Recommendations on TV Shows + Movies

ECE 143 Final Project

Group 14

By the end of our presentation, you should be able to:

1) Make an **informed decision on which platforms to subscribe to**
2) Find 10 movies to watch based on:
    a) A movie you love or
    b) By taking a quiz

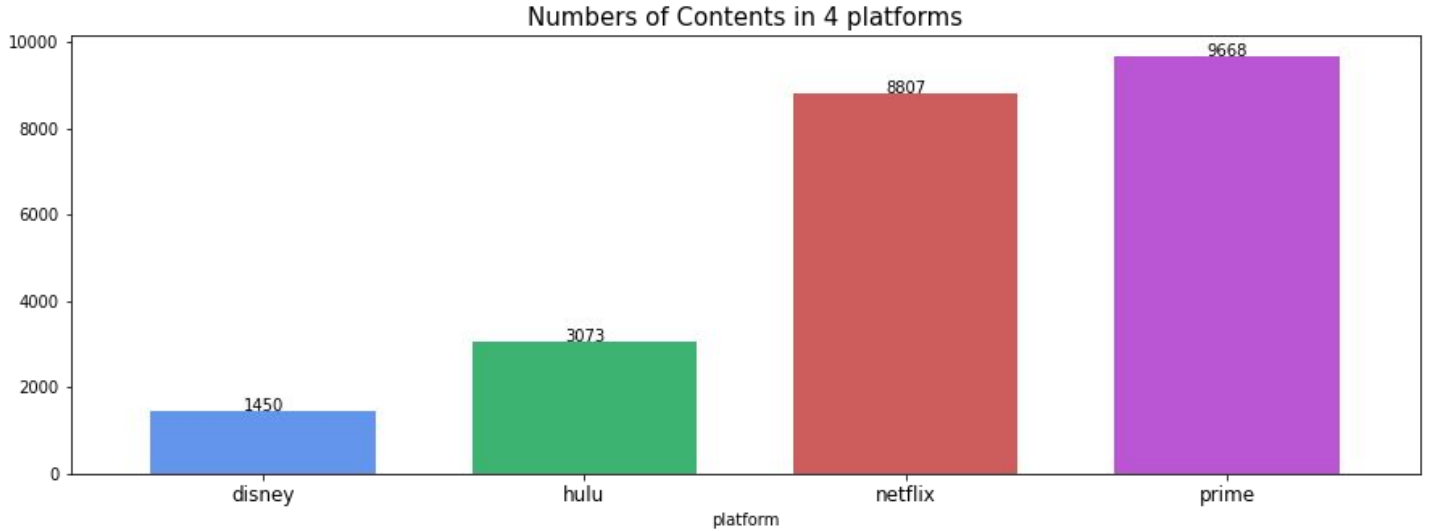
THE DATASET

- Kaggle dataset by ShivamB that frequently updates with latest content from Netflix, Amazon Prime Video, Disney+, Hulu
    - Last updated 2 months ago
- Cast and director info is null for >50% of all data so we exclude this from the following analysis
- Hulu and Prime do not have country level information so we eliminate them from future analysis as well
- Hulu data has high % of nulls for many of the columns, so it is only used in title and type (movie vs TV show) analysis and the recommender system
- Removed all rows that have null value for title, show, release_year, country, and rating

COMPARISON BETWEEN PLATFORMS

1. Which platform has the most content?

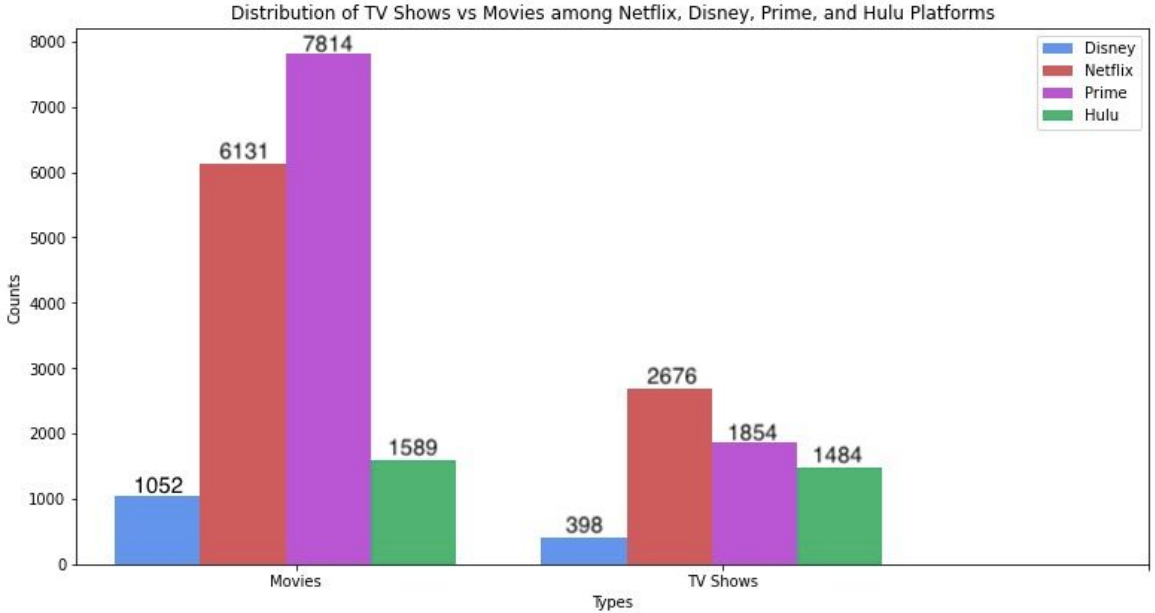
Prime has the most titles and Disney+ has the least



If you are unsure of what to watch: go to Prime or Netflix

2. Which platform has the most movies vs TV shows?

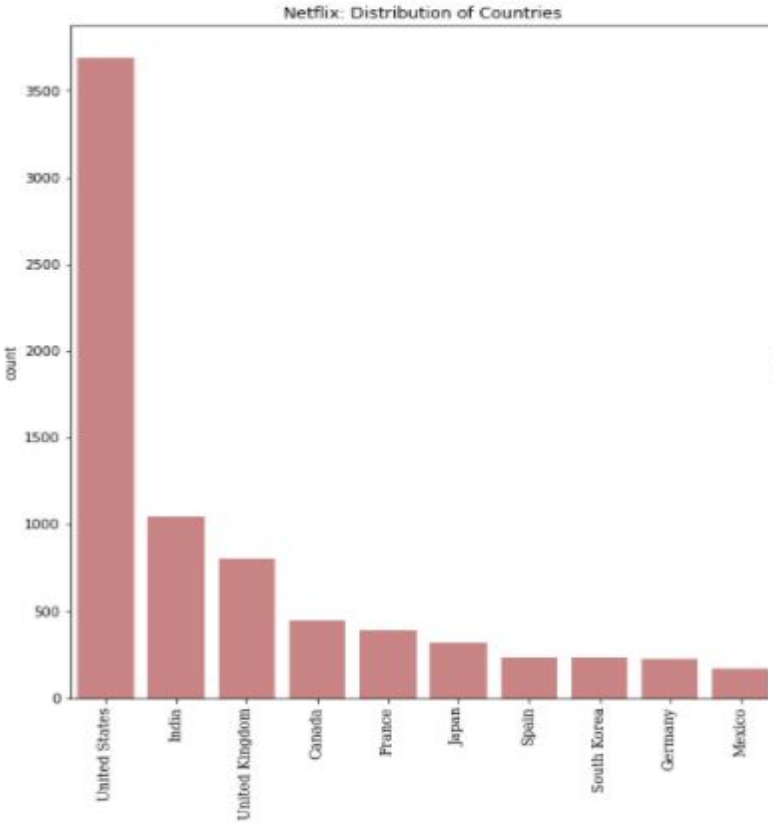
Prime has the most Movies, and Netflix has the most TV Shows

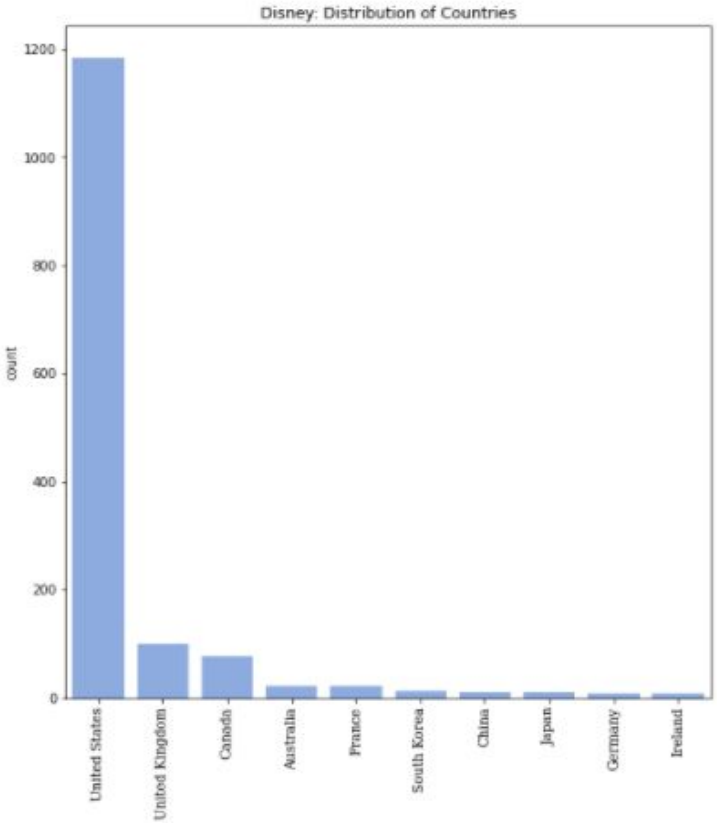


All platforms have more movies than TV shows listed

3. Which platform has the most international movie options?

Netflix has the most content diversity



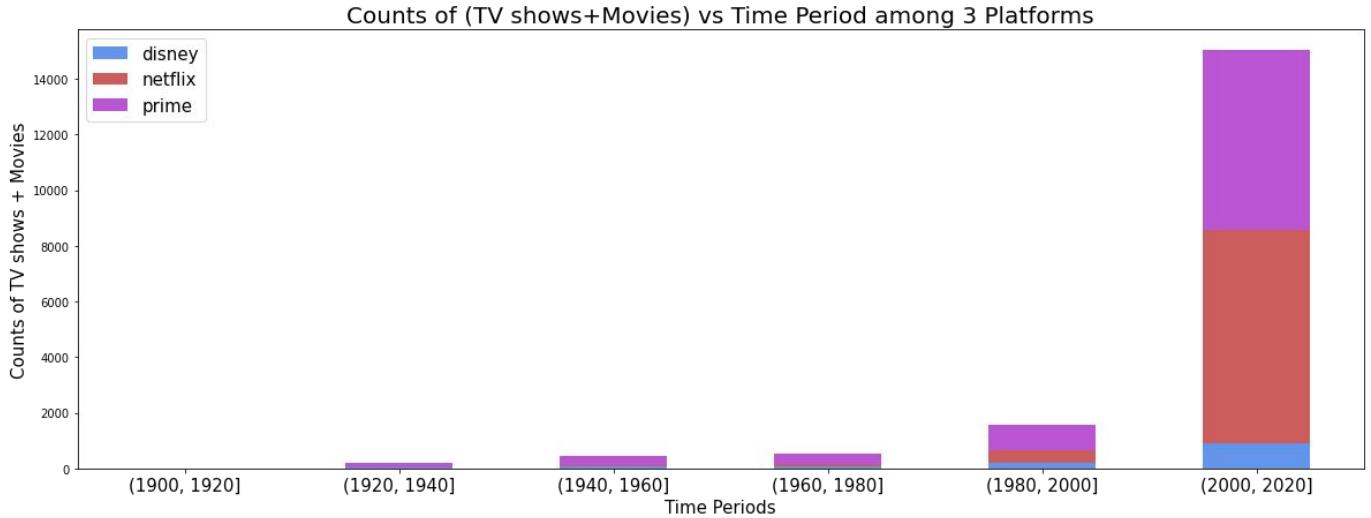


The US is the top content producer in both platforms. The second most content producing country is India for Netflix and UK for Disney+

Note: No country information for Prime or Hulu was present

4. Which platform has the most recently released content?

Netflix has the most recently released content while Prime has the most pre 2000s content

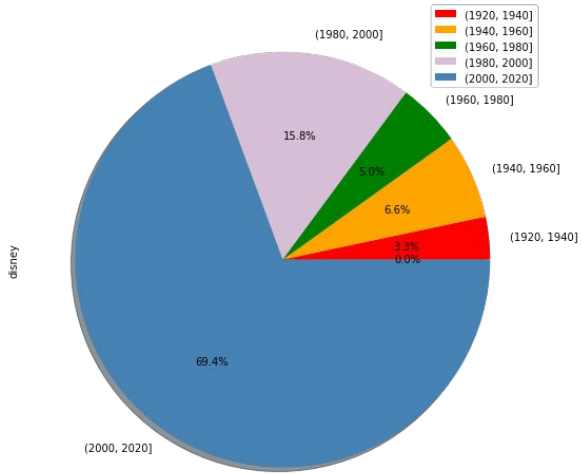


platform	disney	netflix	prime
release_year			
(1900, 1920]	0	0	3
(1920, 1940]	44	1	172
(1940, 1960]	87	30	324
(1960, 1980]	66	102	346
(1980, 2000]	209	429	932
(2000, 2020]	919	7653	6449

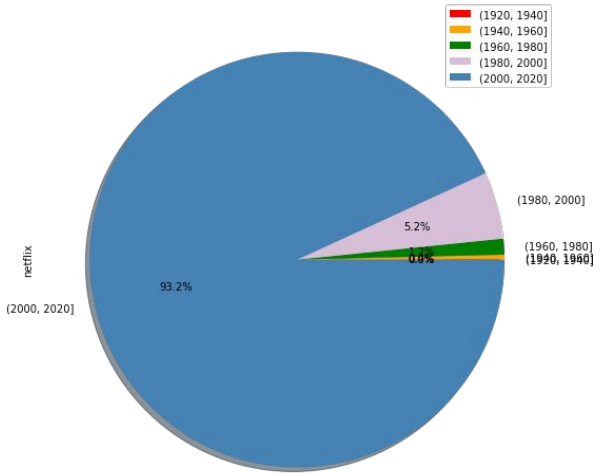
Continue

Distribution of Contents in different time periods (%)

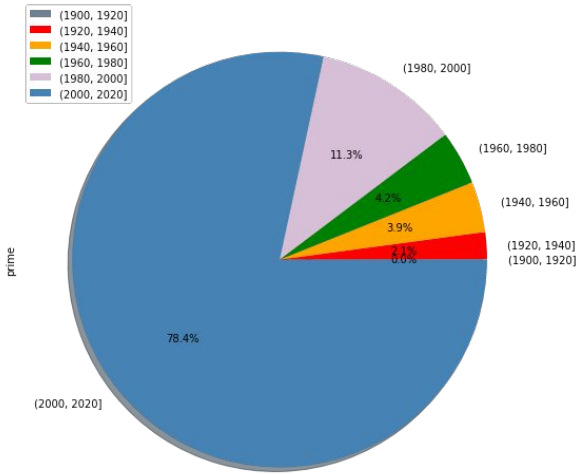
Disney



Netflix

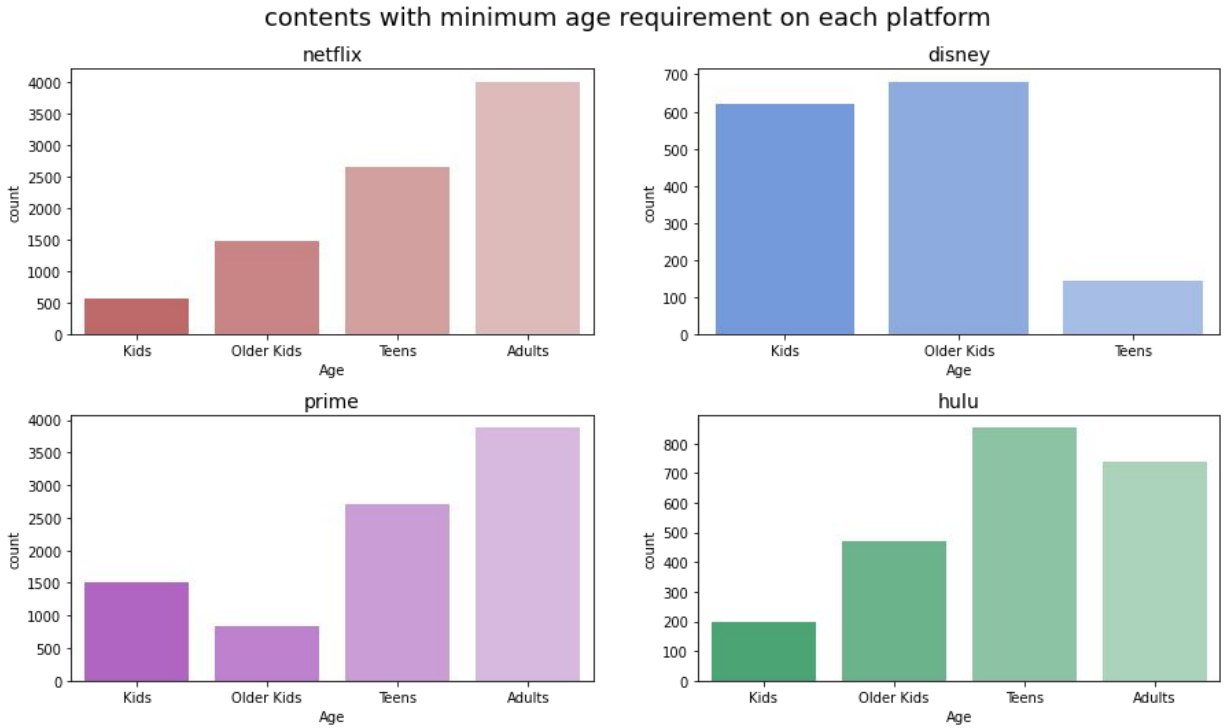


Prime



5. What age groups are the platforms geared towards?

Netflix is geared for adults, Disney+ is geared towards kids, and Hulu towards teens

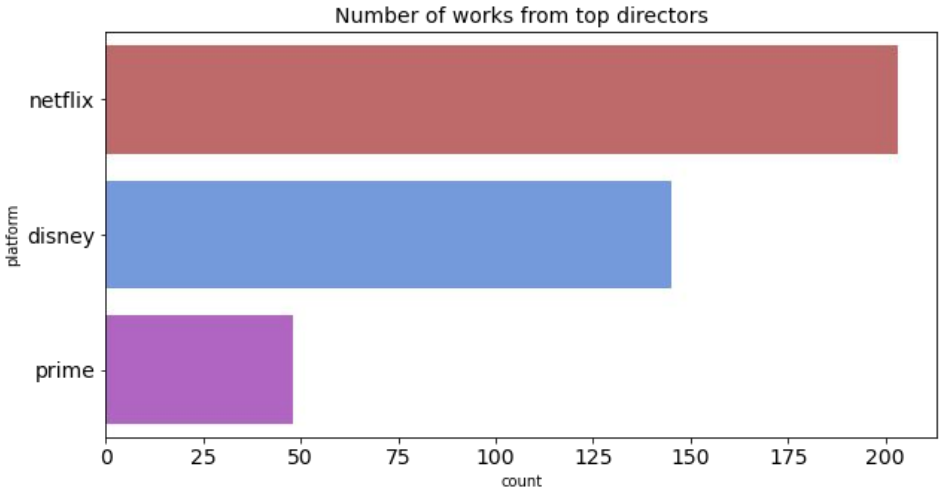


Note: unrated contents are excluded

6. Which platform has most movies from world famous directors？

Reference:Top 100 Grossing Director at the Worldwide Box Office

Netflix has the most movies by famous directors

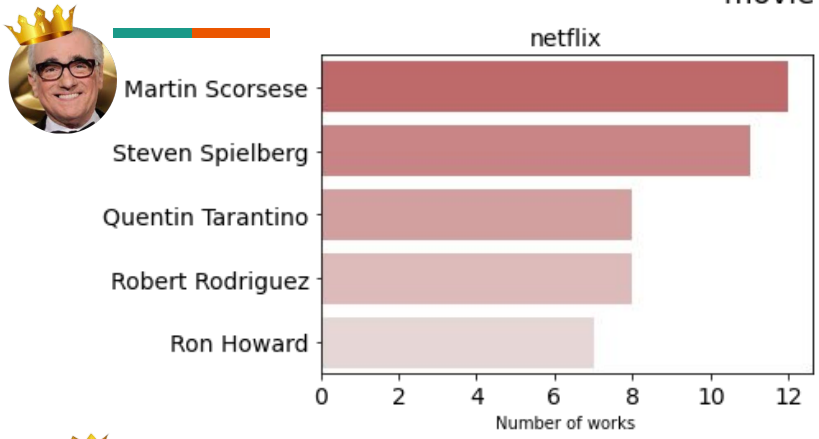


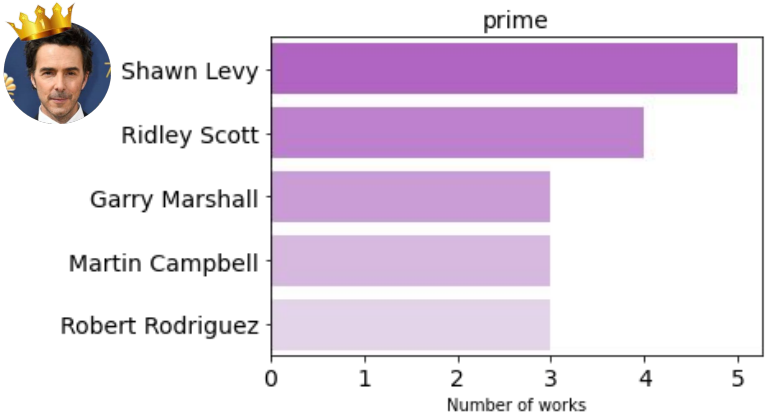
Top 100 Grossing Director at the Worldwide Box Office

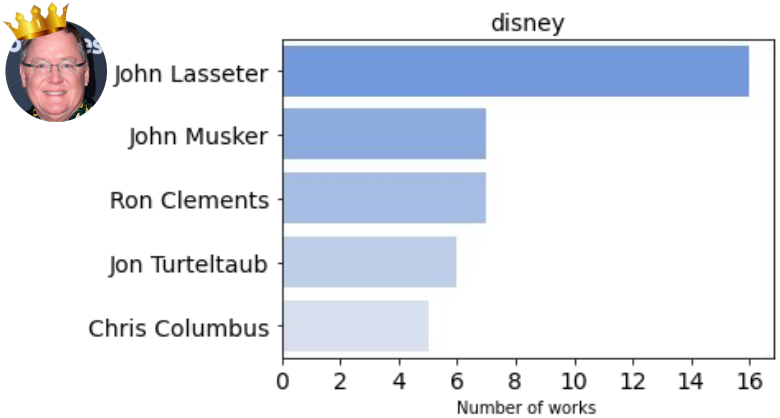
Rank	Name	Worldwide Box Office	Movies	Average
1	Steven Spielberg	$10,548,616,905	36	$293,017,136
2	Anthony Russo	$6,839,063,507	7	$977,009,072
3	Joe Russo	$6,839,063,507	8	$854,882,938
4	Peter Jackson	$6,535,062,604	14	$466,790,186
5	Michael Bay	$6,443,668,115	16	$402,729,257
6	James Cameron	$6,291,648,202	14	$449,403,443
7	David Yates	$5,972,553,612	8	$746,569,202
8	Christopher Nolan	$4,960,176,492	13	$381,552,038
9	J.J. Abrams	$4,649,045,992	6	$774,840,999
10	Tim Burton	$4,413,226,120	19	$232,275,059
11	Robert Zemeckis	$4,356,937,585	22	$198,042,618
12	Jon Favreau	$4,323,508,744	9	$480,389,860
13	Ron Howard	$4,300,742,744	33	$130,325,538
14	Ridley Scott	$4,254,265,326	31	$137,234,365
15	Chris Columbus	$4,080,458,074	16	$255,028,630
16	Roland Emmerich	$3,956,696,574	15	$263,779,772
17	Bryan Singer	$3,716,675,446	10	$371,667,545
18	Pierre Coffin	$3,710,909,442	4	$927,727,361
19	James Wan	$3,705,134,792	10	$370,513,479

If you want to watch masterpieces by world famous directors, go to Netflix and Disney!

Movie directors* with most content on each platform







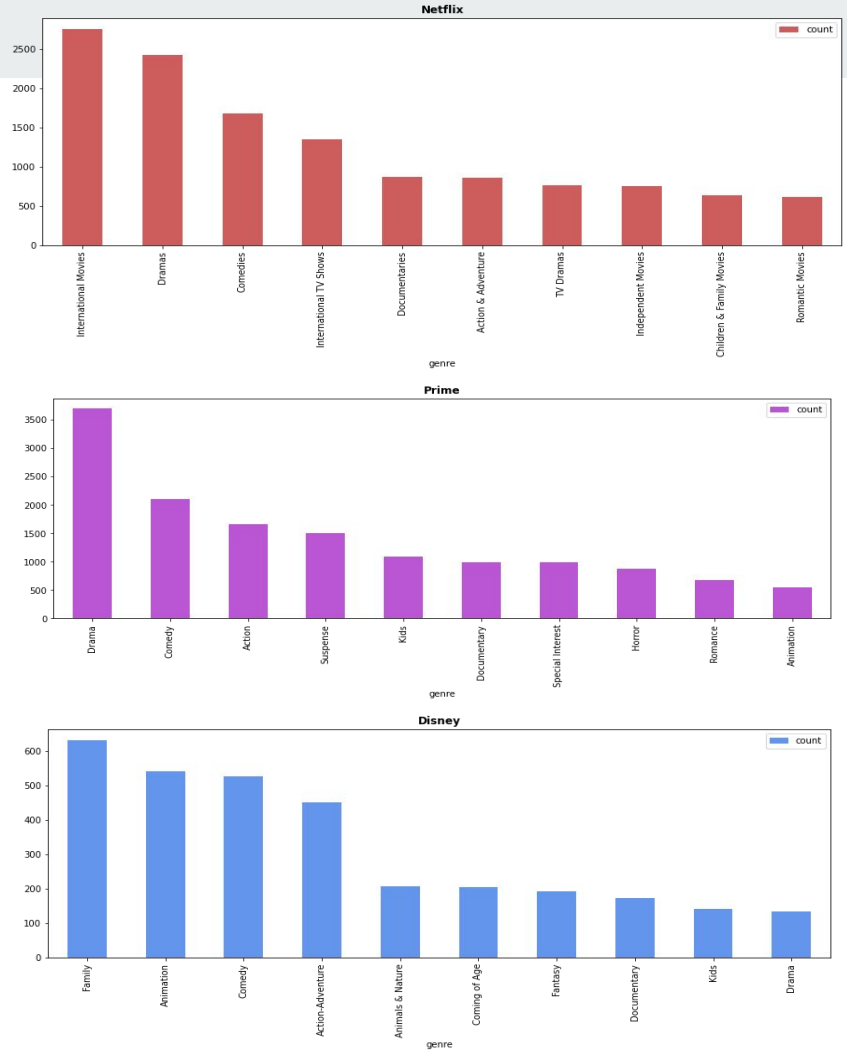
If you want to see their work, go to the corresponding platform!

7. What are the TOP 10 favorite Genres in each platform?

Multiple Platforms Comparison in Bar Chart

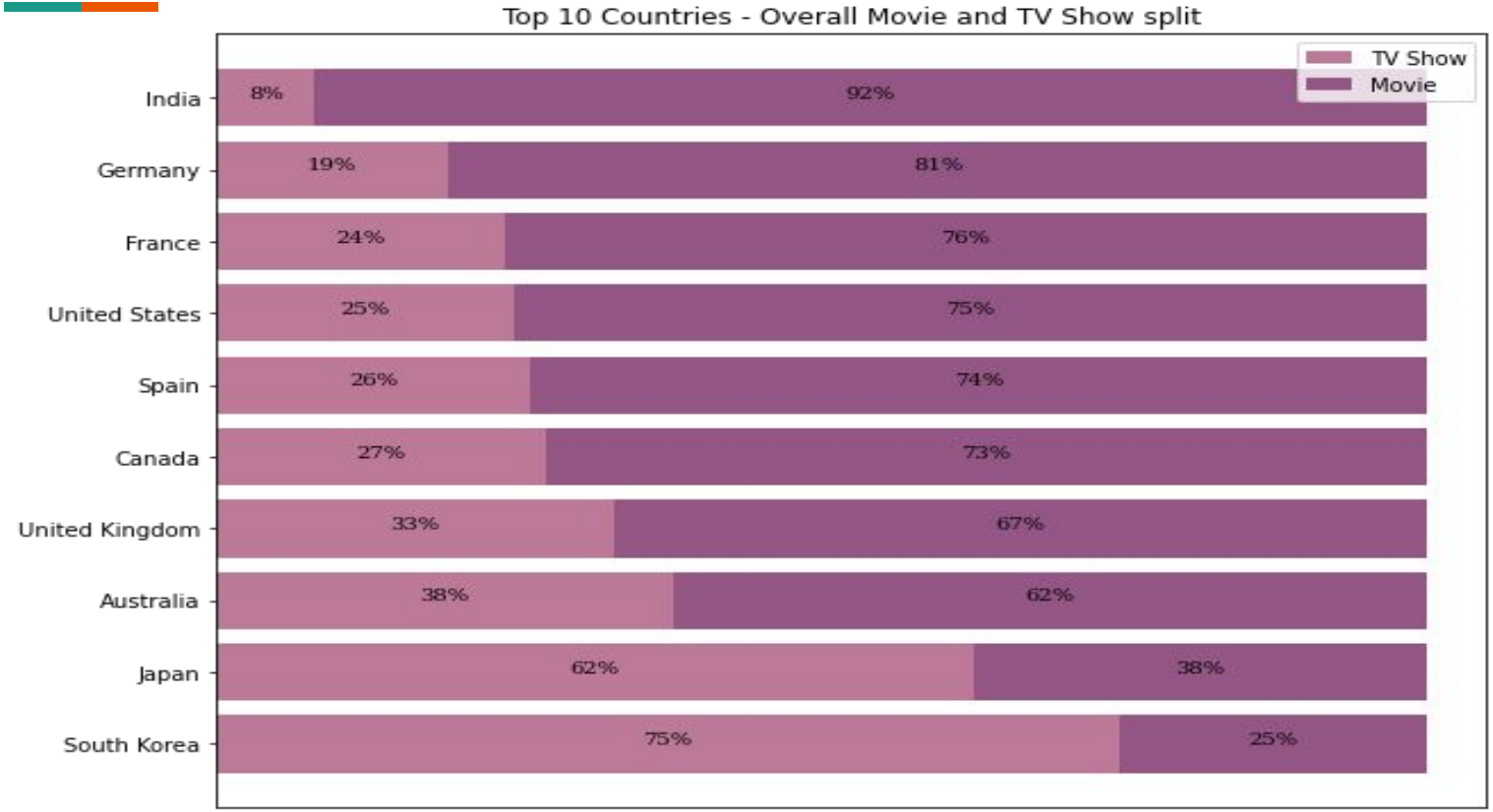
What else we can learn from the comparisons among genres?

- Target audiences?
  a. Disney: kids + families
  b. Netflix: multi-countries
  c. Prime: preference for story-like contents.

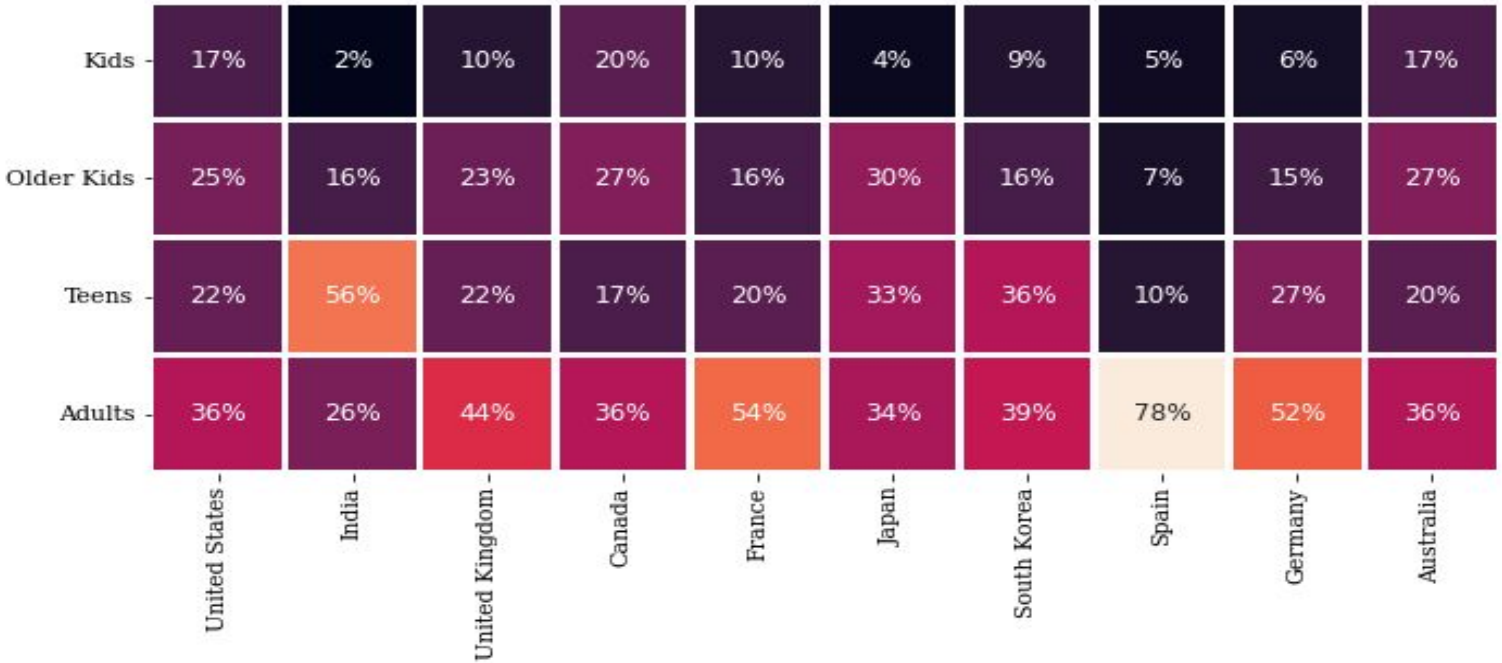


SOME INTERESTING COUNTRY RELATED OBSERVATIONS

South Korea has more TV shows than movies and India has more movies than TV shows

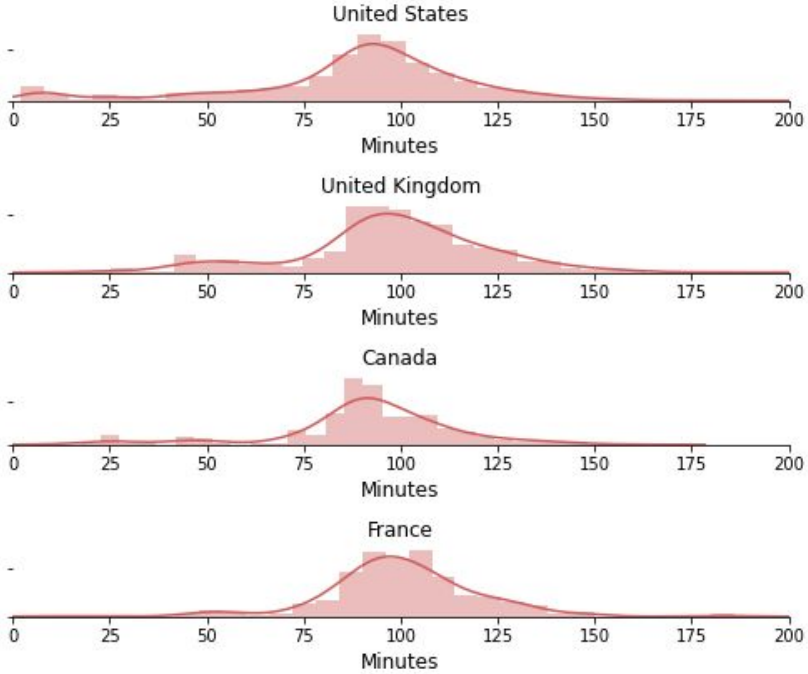


Popularity by Age-Group in top 10 Countries

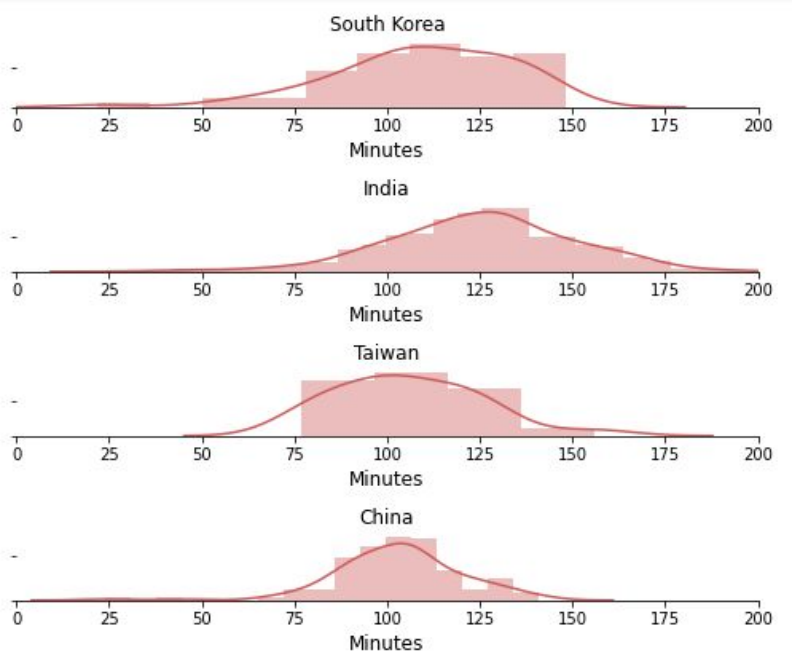


Movie Duration : Country-Wise Analysis

North America / Europe



Asia



RECOMMENDER SYSTEM DEMO

Recommender System
RECOMMENDER SYSTEM
What's Your Name?
Veena
Hi Veena!
Choose Your Favourite Title
"Mixed Up"
OK

Thank you.