



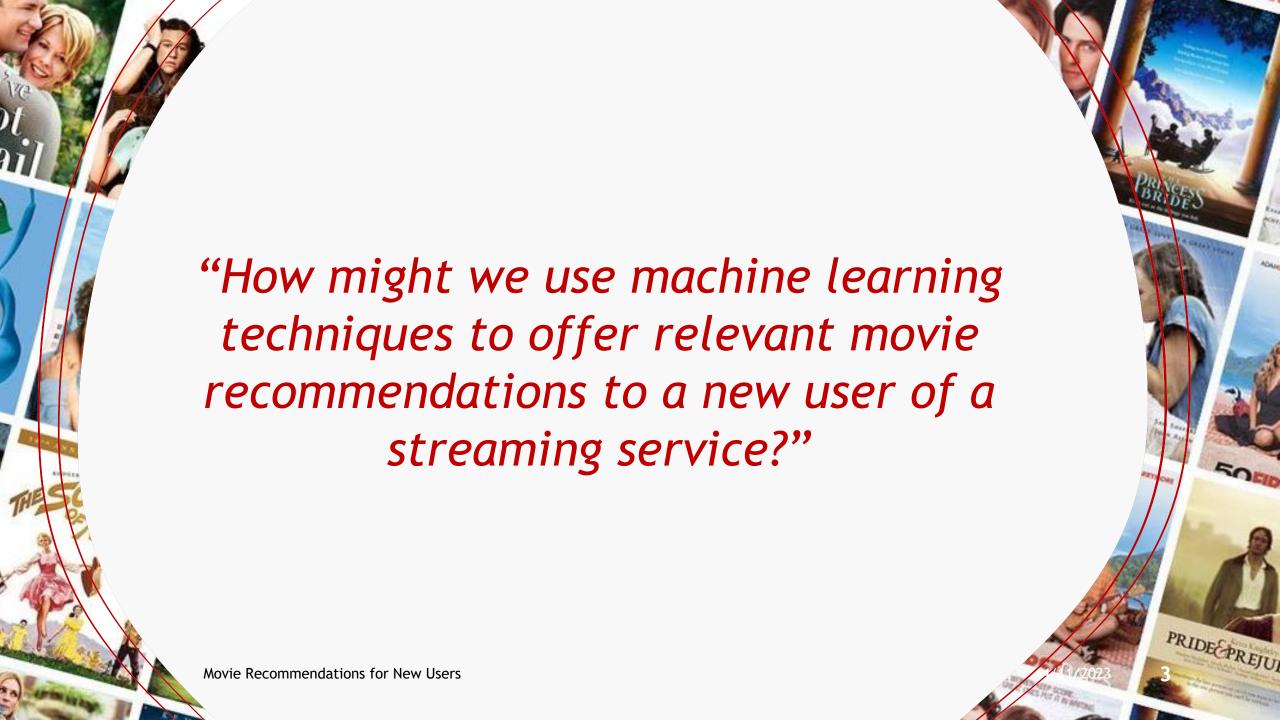
Background

of what customers watch on Netflix comes from recommendations

saved each year due to their recommendation system

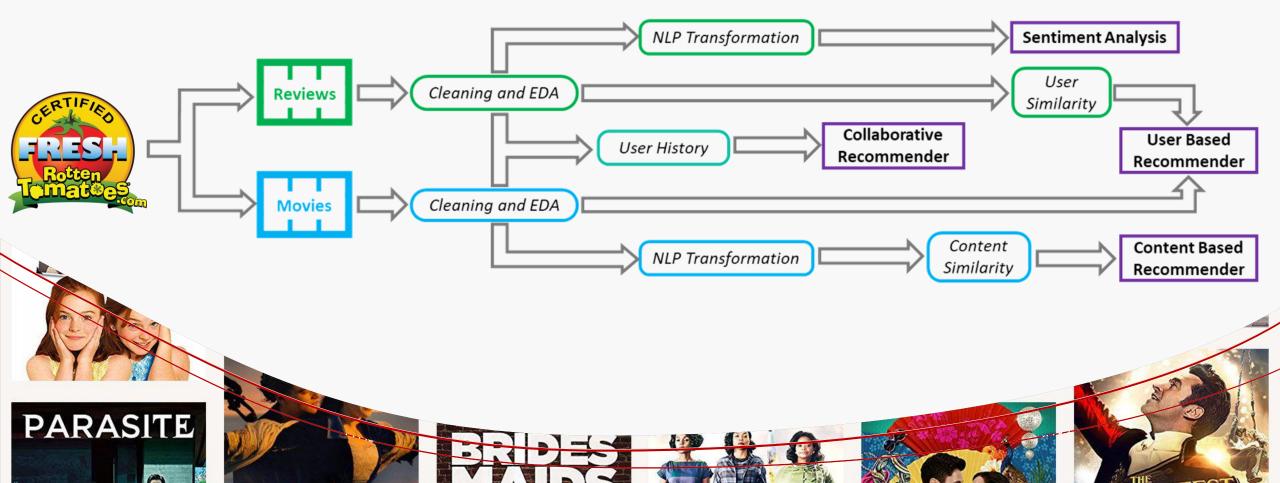
Problem:

How do you recommend movies to users with no history on the platform?



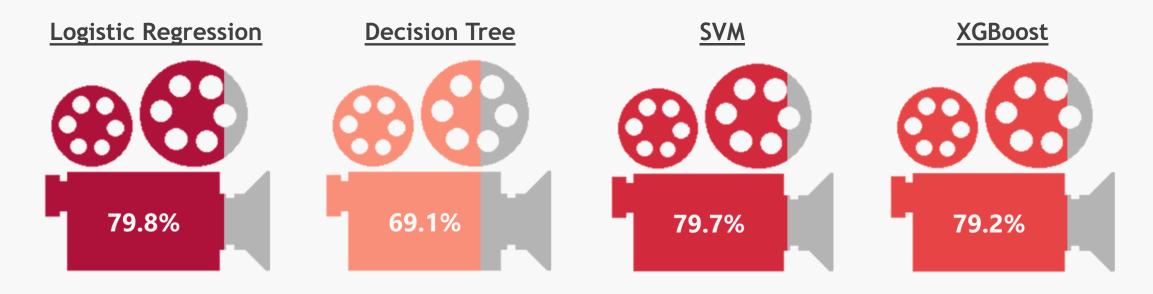
Project Overview

- 3 types of Recommender Systems
- Sentiment Analysis



Sentiment Analysis

- Four classification models evaluated
 - **Logistic Regression** model provides best accuracy scores



Movie Recommendations for New Users 4/11/2023 **5**

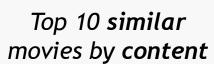
Classification Model Test Accuracies



Recommender Systems

Movie Title





Movie Title







Top 10 similar movies by user ratings

ID of Critic With Similar Interests



Top 10 **highest rated** movies for **similar critic**

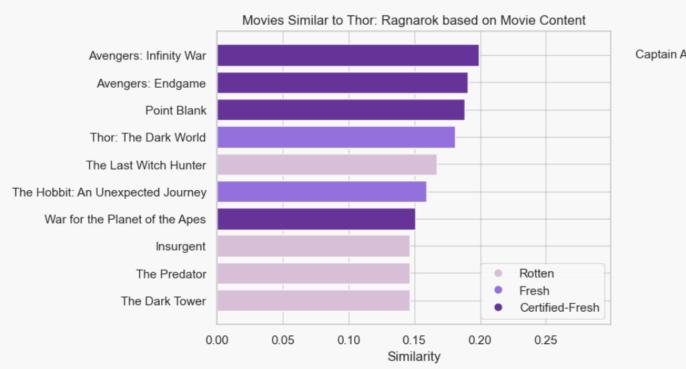
Movie Recommendations for New Users 4/11/2023 **6**

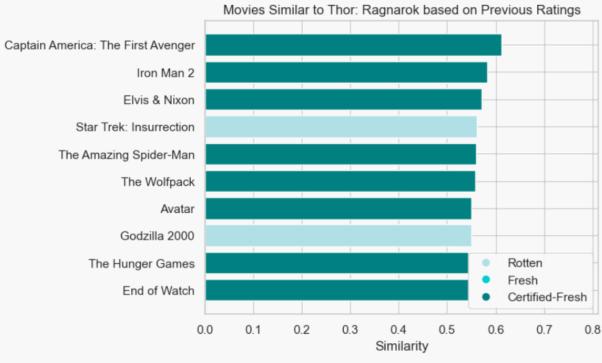


Recommender Systems: Thor: Ragnarok

Content-Based

User-Based





Movie Recommendations for New Users 4/11/2023

Key Findings

- Words predictive of Fresh or Rotten reviews
- Recommender system accuracy not easy to quantify:
 - > Best Result = Content-Based Recommender
 - Worst Result = Collaborative Recommender
 - Movie critics don't show strong opinions





Next Steps

- Content-Based:
 - Weight similarity towards specific variables
- User-Based & Collaborative:
 - Find reviewers with more distinguishable opinions
- > General:
 - Develop app for new user recommendations

Movie Recommendations for New Users 4/11/2023 **8**

Movie Recommendations for New Users

Predicting a Movie Rating:

Enter your review text below

Thanks, I love it!

This review is Fresh!

Provide Movie Recommendations:

Enter the name of a movie you like below

Harry Potter

Movie Name: Harry Potter and the Deathly Hallows - Part 2

Movie Rating: Certified-Fresh

Movie Description: A clash between good and evil awaits as young Harry (Daniel Radcliffe), Ron (Rupert Grint) and Hermione (Emma Watson) prepare for a final battle against Lord Voldemort (Ralph Fiennes). Harry has grown into a steely lad on a mission to rid the world of evil. The friends must search for the Horcruxes that keep the dastardly wizard immortal. Harry and Voldemort meet at Hogwarts Castle for an epic showdown where the forces of darkness may finally meet their match.

