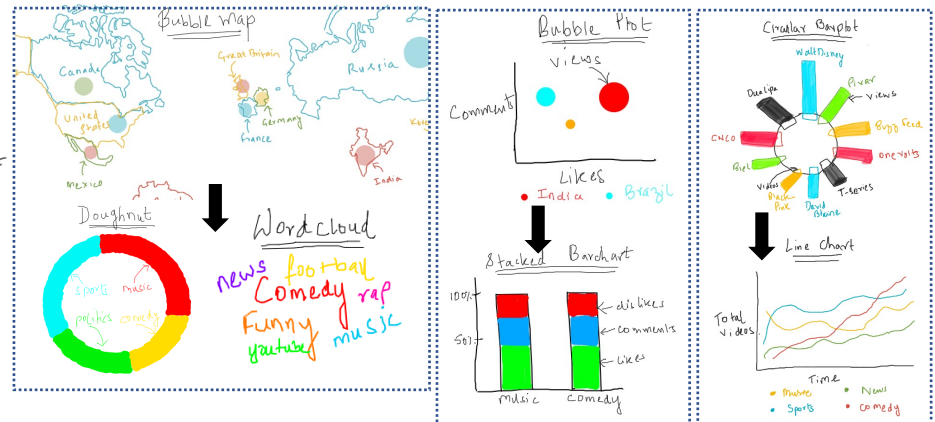
- **Bubble Map**: Overall picture of trending videos.
- **Doughnut**: Classifying the categories.
- **Line Chart**: To explore trends of categories over time.
- **Bubble Plot**: To understand correlation.
- **Stacked Barchart**: To visualize ranking of categories.
- **Circular Barplot**: To explore ranking of channels.
- **Wordcloud**: Text mining of tags.

Reason for rejecting visualizations:

- Difficult to interpret the visualization.
- Not adding value as the insights are similar.
- Lesser scope for interactivity.

# 3. Combine & Refine

We combine and refine our visualization so that we can drill-down and get further information based on user interaction. The direction of arrows below show the visualization that is impacted on user interaction.



# 4. Questions

Is the clients' requirement fulfilled?

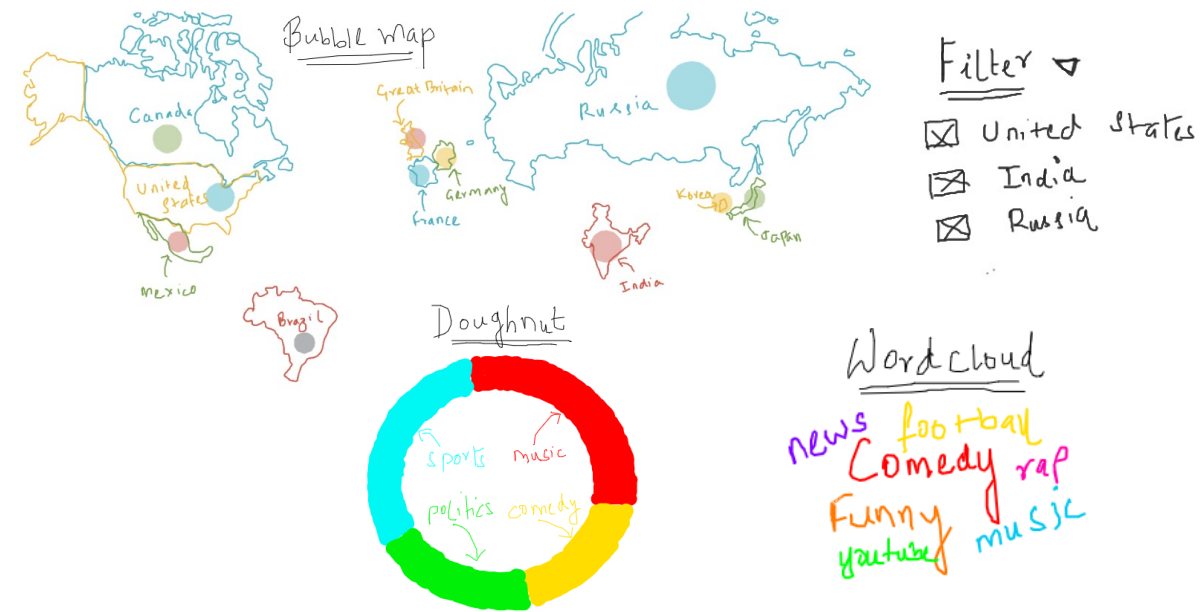
A client looking to run advertisements or create content on/for YouTube would want to target the right videos, channels, and categories. These visualization would help the client and enable them in making informed decisions.

What aspects of trending videos are covered?

The kind of videos that trend (categories and video tags) in each region, the engagement rate and evolution of trending videos by categories, and the channel-wise distribution of trending videos.

Layout

<Title>  
<Short description here>



Operations

Mouse Hover:  
On hovering on any country, the Doughnut chart and Wordcloud will get updated as per the country. For example, if Canada is selected, the category distribution (in the doughnut chart) and Wordcloud, will be as per Canada’s trend.

- Filter:
- You can filter out the countries for which you wish to see the trending videos, categories, and wordcloud metrics.
  - If the mouse is not hovering a country, then the collective trend for all selected/filtered countries is shown.
  - At least one country must be selected in the filter. By default, all countries are selected.

Zoom: You can zoom into the world map for a better view.

Tooltips: You can see more information in the tooltips.

Focus



- Focus on a particular country by hovering on it.
- Focus on multiple countries by using filters.
- Zoom on the map for enhanced view.

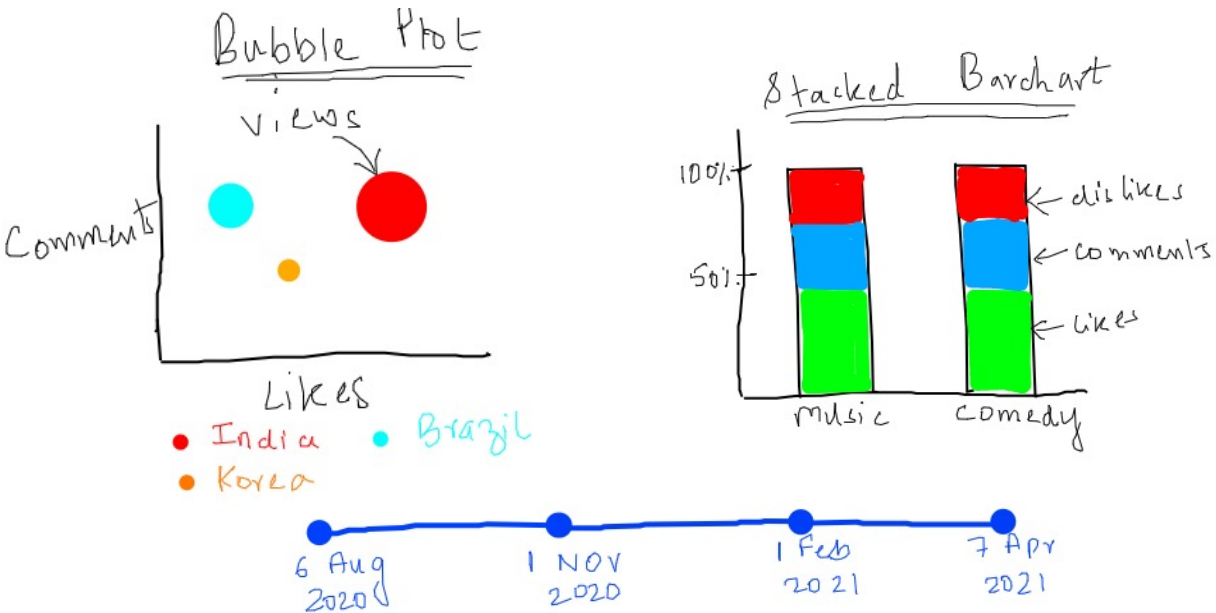
Discussions

- Advantages:
- The bubble size in the map would give a region-wise comparison of the number of trending videos.
  - Countries can be filtered, and users can focus on a particular country or multiple countries.
- Disadvantages:
- Some users may find the interactions difficult to use.

Layout

<Title>

<Short description here>



Operations

Timeline drag:  
You can drag the timeline to see the trends for a particular time period.  
By default, the entire period of the dataset is selected.

Mouse Hover:  
On hovering a particular country, the stacked barchart gets updated and show dislikes, likes, comments as per the country.

- Filter:
- You can filter out the countries (from the legend) for which you wish to see the category-wise engagement rate.
  - If the mouse is not hovering any bubble, then the collective trend for all selected/filtered countries (as per the legend) is shown based on the timeline selected.
  - At least one country must be selected in the legend.
  - By default, the bubble plot shows all countries.

Focus



- Focus on a particular country by hovering on the country bubble.
- Focus on multiple countries by filtering from the legend.
- Focus on a particular time period by dragging the timeline.

Discussions

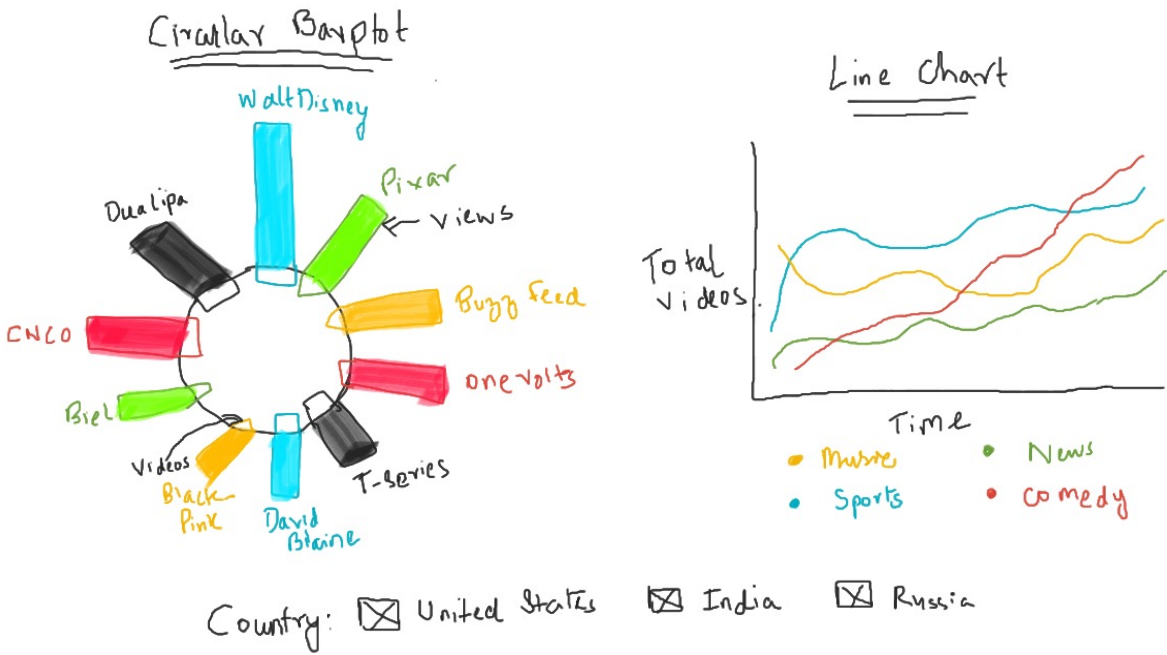
- Advantages:
- The bubble shows a lot of information (likes, comments, views).
  - Countries can be filtered from the legend, and users can focus on a particular country or multiple countries.
  - Users can also see trends based on a particular time period.
- Disadvantages:
- Limited interactions are possible.



Layout

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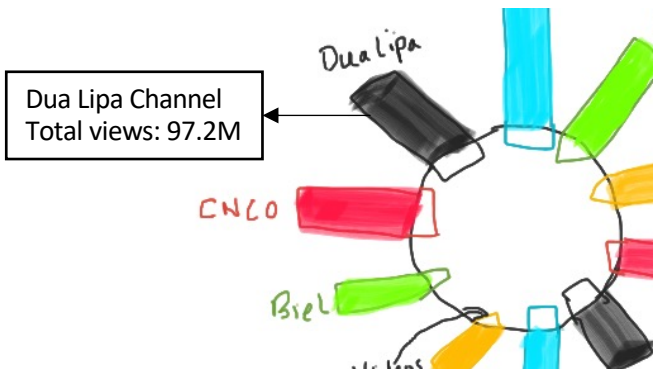
Operations

Mouse Hover:  
On hovering a particular channel (big bar), the line chart gets updated and shows the total video views from that channel by category (on a timeline). On hovering the small bar, it shows the total videos instead of total views.

- Filter:
- You can filter out the countries for which you wish to see the category-wise trending videos trend.
  - If the mouse is not hovering any bar, then the collective trend for all the channels in the filtered countries is shown.
  - At least one country must be selected in the filter.
  - By default, the filter shows all the countries.

Tooltips:  
The tooltip of the big bar in the circular barplot shows the total views while the small bar shows the total number of trending videos.

Focus

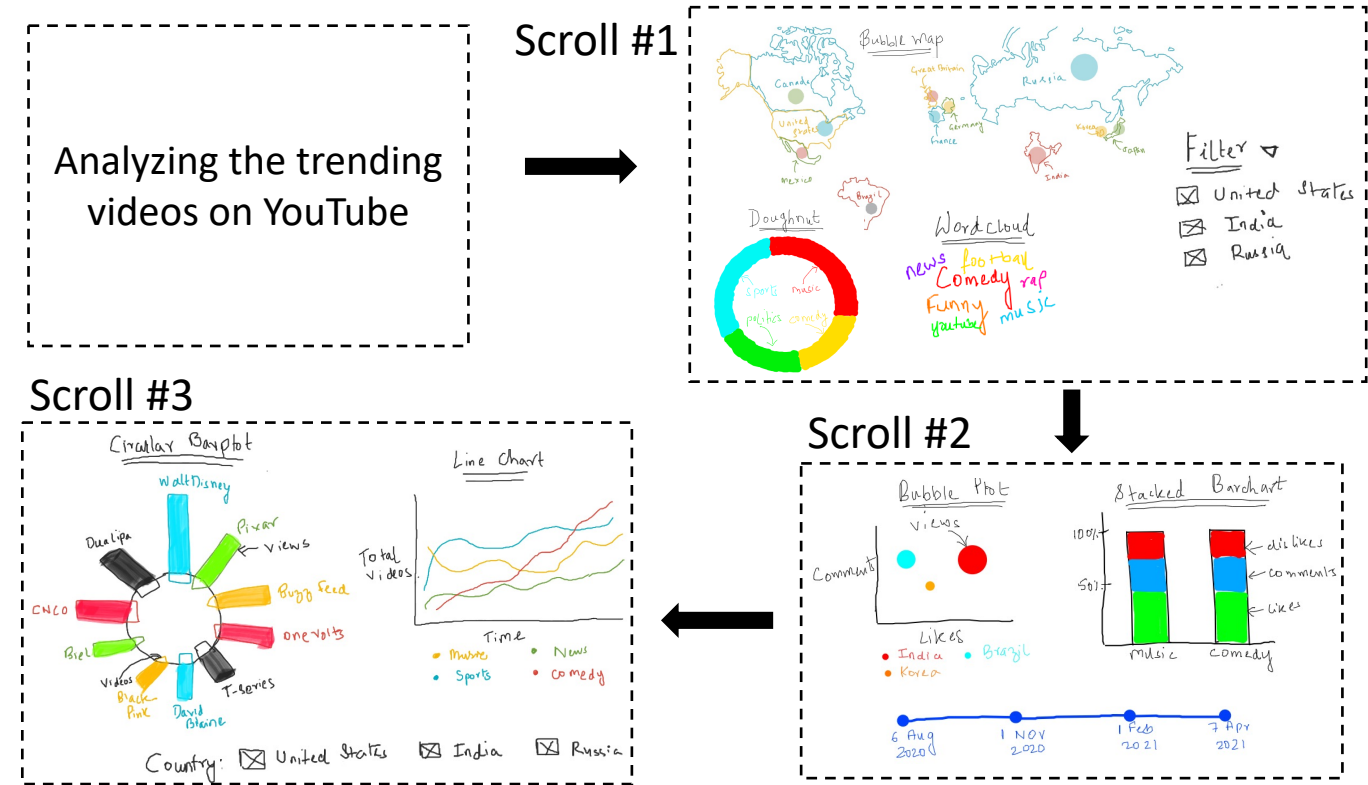


- Focus on a particular channel by hovering on the channel bar.
- Focus on one/multiple countries by selecting the countries filter.
- Drill-down to channel trending videos details by hovering.

Discussions

- Advantages:
- The visualization is simple with minimal interactions, which makes it easy to use and understand.
  - Countries can be filtered so that users can focus on a particular country or multiple countries.
- Disadvantages:
- Only top few channels can be accommodated in the barplot.

Layout



Operations

The visualization dashboard would open to a landing page which would only contain the topic of the visualization and very little details.

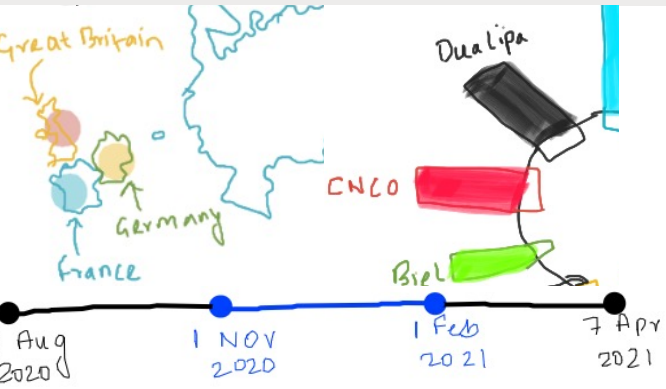
**Scroll:**  
On each scroll, the user will move to the new visualization.

**Hover:**  
Each visualization contains some form of hover interaction which will enable the user to drill-down into more details.

**Click:**  
In some cases, a user can also click the visualization to obtain more details.

**Tooltips:**  
Tooltips will be added wherever possible to allow users to see additional information.

Focus



Hover and filter will help in drilling-down into details.

The zoom feature will help in taking a closer look.

In short, all interactions will enable users to focus on a particular dimension.

Details

The visualizations in this project help users determine the properties of a trending video on YouTube. With this information, a user/content-creator can make informed decisions about what kind of videos they should advertise their products/companies. The following represents:

Sheet 2: Region-wise trends and can drill-down to categories/tags.

Sheet 3: Engagement rate per region with an option to drill-down by category and timeline.

Sheet 4: Channel-wise trends and can drill-down to categories/timeline.