Movie Ratings & Awards Analysis

Exploring Patterns Behind Movie and Actor Success

Executive Summary :

This project investigates the key factors driving a movie's success - both at the box office and during award seasons. By combining data from Rotten Tomatoes, the Oscars, and Kaggle movie datasets, I analyzed trends related to actor performance, director influence, genre popularity, and the correlation between critic scores and audience reception.

Using Python for data analysis and web scraping, I uncovered actionable insights that can guide production and marketing decisions for studios, investors, and streaming platforms.

Objective:

To identify the factors that influence a movie's commercial and critical success - with a focus on:

- Award wins
- Audience and critic scores
- Box office performance

Datasets Used

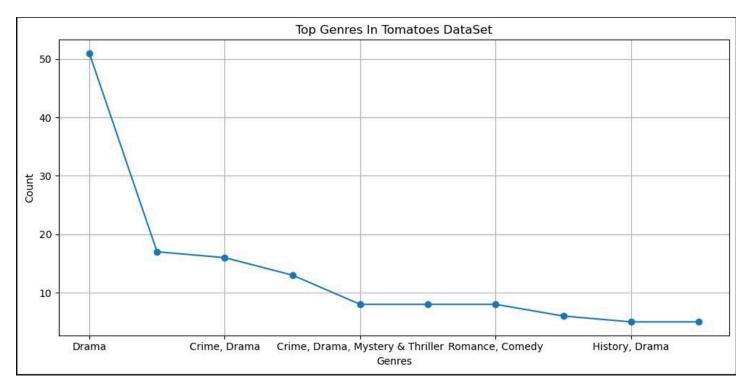
- 1. Rotten Tomatoes Dataset scraped manually From:
 https://editorial.rottentomatoes.com/guide/best-movies-of-all-time/
- 2. Oscars Dataset scraped manually From : https://www.britannica.com/art/Academy-Award-for-best-picture
- 3. IMDb And Box Office Dataset downloaded from Kaggle
- 4. Golden Globes Data Set downloaded from Kaggle

✓ Data Cleaning and Preprocessing:

- Fixed incorrect data types (e.g., box office, budget, release date).
- Filled missing Release Date values using matched movie titles.
- Removed duplicates
- Handling Missing Values
- Invalid or Incorrect Value
- Mixed Data Across Columns Due to scraping inconsistencies

Key Insights:

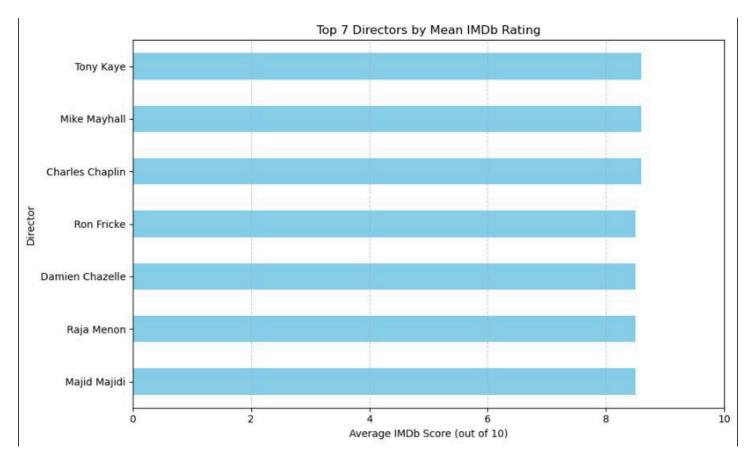
🐾 Insight 1: Most Common Genres in the Rotten Tomatoes Dataset



Conclusion:¶

The most frequently appearing genres in the dataset reflect popular or widely reviewed movie categories, offering insight into the dominant themes or industry focus over time.

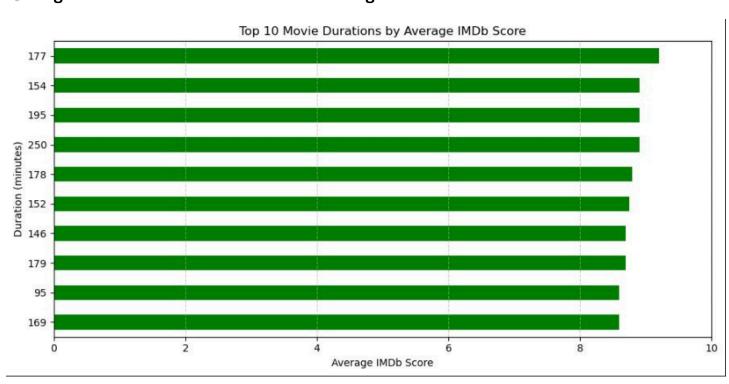
Insight 2: Directors Behind the Highest-Rated Movies (IMDb)



Conclusion:¶

Different directors rank highest on Rotten Tomatoes and IMDb, showing that critics and audiences may prefer different styles or films.

№ Insight 3 : Does Movie Duration Affect Ratings?



Movies with durations between 100 and 130 minutes tend to have the highest IMDb scores, while very short or very long movies often receive lower ratings. This suggests that audiences may prefer standard-length films.

SInsight 4: Most Awarded Actresses at the Oscars

Katharine Hepburn	4
Hilary Swank	2
Vivien Leigh	2
Olivia de Havilland	2
Ingrid Bergman	2

Conclusion:

These top 5 actresses have received the most Oscars for Best Actress, highlighting their repeated recognition for outstanding performances.

Final Conclusion:

This analysis provides a comprehensive view of success patterns in the film industry. It shows how movie length, genre, director, and lead actors can impact both critical acclaim and commercial performance.

Studios and content platforms can use these findings to:

- Choose optimal film durations
- Focus on high-performing genres
- Collaborate with award-winning directors and actors

Tools Used

- Python (Pandas, Matplotlib, Seaborn)
- Jupyter Notebook

BeautifulSoup (for web scraping)		