**Goal:**

Create line posters based on anime tv shows and movies

**Technology Required:**

FFMPEG, PYTHON

**Steps:**

Take movie file and take screenshots at intervals

https://trac.ffmpeg.org/wiki/Create%20a%20thumbnail%20image%20every%20X%20seconds%20of%20the%20video

Use python to find the dominant colors of the image

https://stackoverflow.com/questions/43111029/how-to-find-the-average-colour-of-an-image-in-python-with-opencv

Other concerns in process:

https://www.metafilter.com/142548/The-Colors-of-Motion

**HOW DOES IT WORK?**

- A bash script runs ffmpeg to export frames from a video file.

- The frame rate of the exports depends on the length of the video.

- The bash script then calls a PHP script which extracts the average color from each frame.

- The results are spit out as a JSON file with the hex values in an array.

- The front-end runs on backbone, and presents the color data.

- Navigate the colors in a number of ways, and compare the color to each frame."

**Future Features**

analyze audio to figure out the peaks of the movie

**How to use FFMPEG**

<https://video.stackexchange.com/questions/20495/how-do-i-set-up-and-use-ffmpeg-in-windows>

**Tool to find average color of image**

http://matkl.github.io/average-color/

**Test Movie**

Spiderman Into the Universe

**Another Software to Check Out**

<https://processing.org/>

**Another Test**

<https://www.youtube.com/watch?v=fzQ6gRAEoy0>

Use Youtube-DL to download

<https://github.com/rg3/youtube-dl/blob/master/README.md#readme>

**More Reading/Tools**

<https://github.com/fluent-ffmpeg/node-fluent-ffmpeg>

<http://www.omdbapi.com>

<https://thecolorsofmotion.com/faq>

<https://pillow.readthedocs.io/en/4.0.x/handbook/overview.html>

<https://github.com/atduskgreg/opencv-processing>

**What are a list of animated series to try?**

**Figure out how to use AZW and host the website online?**

**Movie Combos to Try**

2019 Animated movies

Miazaki Films