Filmline

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0.0.0.1

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GitHub Repository

Overview

Participants

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GitHub Repository - https://github.com/chanchalkariwala/dataviscourse-pr-filmline

Background and Motivation

We started brainstorming about various project ideas and soon realized that every time we came close to finding an idea interesting, we couldn't gather appropriate data for it. For example, our first idea was based on analysing how a country's tourism may be affected by aspects like passport strength - visa requirements, crime against tourists, GDP spent on tourism. The idea stemmed from Passport Index.

Post this, we changed tactics and started looking for datasets that we found interesting. This led us to a ton of websites that provide data for a plethora of topics and we narrowed down to two topics, the one we have currently picked and another - a survey of young people ranking a variety of topics from 1-5, ranging from music genres to fear of spiders, alcohol addiction etc.

We decided to proceed with the movie database since it gives us plenty of scope to visualize data in various ways, and to draw relationships and contrast between a lot of facets of the movie industry.

Questions

We plan on visualizing the following data:

1. Genre, language and overall popularity
2. Comparisons between:
    a. Popular genre and year (To see if there's a trend to popular genres)
    b. Language and popularity
    c. Proportion of movies that fall under each genre
    d. Production companies and revenue
    e. Budget and revenue
    f. Countries that produce the most number/most popular movies
3. Overlapping genres

There are many more comparisons and interesting relationships that can be drawn from the dataset.

Data source and Processing

We retrieved our data from Kaggle.

Links: https://www.kaggle.com/tmdb/tmdb-movie-metadata

Currently, our scope is limited to the data set we obtained from Kaggle. However, if time permits, we want to add additional datasets and API calls.

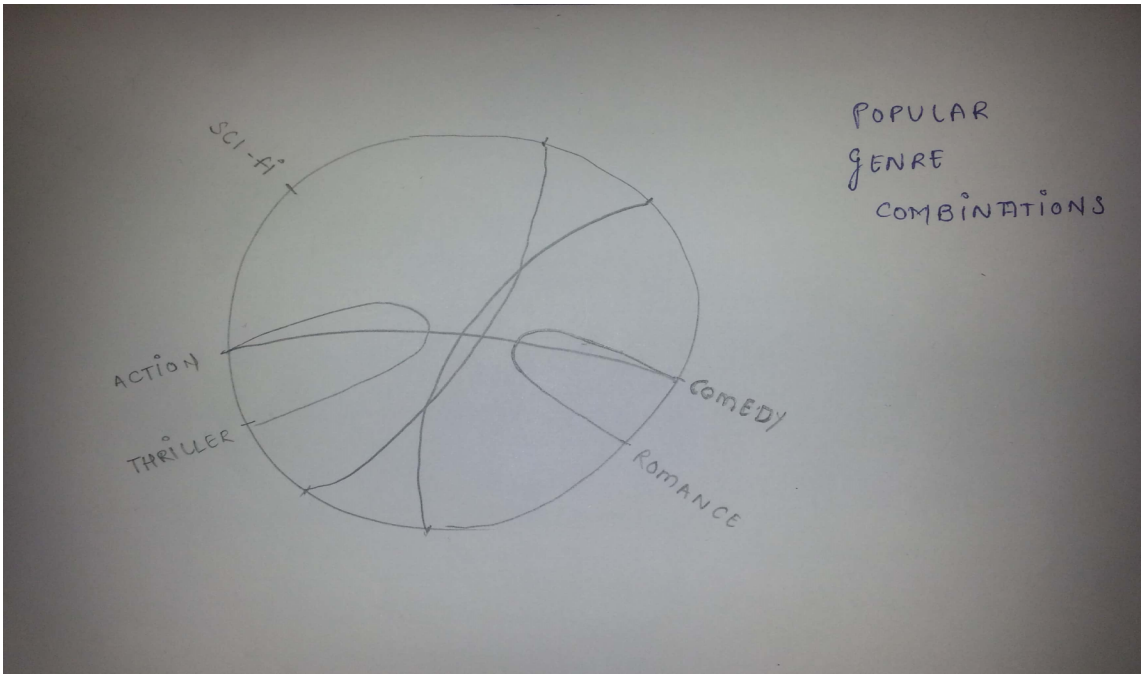
https://www.kaggle.com/theacademy/academy-awards

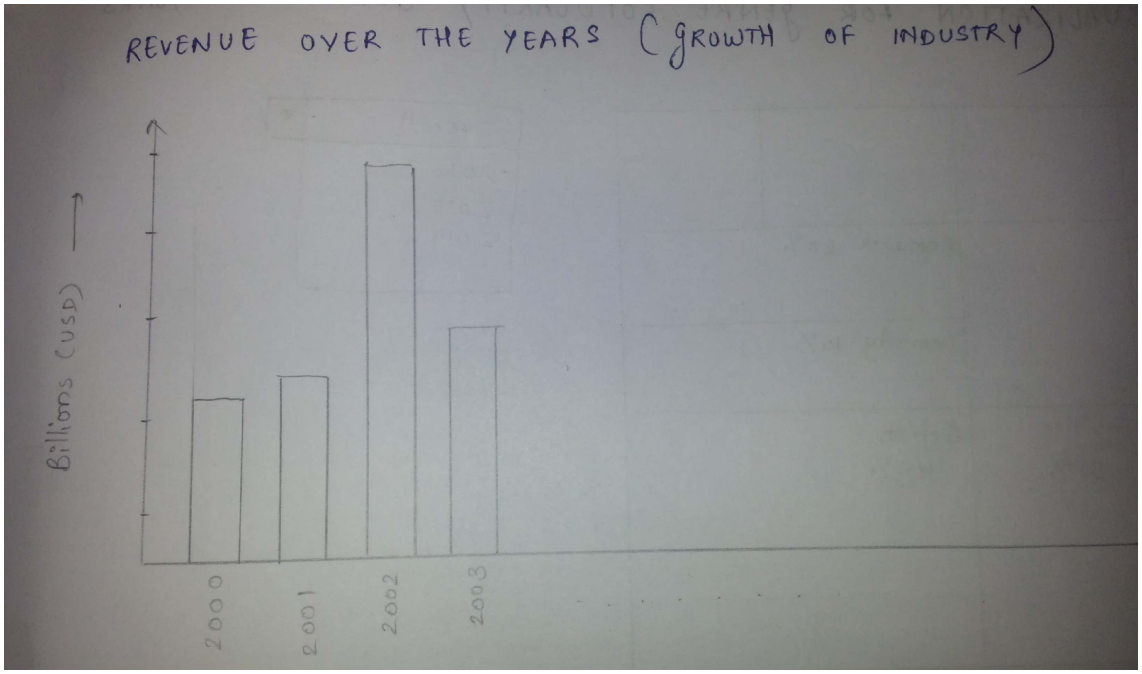
https://www.kaggle.com/rounakbanik/the-movies-dataset

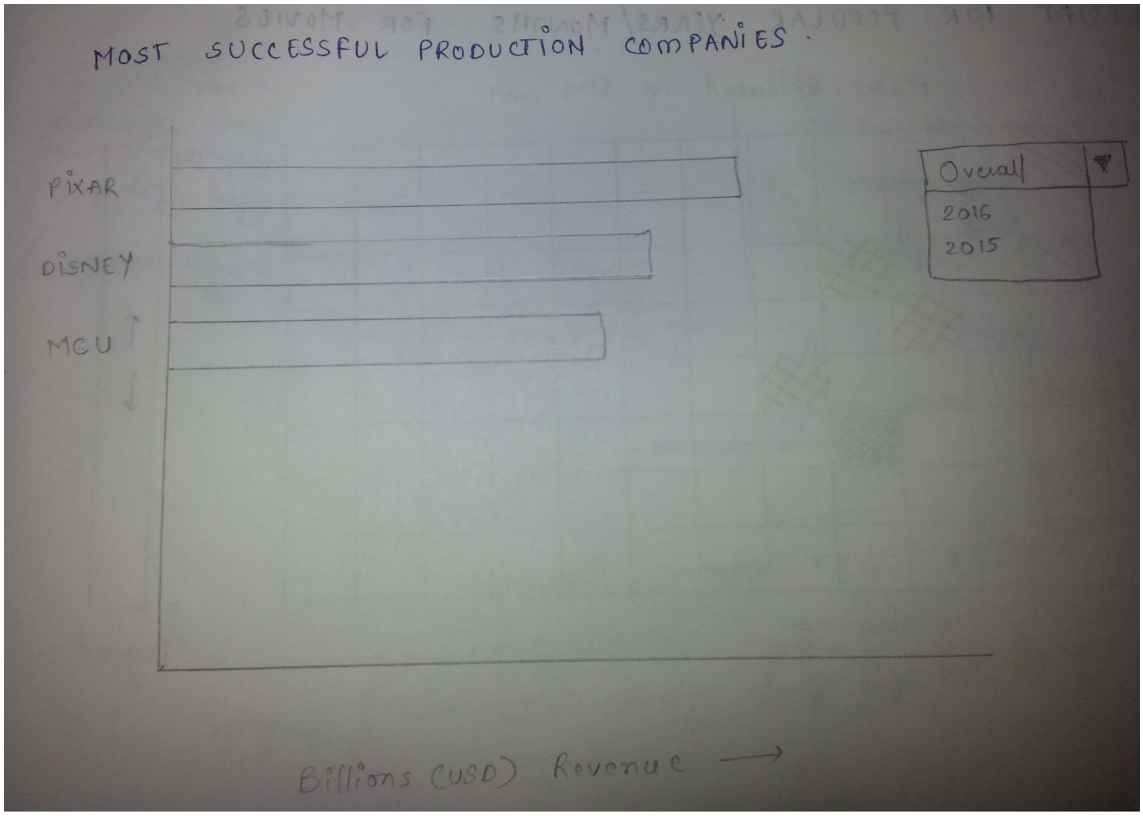
The overall dataset is too large, primarily because of the vast number of rows. Each row contains a lot of information, most of which will not be used in visualizations. So a considerable amount of data munging will be required to combine the datasets, remove unnecessary columns and also split (if it comes to that) the file into parts, containing data required for each visualization. We might use javascript or python to process the data.

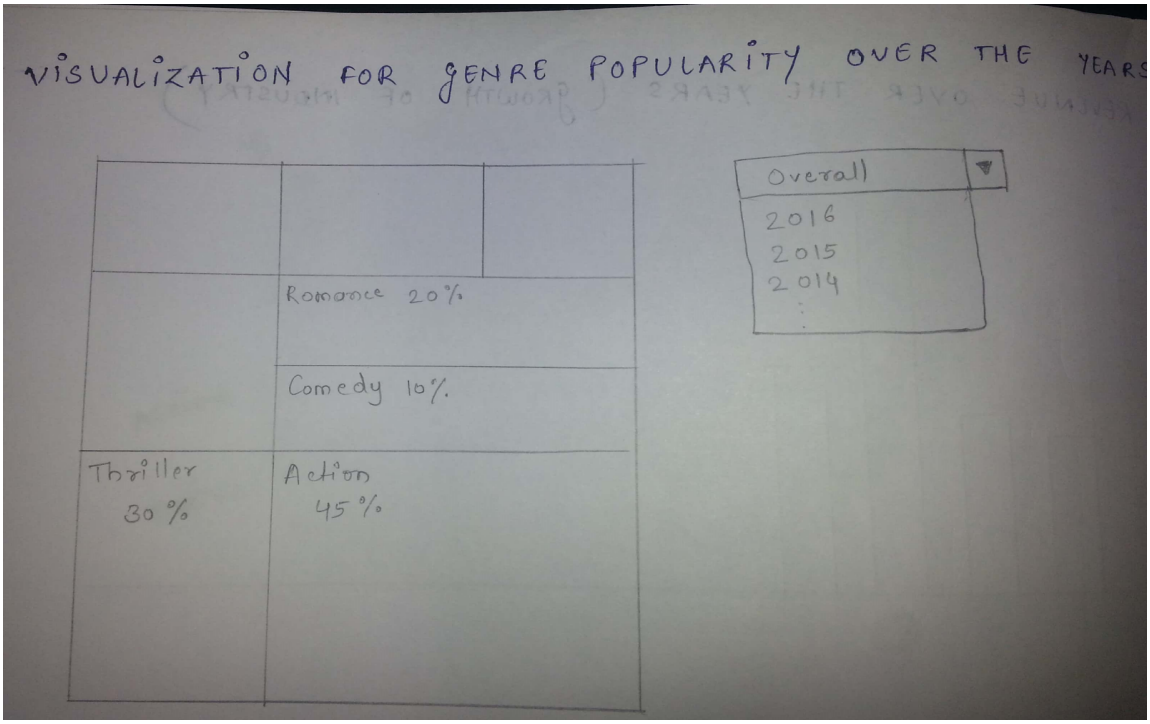
Visualization Design

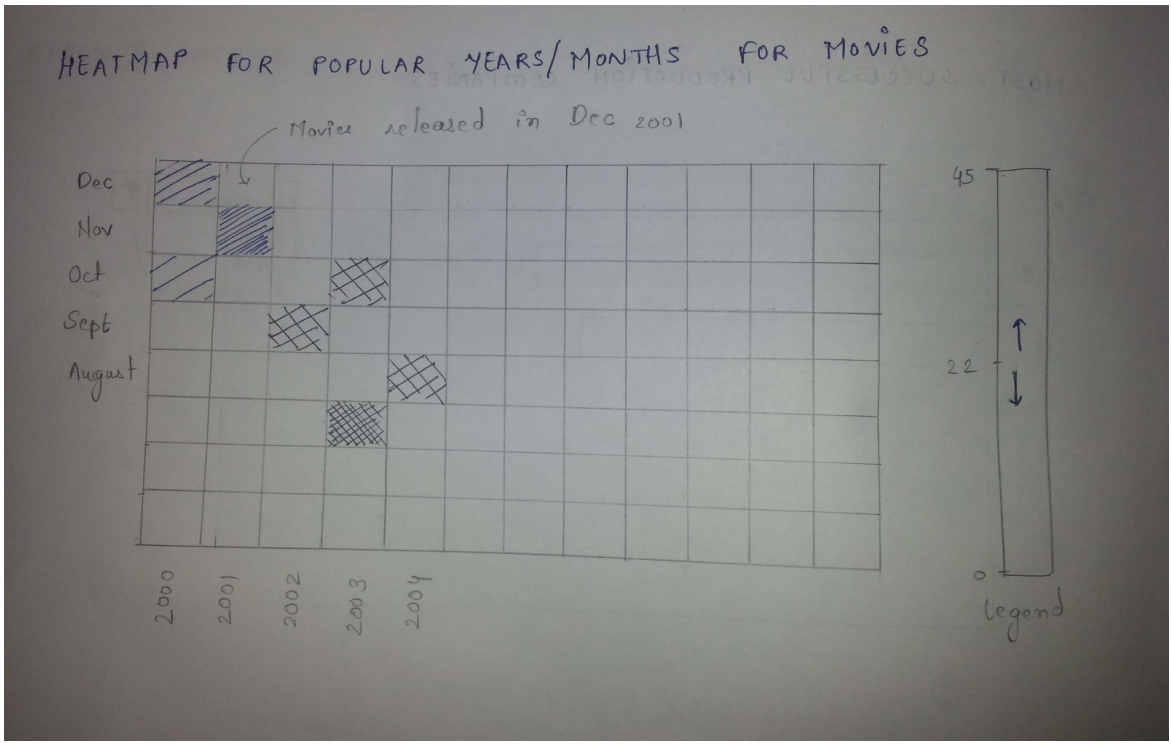
We have thought about using barcharts, chord diagrams, scatter plots, venn diagrams and line charts to visualize the relationships we have drawn from the data so far. We plan to implement a combination of some of them to give it a more unique touch.


POPULAR
GENRE
COMBINATIONS
SCI-FI
ACTION
THRILLER
COMEDY
ROMANCE


REVENUE OVER THE YEARS (GROWTH OF INDUSTRY)
Billions (USD)
2000
2001
2002
2003


MOST SUCCESSFUL PRODUCTION COMPANIES
PIXAR
DISNEY
MCU
Overall
2016
2015
Billions (USD) Revenue


VISUALIZATION FOR GENRE POPULARITY OVER THE YEARS
Romance 20%
Comedy 10%
Thriller 30%
Action 45%
Overall
2016
2015
2014



Project Features

I. Must have:

The primary objectives listed earlier are a must, as the objective of the project is to tell a story about the movie industry.

II. Optional:

We also wish to extend the project to include more data on actors, their relationship with each other (as in the movies they've shared, etc), the number of awards they've won and so on.

Project Schedule

Week 1

1. Functioning GitHub website
2. Trace out the specifications of the planned visualizations.
3. Process the data required for most of the above visualizations.

Week 2

1. Complete pending data processing.
2. Have at least half of the basic form of visualizations up and ready.

Week 3

1. Enhance existing visualizations and add interactions and animations.

Week 4

1. Add remaining visualization and complete their functionality.

Week 5

1. Wrap up work, and if time permits, enhance website with additional features and information on the project.

Progress

Week 1

1. We received peer feedback on our Project Proposal
2. Functioning GitHub website:

We setup github pages and hosted an empty website as a trial step.

3. Trace out the specifications of the planned visualizations:

We incorporated the feedback we received to give new direction to our visualizations. We decided to visualize the role the genre of the movie played in it's success.

4. Process the data required for most of the above visualizations.

Our data files are of the size of 200-300 MB. So we chose to split the data set into separate files, containing data required for each visualization. This seems like the most appropriate choice at the moment to avoid network delay.

Week 2

1. Complete pending data processing.

Data Processing for the originally planned designs is complete. However we foresee more processing in order to implement the suggestions we received during the peer feedback.

2. Have at least half of the basic form of visualizations up and ready.

We had selected 4 visualizations to work on for the project milestone. We got two of them up and running, partially. Most of our time was spent in understanding Git and GitHub

Pages. A significant challenge was to understand branch and merge process. We are glad to see that our efforts paid off, and the current state of project can be seen at the repository's GitHub pages branch - URL