

1. Data Stored In Database:

https://www.kaggle.com/datasets/rsrishav/youtube-trending-video-dataset?select=US_youtube_trending_data.csv.

- Current Top Trending Video saved as Column Entry
- Relation related to each category of video watched
- Relation recording past 30 days trending videos/Max
- Relation Recording user watch history videos

2. Basic Functions:

- Displaying Video
- Navigating between pages on site
- Clicking randomizing button
- Checking history/Preferences

3. Cool Feature

- Randomization Button
- Can be tuned to cater towards user taste/watch history

4. Project Title:

Trending54

5. Project Summary:

We are planning to create a website that will allow users to view trending YouTube videos from the past month based on the user's preferences. The user will also be able to view a random trending YouTube video. The website will display the daily trending video on its main page. If the user wishes to access the video, we will provide its link. In addition, there will be a functionality similar to the "surprise me" button for google search, wherein the user can be linked to a random trending video within the dataset. In addition, different trending videos can be broken down by category if the user wishes to access a certain one in particular. We will keep a record of their watch history as well and record their taste. As the user begins to acquire a growing list of videos watched, we will be able to display their favorites and history.

6. Description of Steps:

We want to solve the problem of not being able to view trending YouTube videos based on a user's preferences. Currently, the YouTube Trending page only allows users to see every trending video, without the ability to set their preferences. Thus, users are left with scrolling through countless videos or watching the YouTube channels they are already familiar with.

To address this issue, we are creating a web application that provides users with the ability to view trending videos based on their preferences. A user will create an account and select which genres of videos they enjoy the most and any key words that interest them. Our site then recommends the top 5 trending videos based on these preferences. We will query the data based on the categories the user prefers, the key words, preferred watch time, view count, and the like to dislike ratio. Additionally, the web application has a "Surprise Me" feature that recommends any of the trending videos to surprise the user with content they have not viewed before. Finally, the user can access a "Favorites" page, which will

allow the user to see every trending YouTube video and select the exact preferences of videos they would like to see. This will be a query of the entire dataset and the queries will change based on the preferences selected by the user.

7. Usefulness:

This application is useful because it allows YouTubers to see what is trending daily so that they can keep up with content and still be relevant. YouTubers can see what videos people are liking and are more active on, therefore they know how to alter their content to fit the likings of consumers. This web application also benefits the consumers because they can keep track of the videos that they have watched and liked. This website application also creates a profile and database for every user so that they can have access to their previous likes and preferences and also add new ones.

YouTube itself has some of the aspects that we are adding in our website such as having the top videos of the day and outputting videos based on keywords. However, the part that is different in our application is that the user can input preferences and our application will provide top videos based on those preferences and the application will also save these preferences in the database, creating a profile.

8. Realness:

The Data We will Gather from the dataset:

- Trending Videos
- Categories
- Dates Posted

Data From User to be Recorded/Implemented:

- Links Clicked
- Most Watched Categories
- History

We will be getting this data from the dataset provided by the TA's:

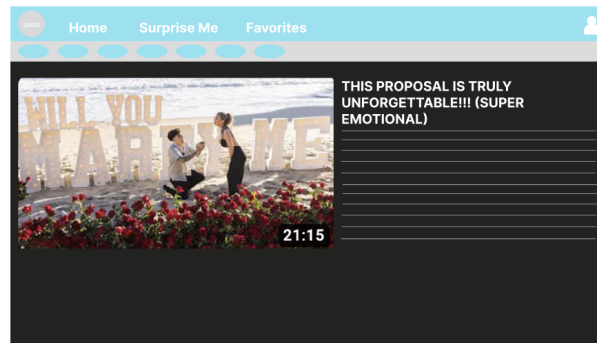
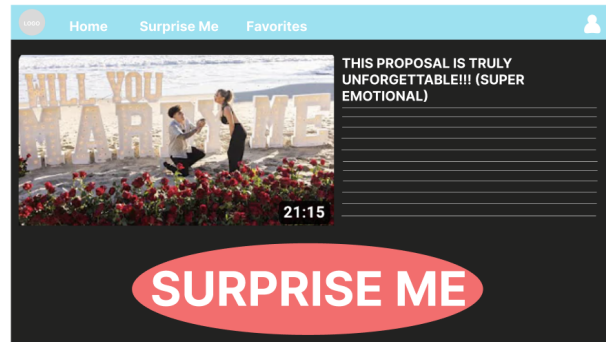
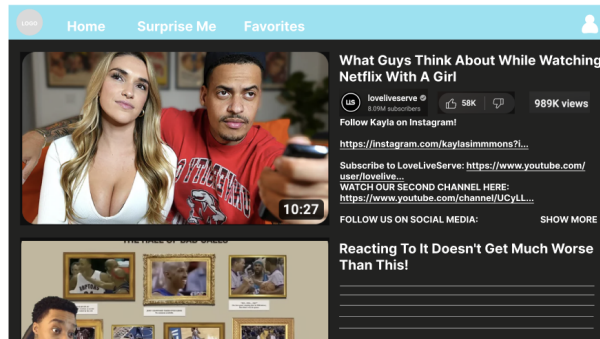
https://www.kaggle.com/datasets/rsrishav/youtube-trending-video-dataset?select=US_youtube_trending_data.csv.

9. Description of Functionality

Users will be able to input their preferences in terms of keywords and tags and the top videos in those categories will be displayed. Over time, the top videos that are displayed will cater toward their favorite and most watched videos. Users will be able to change their preferences at any time and these changes will be saved in the database

Users can input their preferences from the time they create their account and they can update these preferences at any time by clicking on different keywords. They will also be able to search for certain videos depending on their likes. They will be able to create and delete their accounts as well.

9.1 Low-fidelity UI mockup



9.2 Project work distribution

Problems / Steps	Name
Creating overall UI	Everyone
Favorites Page	Aarya
Home Page	Yilin
Drop Down/Surprise Me Features	Drew
Profile and Log In	Vir