

# Quarantine & Chill

...

An introductory film analysis in the days of COVID-19

# Data

To perform this analysis I utilized data from the following sources:

- IMBD
- TMBD
- Rotten Tomatoes
- Wikipedia/Netflix

# Methodology

- One-way t-test
- Pearson's Correlation
- Mean

# Questions

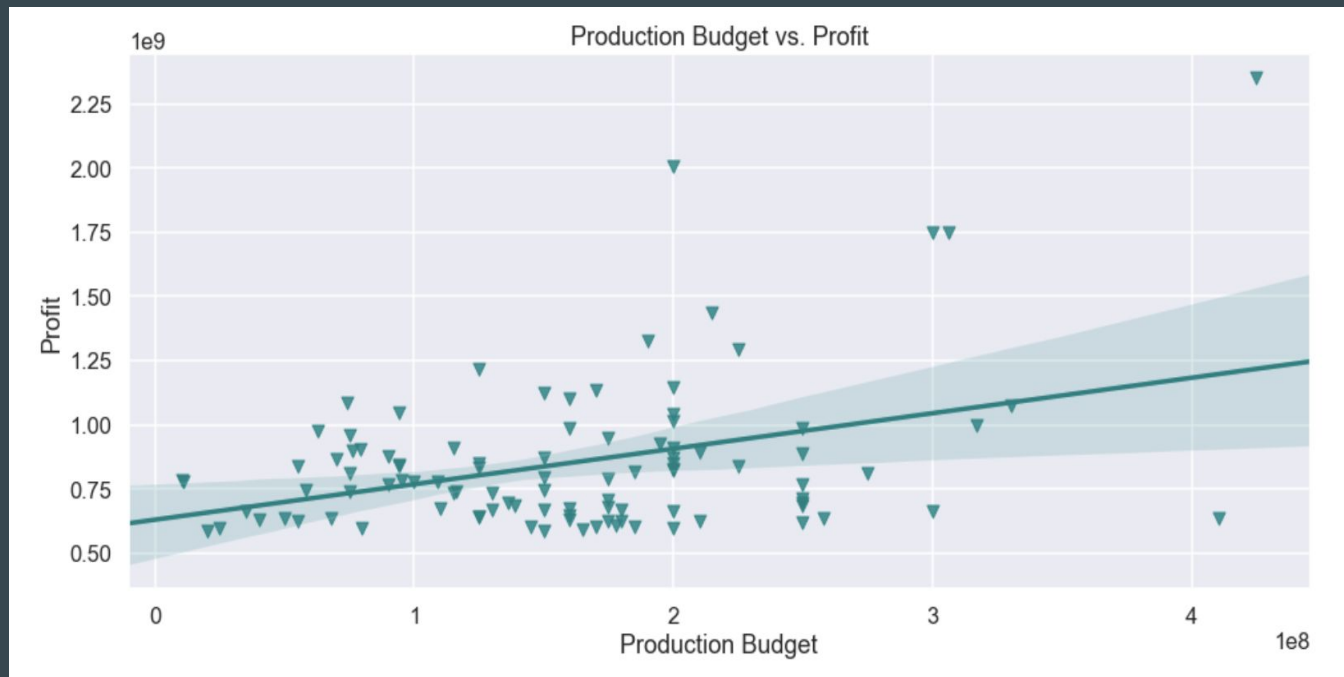
1. What are the top 100 profiting box office films?
2. How do genre, feature length, production budget, and release date affect profit?
3. What information can be gathered about Netflix original films?
4. How do genre, feature length, and release date of Netflix original films compare to the top 100 profiting box office films?

# The Top 100 Profiting Box-Office Films

To give some context to these films, here are the top ten.

1. Avatar
2. Titanic
3. Avengers: Infinity War
4. Star Wars Episode VIII: The Force Awakens
5. Jurassic World
6. Fast & Furious 7
7. The Avengers
8. Black Panther
9. Jurassic World: Fallen Kingdom
10. Frozen

# Production Budget



R-value: 0.38

Mean Profit:  
\$850,396,016

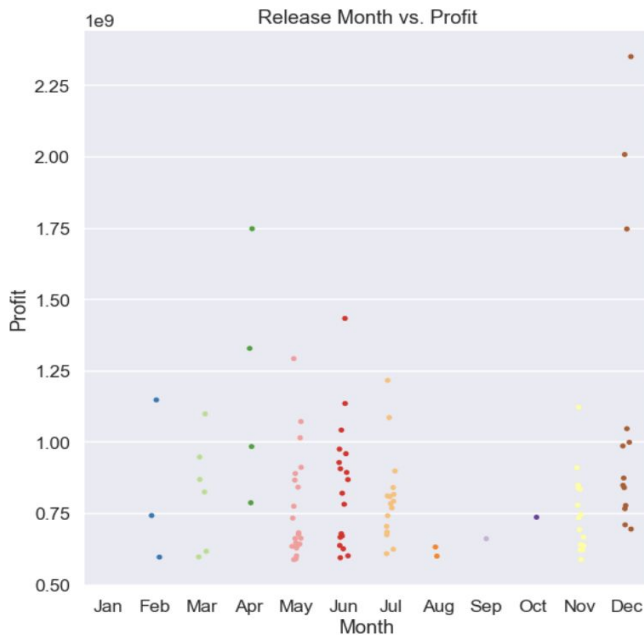
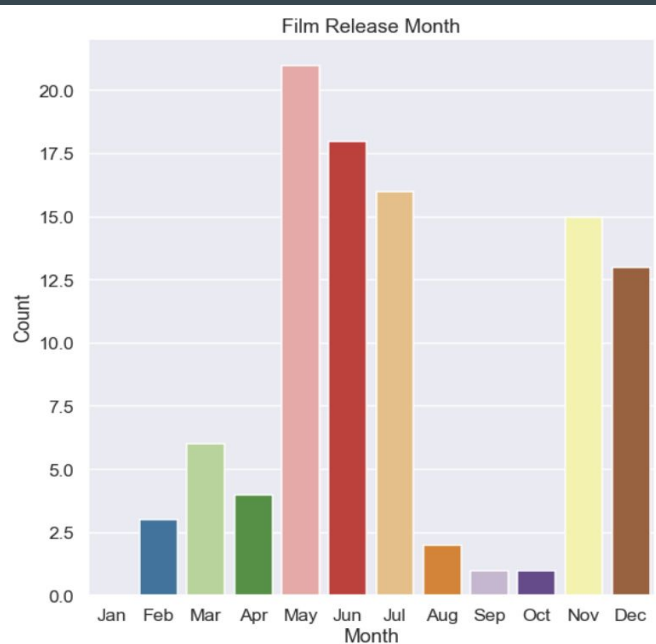
Mean Production Budget:  
\$159,522,000

Mean Worldwide Gross:  
\$1,009,918,016

Smallest Budget in Top  
100: \$10,500,000

**Conclusion:** A higher production budget is correlated with a higher profit.

# Release Date



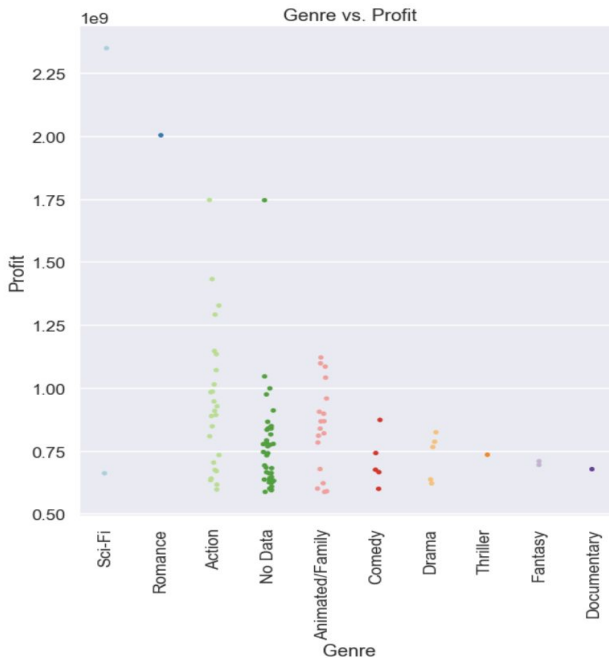
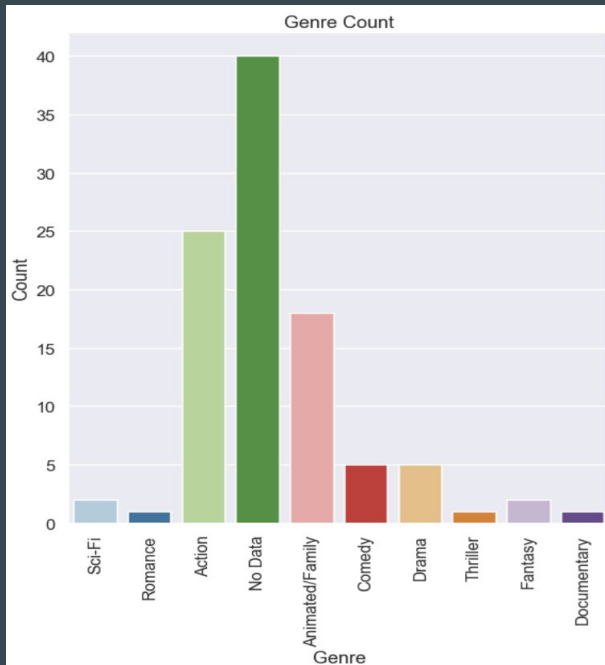
T-test value: 8.94

P value:  $2.23 \times 10^{-6}$

Highest average  
profit per month:  
April, December,  
June

Conclusion: The release date of a film matters.

# Genre



T test value: 6.89

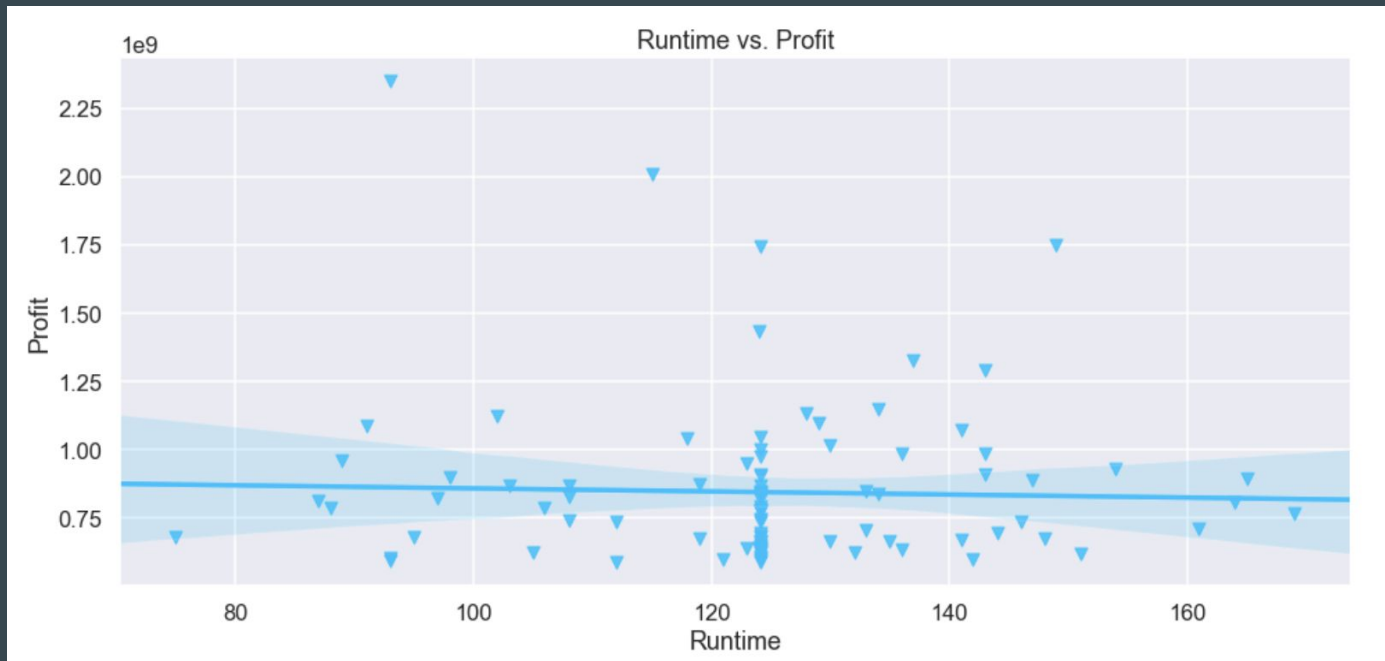
P value:  $7.15 \times 10^{-5}$

Highest average  
profit per genre:  
Romance, Sci Fi,  
Action

Conclusion: The genre of the film matters.



# Runtime

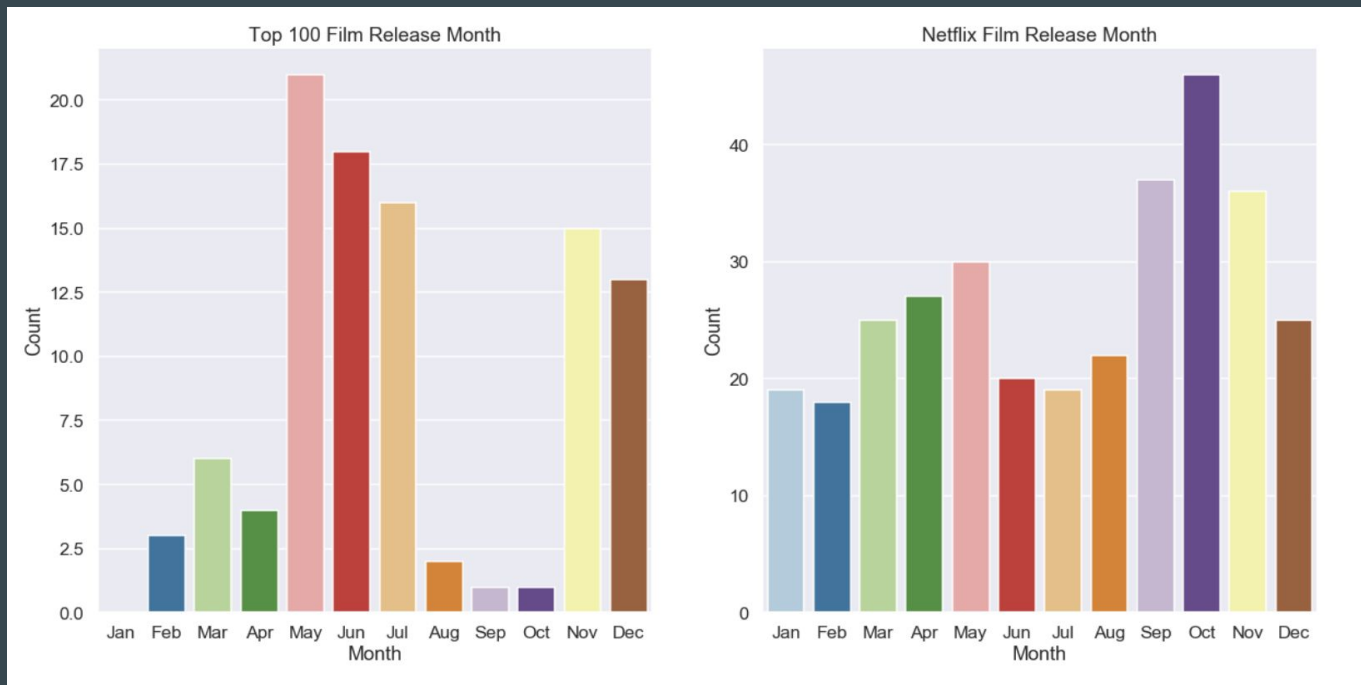


R:-value: -0.03

Mean runtime:  
2 hr 4 min

Conclusion: Runtime isn't highly impactful.

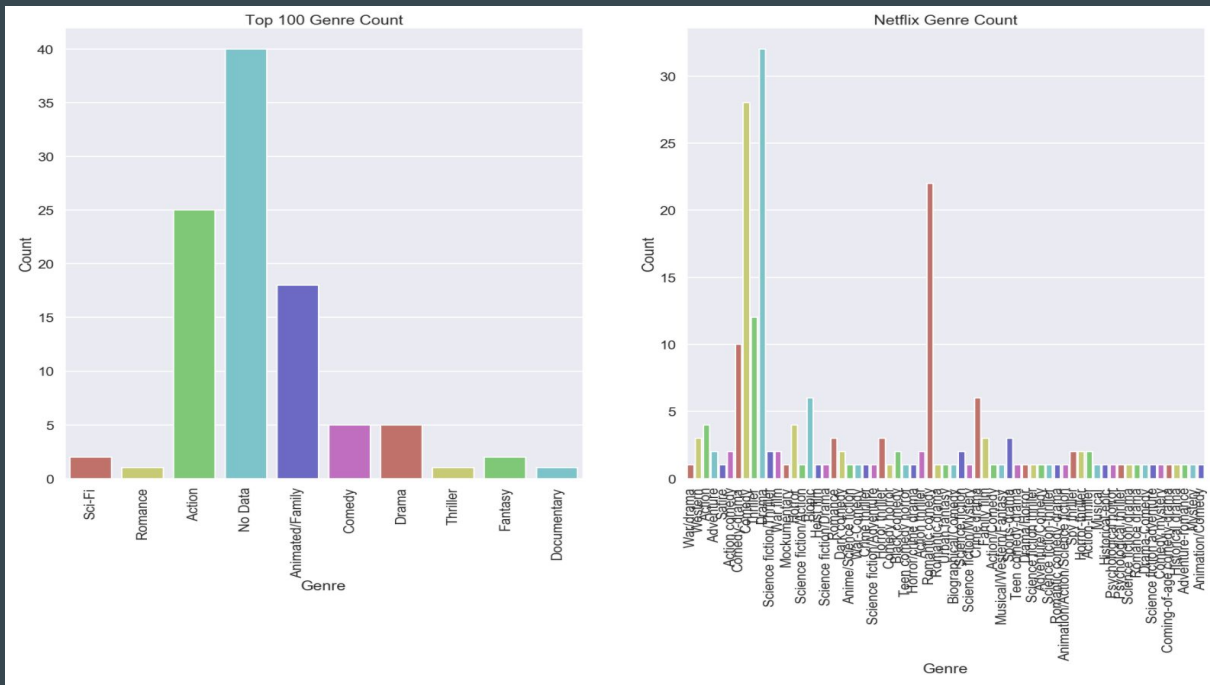
# Netflix Comparison - Release Date & Runtime



Not Pictured:  
Mean runtime  
Netflix Originals  
32 minutes shorter  
than top 100

**Conclusion:** There are significant differences in the characteristics of Netflix films vs. Box-Office films

# Netflix Comparison - Genre



Note: Standardization of genre categories would greatly improve the salience of this analysis.

## Conclusion: There are significant differences in the characteristics of Netflix films vs. Box-Office films

# Recommendations

- Further investigation!
  - Further investigate direct streaming film production budgets
  - Create a standardized way to measure "profit" of individual productions within a streaming service
  - Create a standardized way to categorize genre
  - Fill in missing data for more accurate analysis
  - Further investigate film viewership during the quarantine

# Recommendations for myself

- Use an SQL database to compile the csv files from the start
- Use several different ipynbs to document the process
- Make a more extensive plan of the analysis prior to executing
- Continue to review dataframe manipulation (concat, merge, etc.) and data visualization techniques

**Cheers!**