Youtube for Content Creators

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I set out to develop a web app for youtube content creators (gamers, specifically) to look at for advice on what games to play to incrase viewership. I acquired relevant data, set up an analytics dashboard and provided a recommendation system for games that might be productive to make videos for.

Design

As I'm making something for content creators, direct data from youtube was the most important. Consequently I scraped to overcome API limitations. I also focused on both game characteristics as well. For compuational and deployment reasons, I used matrix factorization methods and pretrained models to limit filesize and memory footprint. Due to the vagaries of web scraping I put in extensive error handling in the data aquisition to future proof it (and still work if API's get depreciated).

Data

Data from youtube API (list of channel videos) and scraping youtube for the rest. Steam ap ID's came for two three different implementations with a scraper as fallback. I used both SQL databases and serialization to store data (the latter in an attempt to optimize memory) for deployment.

Algorithms

I made a neural network which I gave up on at deployment. I used matrix based recommendation systems after signifcant data preprocessing, using NLTK and surprise for their implementations.

Tools and Communication

I used streamlit to develop a web app here. The visualizations were done in matplotlib with some seaborn thrown in.