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| Checkpoint I | Checkpoint I: Project Proposal | |
| Group: | 30 |
| Date: | 2024/09/17 |
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# Problem Domain

We are going to study the growth of Netflix over the years. This might include the movies produced by Netflix or the number of TV show accessible in the platform. We find that this subject may be very interesting to understand the how our way of consuming content, movies or TV show, has change over time. Since Netflix is one of the main players of this game and we wish to understand how.

# Task Abstraction

Our project aims to dive into various aspects of Netflix's evolution over the years, focusing on both the platform's user base and its content catalog. Specifically, we will explore the following key questions:

## Example Questions

1. **Top Performing Content**: *What are the top 10 movies or TV shows of all time on Netflix, and in which years were they released?*
2. **Netflix Original Productions**: *How many Netflix-produced movies and TV shows are released each year, and what trends are evident in their production volume and reception?*
3. **Release Year vs. Rating Category**: *Is there a relationship between the release year of content and its rating category on Netflix? Are newer productions skewed towards certain ratings?*
4. **Evolution of Average Content Ratings**: *How has the average rating (both user ratings and content ratings like PG, R, etc.) of content evolved year by year on Netflix?*
5. **Proportion of Movies vs. TV Shows**: *How has the proportion of movies versus TV shows added to Netflix changed from 2008 to 2021? What factors might be influencing these changes?*
6. **Country Contributions and Predominant Genres**: *Which countries contribute the most content to Netflix, and what are the predominant genres produced by these countries? How does this reflect global content trends and Netflix's localization strategies?*
7. **Top Directors and Their Genres**: *Who are the top directors with the most content on Netflix, and what genres do they predominantly work in? How have these directors influenced Netflix's content library?*
8. **Trends in Content Addition Over Time**: *What are the trends in the number of movies and TV shows added to Netflix over time? Are there periods of significant increase or decrease, and what might be the reasons behind them?*
9. **Ratio of Movies to TV Shows Over Time**: *How does the ratio of movies to TV shows change over time? Does this ratio correlate with shifts in viewer preferences or strategic decisions by Netflix?*
10. **Evolution of Country Contributions**: *Which countries have contributed the most content to Netflix over the years, and how has this trend changed? What does this indicate about Netflix's global expansion and content acquisition strategies?*

# Data

We decided to choose [*“Latest Netflix data with 26+ joined attributes”*](https://www.kaggle.com/datasets/ashishgup/netflix-rotten-tomatoes-metacritic-imdb) available on Kaggle, it currently provides lots of data and allows us to answer mainly all of our questions.

## Initial Dataset

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## Selected/Derived Data

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## Data Processing

To clean it we used pandas and removed the following columns *“[Tags', 'Runtime', 'View Rating', 'Production House', 'Netflix Link', 'IMDb Link', 'Summary', 'IMDb Votes', 'Poster', 'TMDb Trailer', 'Trailer Site', 'Hidden Gem Score']”,* those appeared to be not necessary as of now. We might delete few more columns but we are still thinking of visualization ideas so for example the Poster of the movie might be useful if we plan on doing a line chart with a onMouseClick event where we could display some movie statistics.

We are also facing an issue using blank values

## Data Abstraction

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## Mapping (Data sample/Questions)

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