CS348 Project Spring 2020
Youtube Trends Visualizer - Milestone 0

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After brainstorming a few ideas, we decided to create a web application to visualize and explore YouTube videos. The dataset we chose is called "Trending YouTube Video Statistics" on Kaggle and consists of several months of data of daily trending YouTube videos from many countries, with up to 200 listed trending videos per day. It includes data such as the trending date, channel name, likes, dislikes, views, and the category of video. We used the provided columns for our database schema, along with an extra column that states which country the video was trending in, since the csv files are split by country. For a sample dataset, refer to the Kaggle link as that is the data in our database.

The users of this project would be anyone who watches YouTube videos and anyone who is interested in seeing information and statistics on historic YouTube video data. We plan to create a web app where users can enter search queries for things such as trending videos on some past date, filter by trending videos for different countries. Other potential features integrating the YouTube API to make the app more than a simple visualizer, like having a YouTube player so that users can watch videos directly from our app. Another potential idea is to use another dataset that has information on the growth of youtube channels, or perhaps we could get this from the Youtube API. We can join this information together with our trending videos to provide deeper insight into the growth of channels before and after they had a trending video.

We have created a simple prototype using Google Cloud Platform, Node.js, and React. The data is hosted on Google Cloud Platform and we currently have a frontend display that shows the result of a SQL query to the database. The query selects all columns from the database and uses an offset to provide new results each update, but for the purposes of visual clarity, only the video title and release date are shown.