TEQSPHERE

By: RINAE Apps™

Date: 04 February 2022

Meet the Team

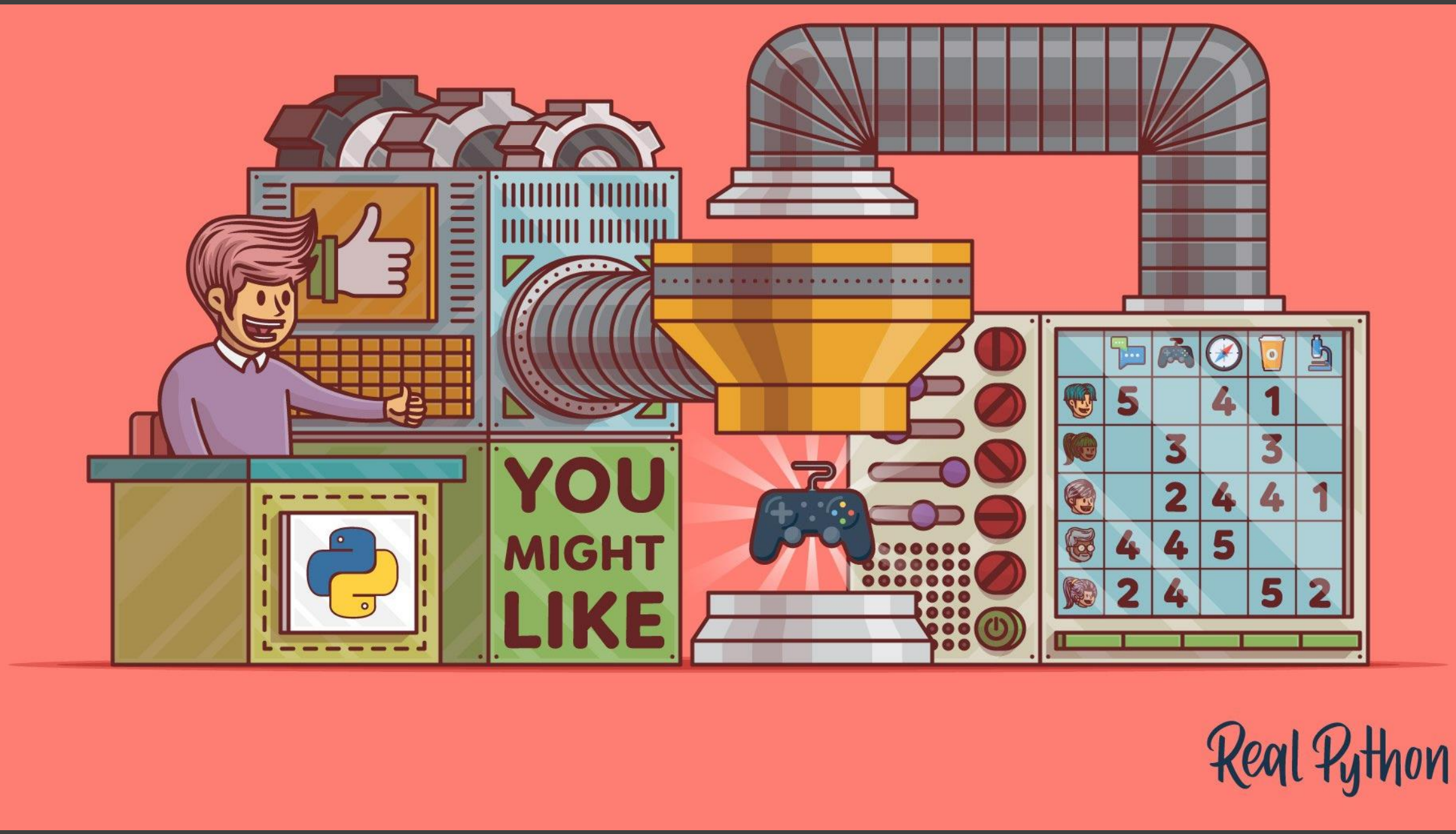
- Nokulunga Twala
- Rinae Tshivhidzo
- Kwanda Mazibuko
- Tsepo Sehaole
- Tshegofatso Sekgobela

Content

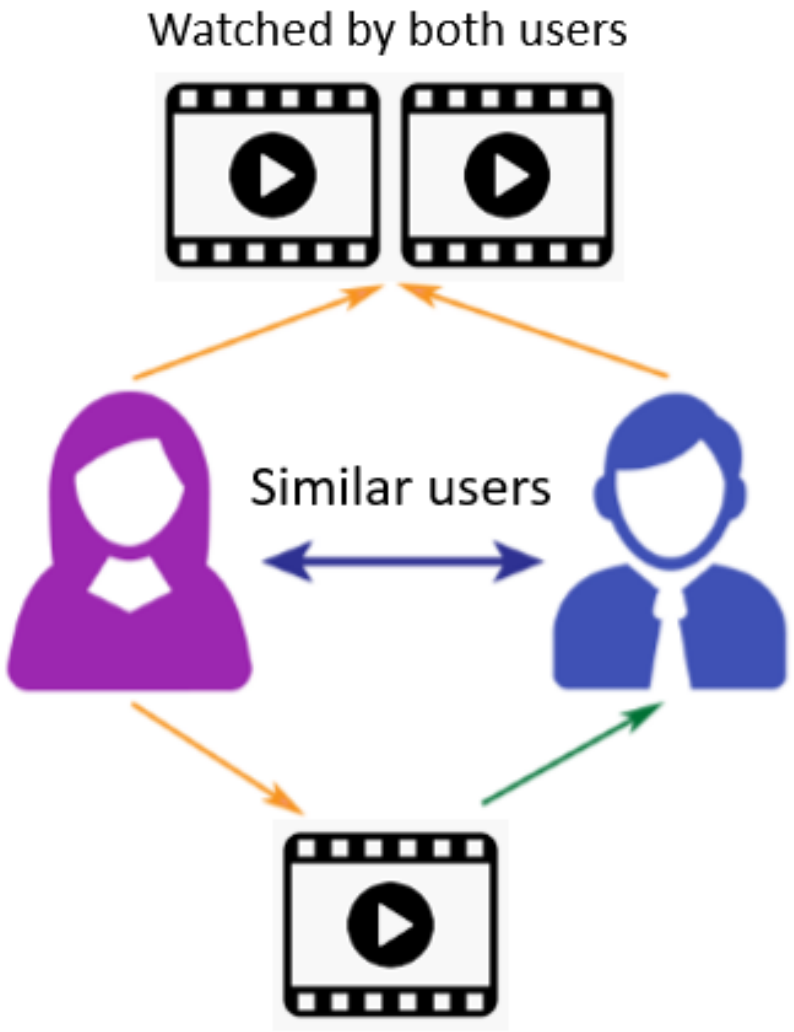
- Introduction
- Problem statement
- Exploring the Data
- Machine Learning
- App development
- Conclusion

Introduction

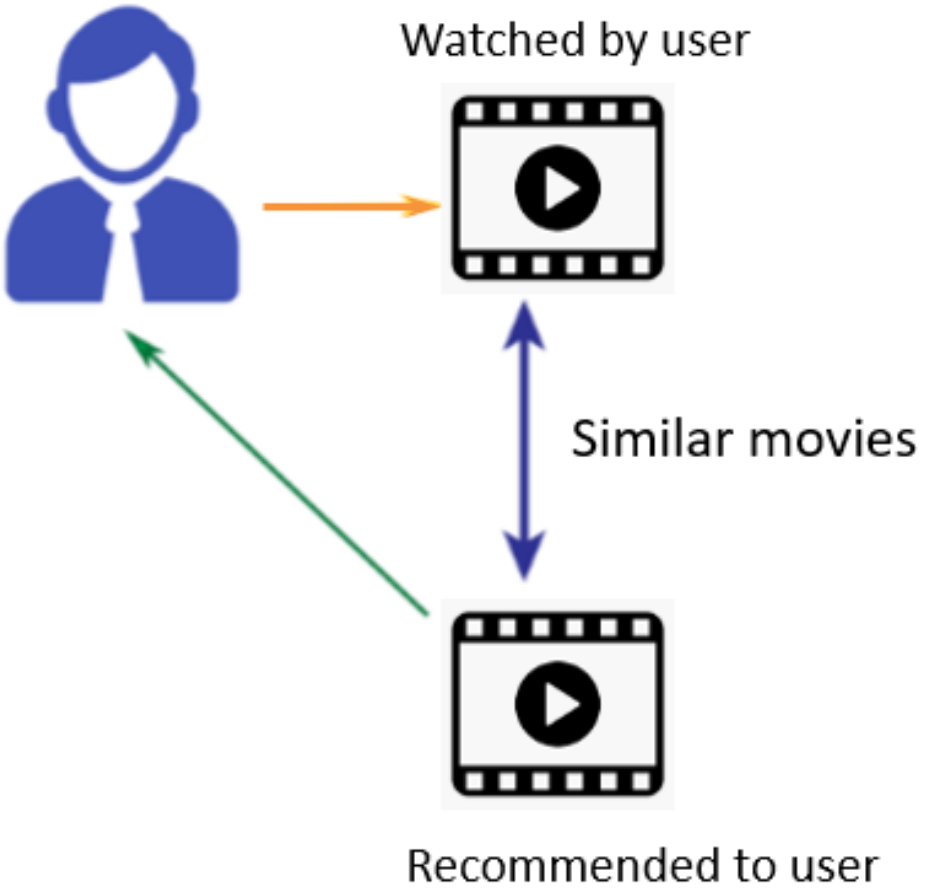
CEREAL
CEREAL
CEREAL
TEA
TEA
PEANUTS
PEANUTS
PEANUTS
CEREAL
MILK CHOCO
MILK CHOCO


YOU
MIGHT
LIKE
Real Python

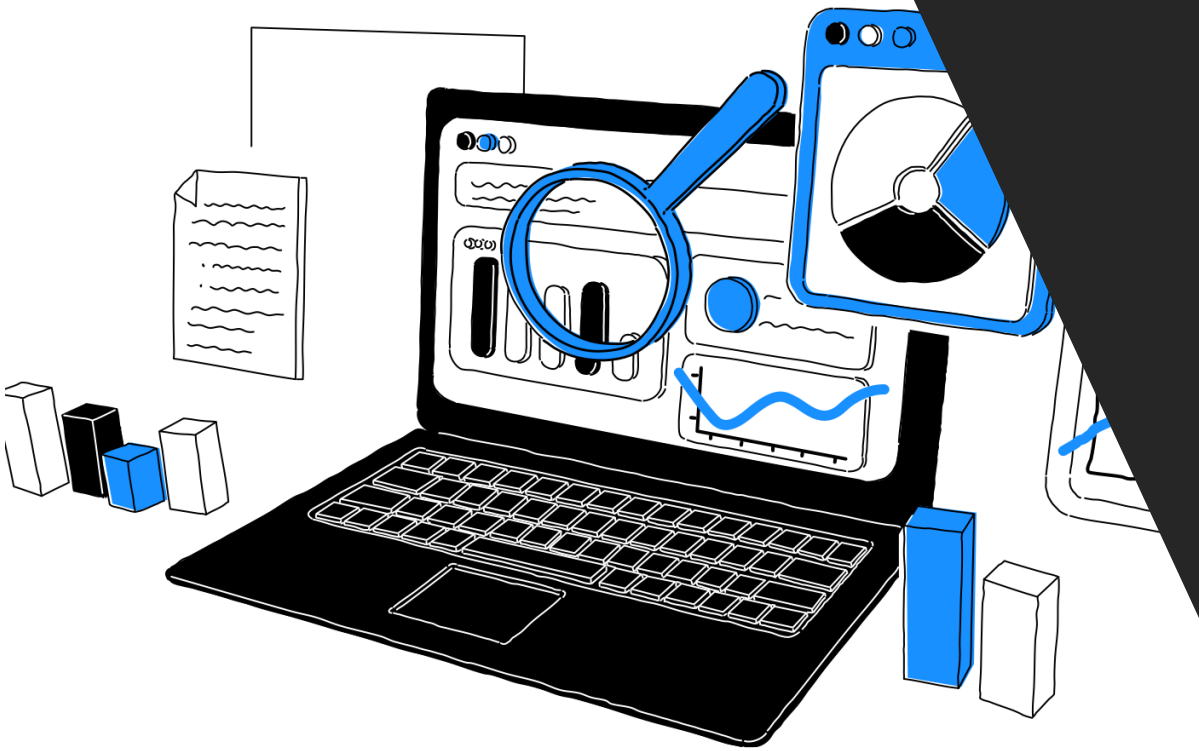
Collaborative Filtering



Content-Based Filtering

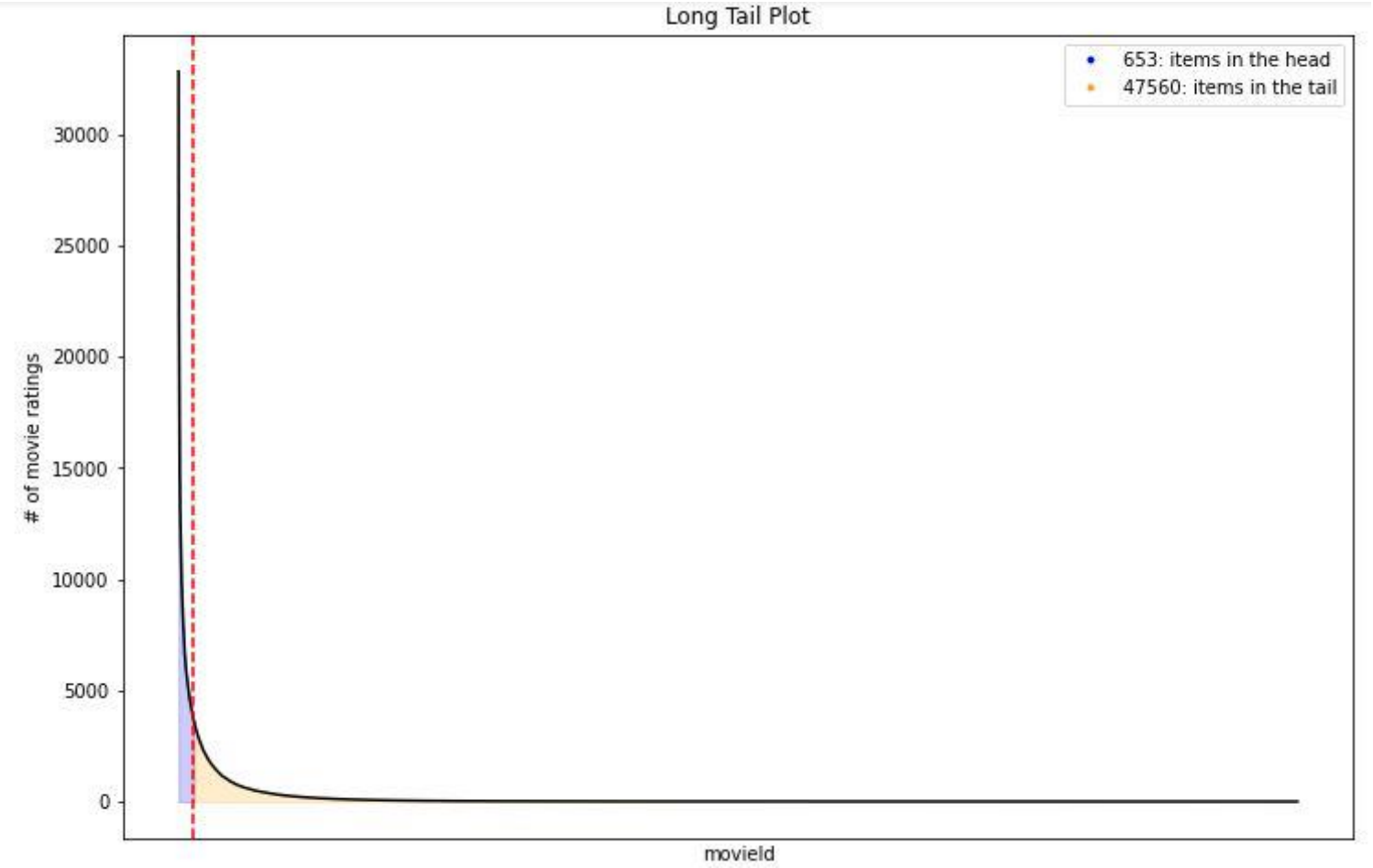


Problem Statement



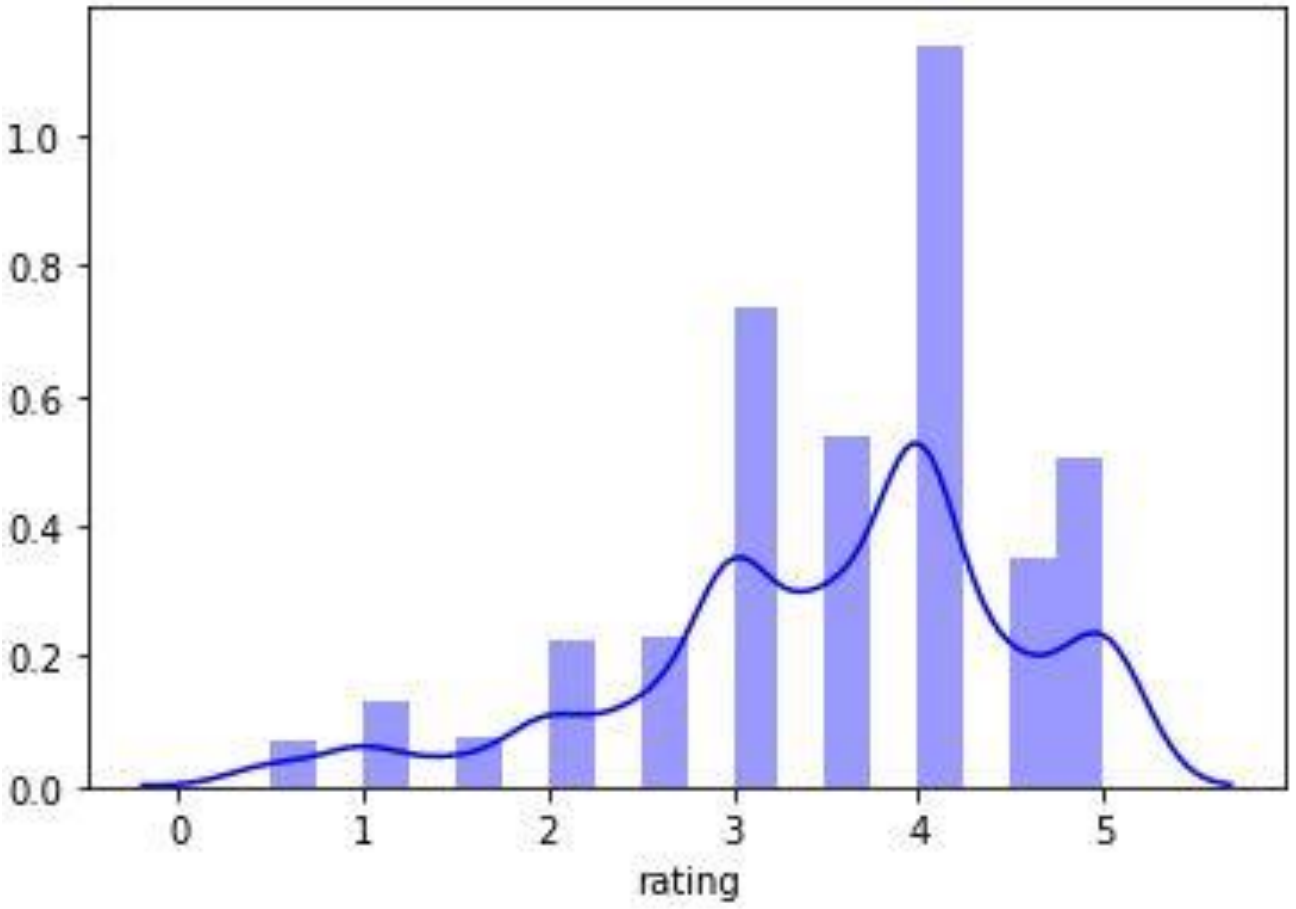
Understanding data

Popular Movies



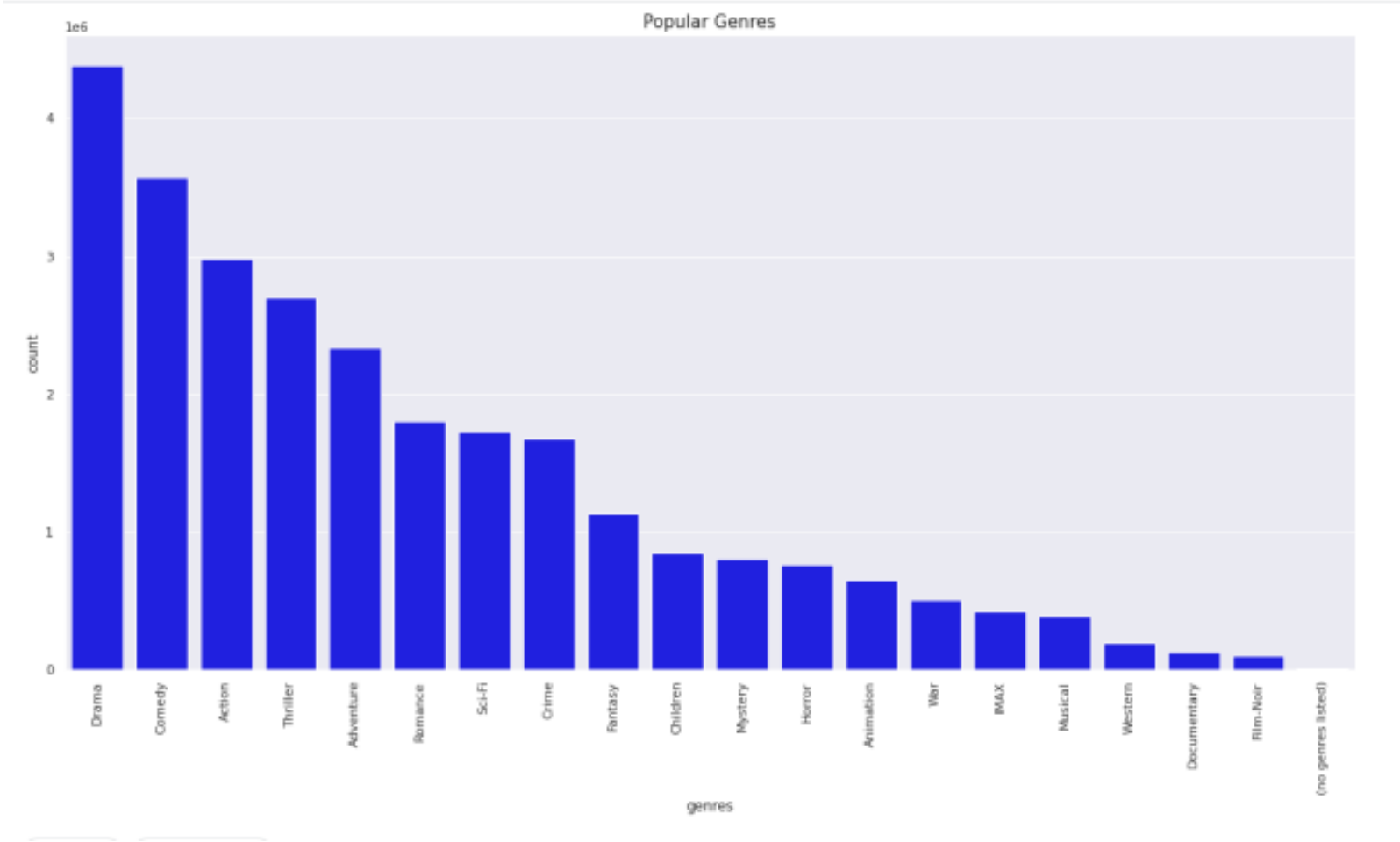
- 653 popular movies and 45760 unpopular movies.

Ratings by Movie Users



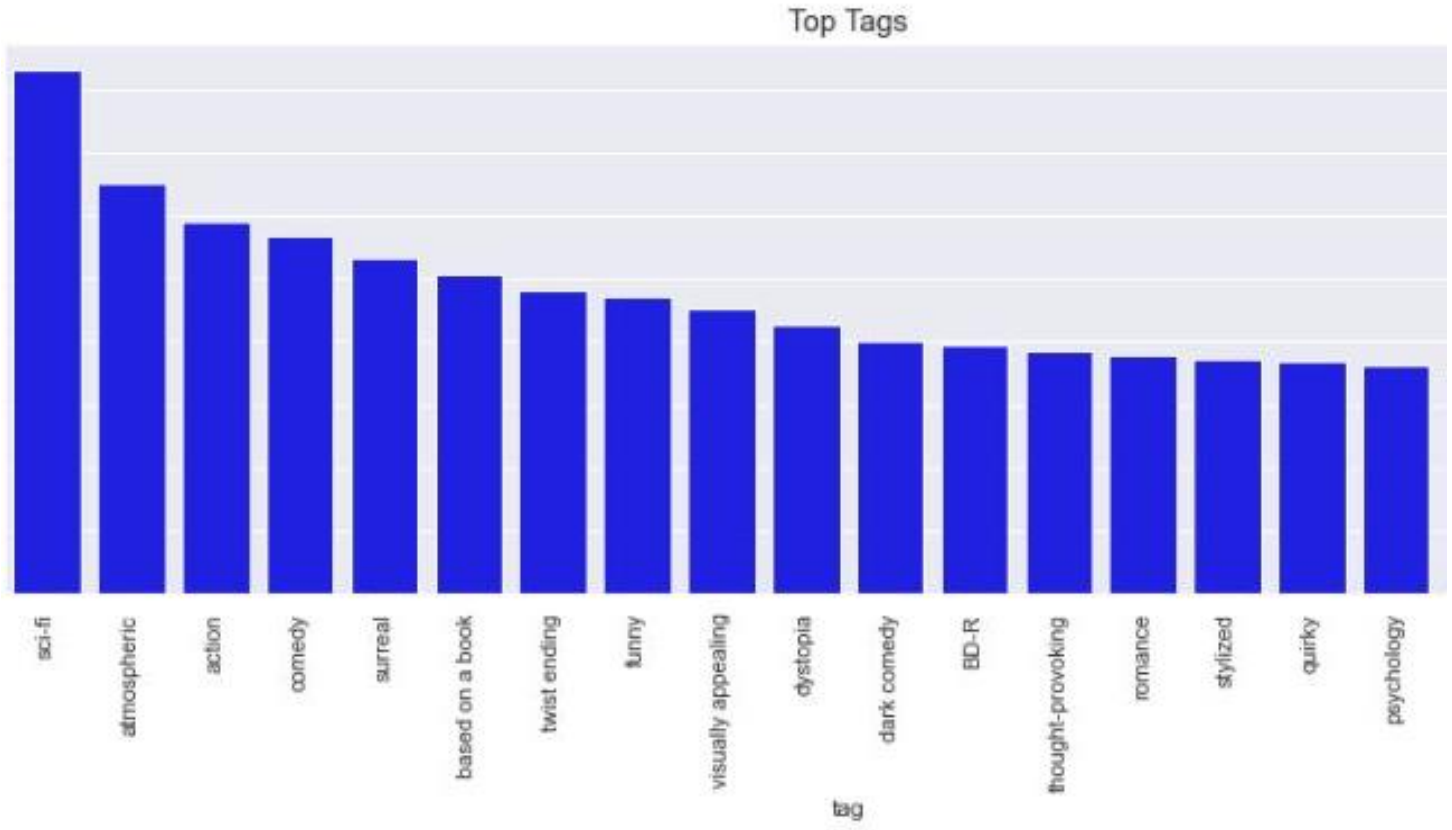
- Most movies received ratings of 4, while others received less

Popular Movie Genres



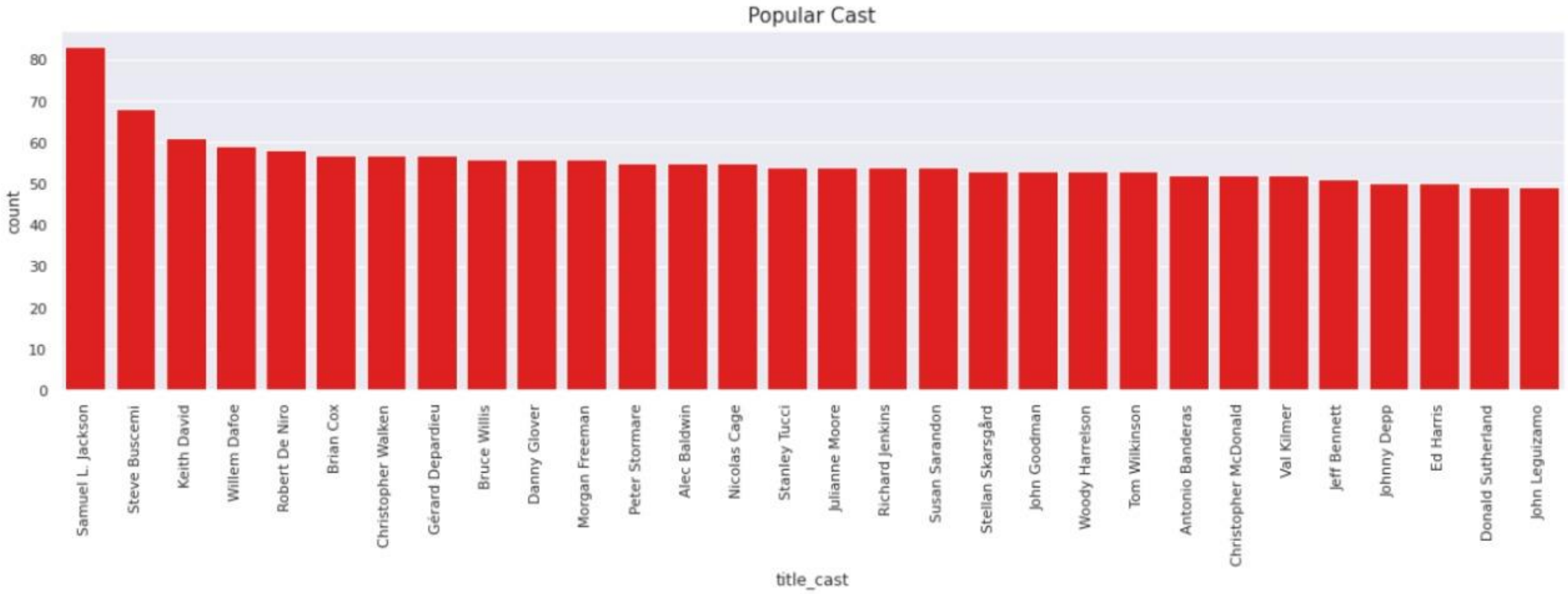
- Drama, Comedy and Thriller are top 3 most common movie genres.

Popular Movie Tags

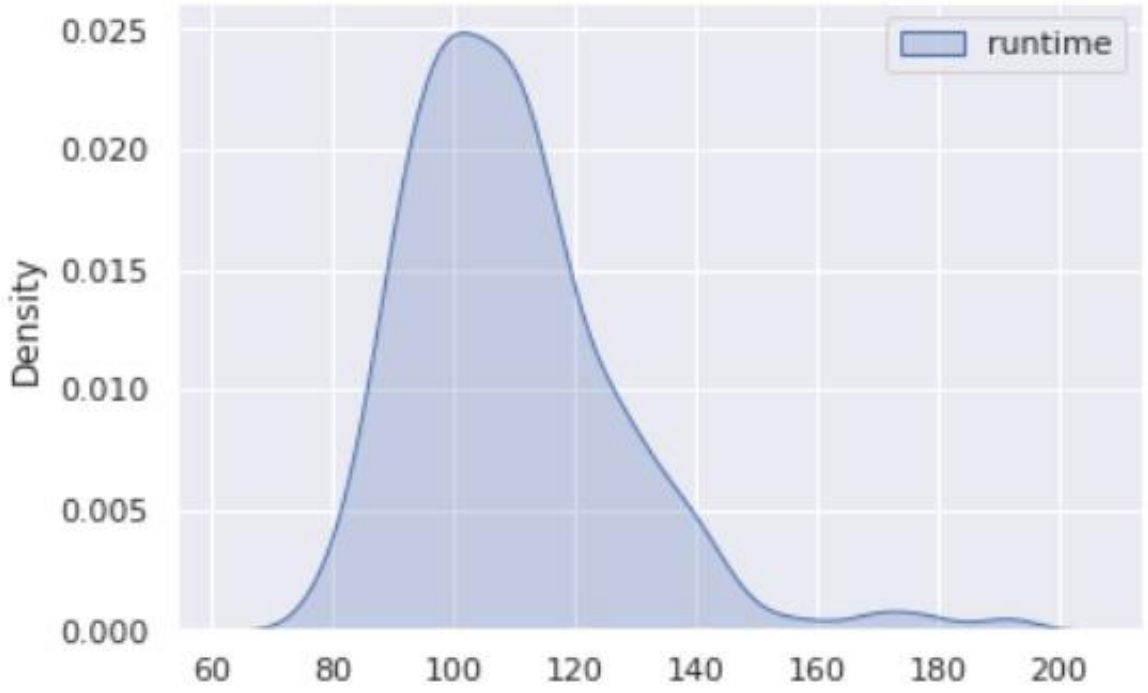


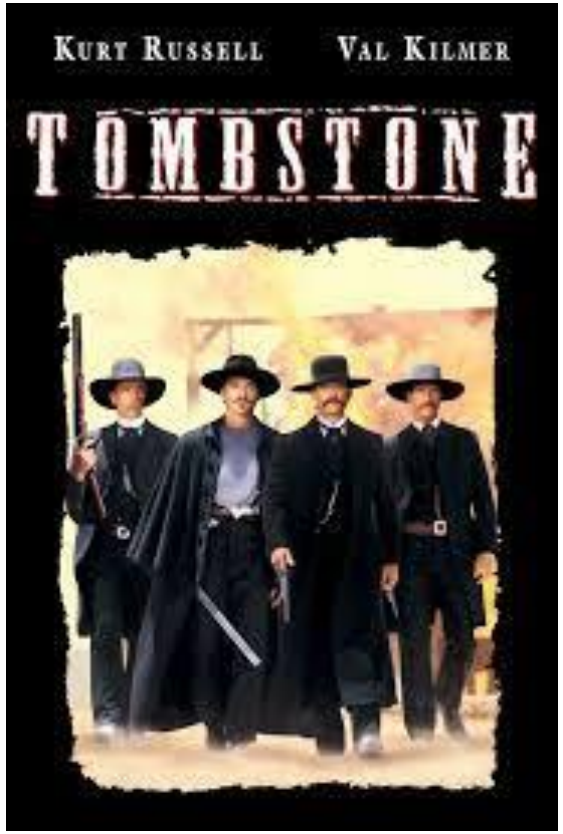
- Sci-fi is the most popular tag while classic has the least number of counts.

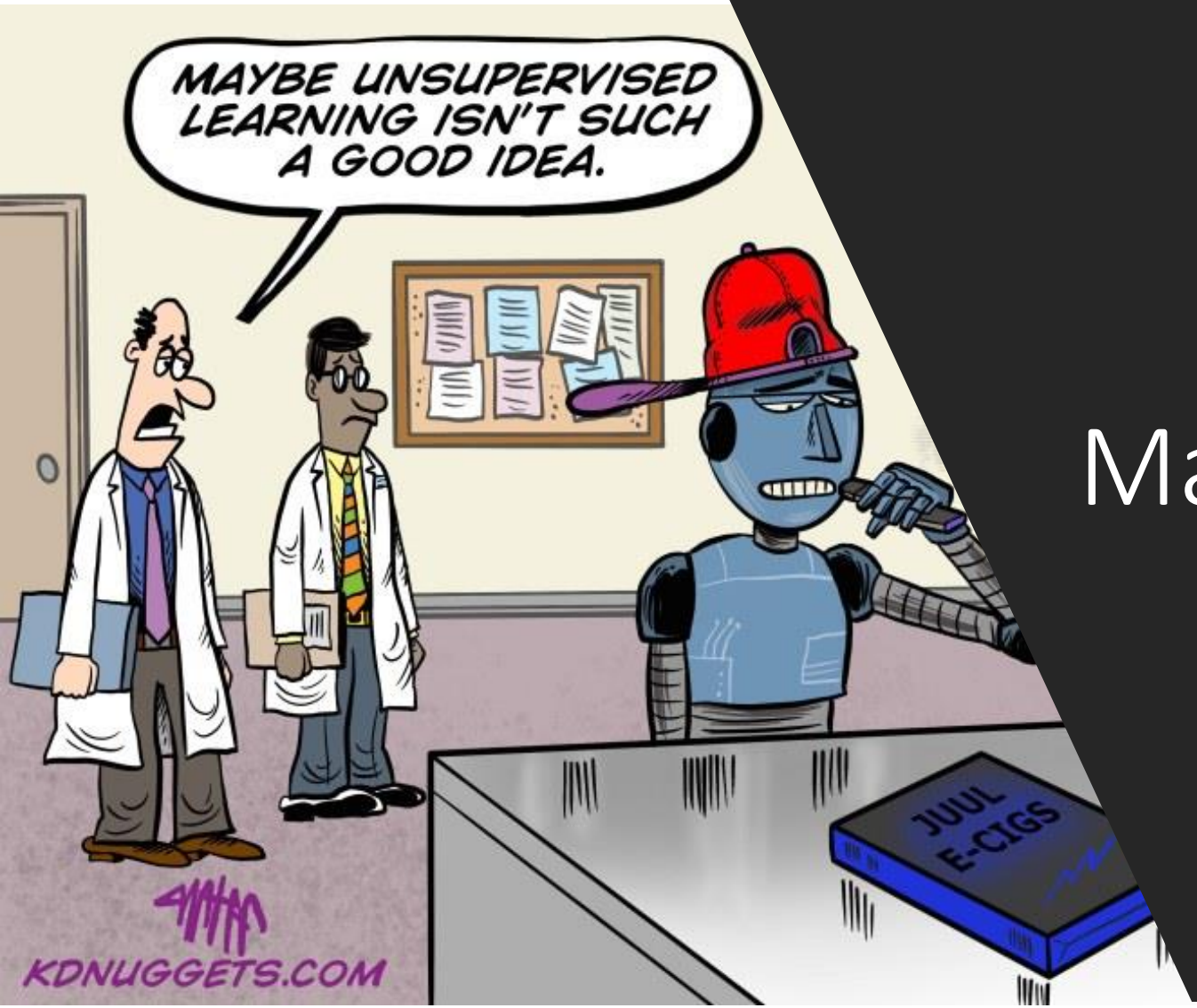
Popular Cast Members



Movie Runtime

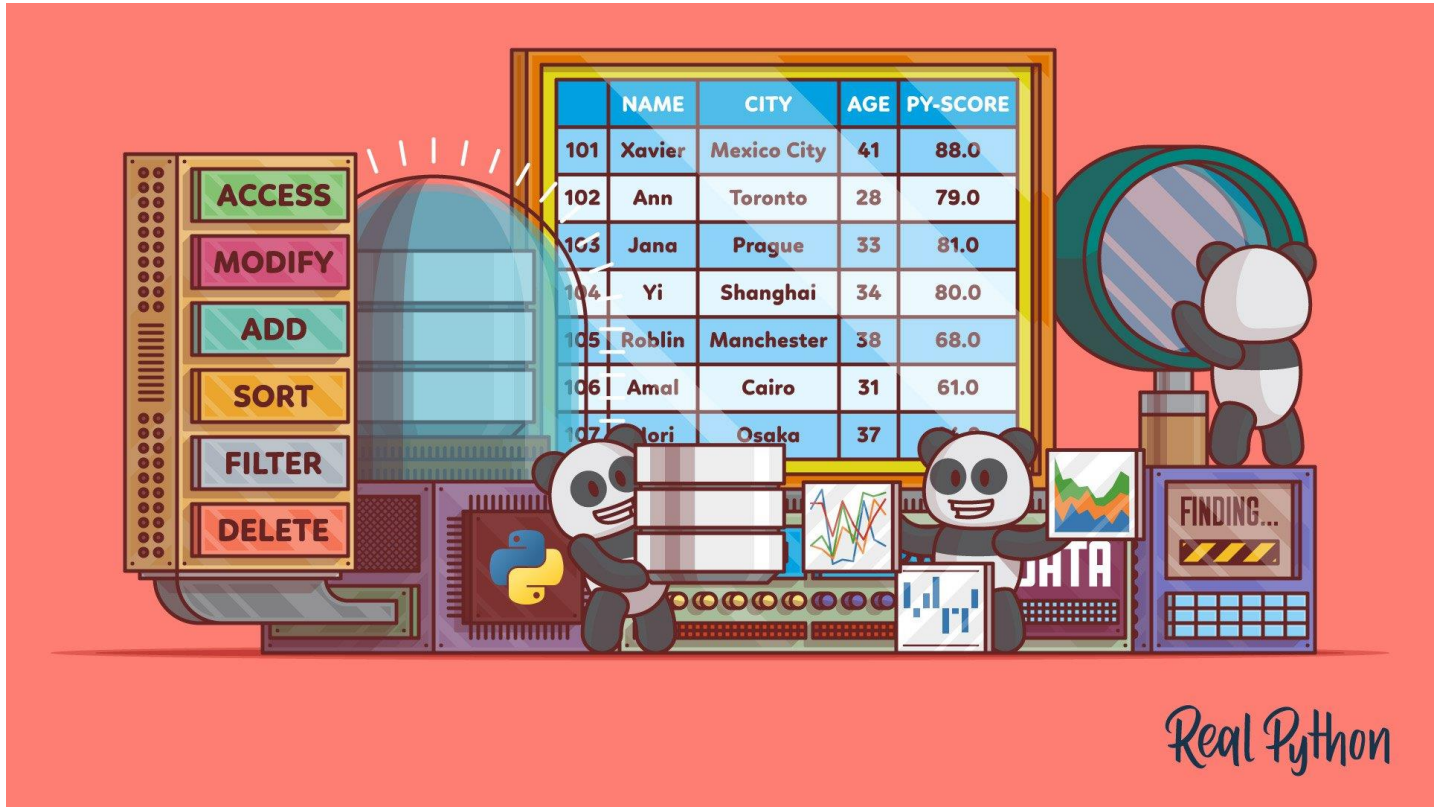






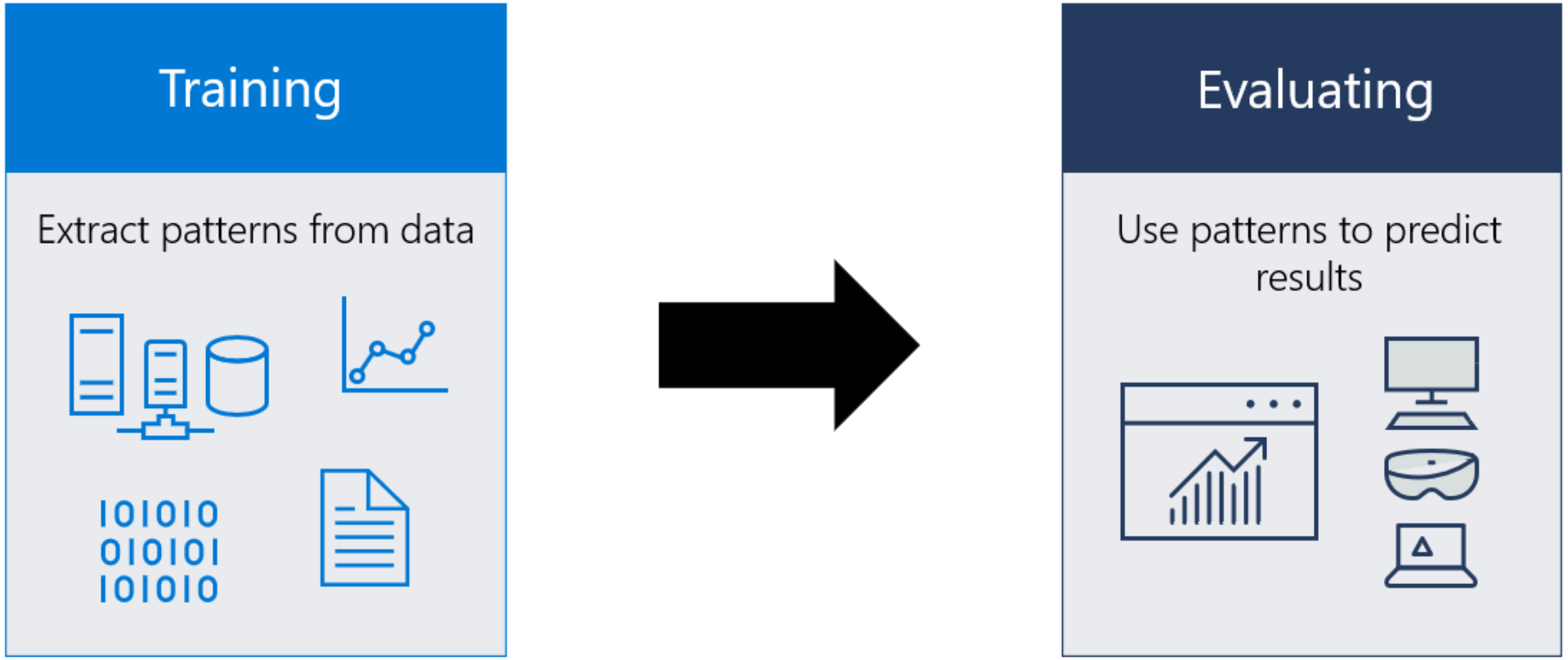
Machine Learning

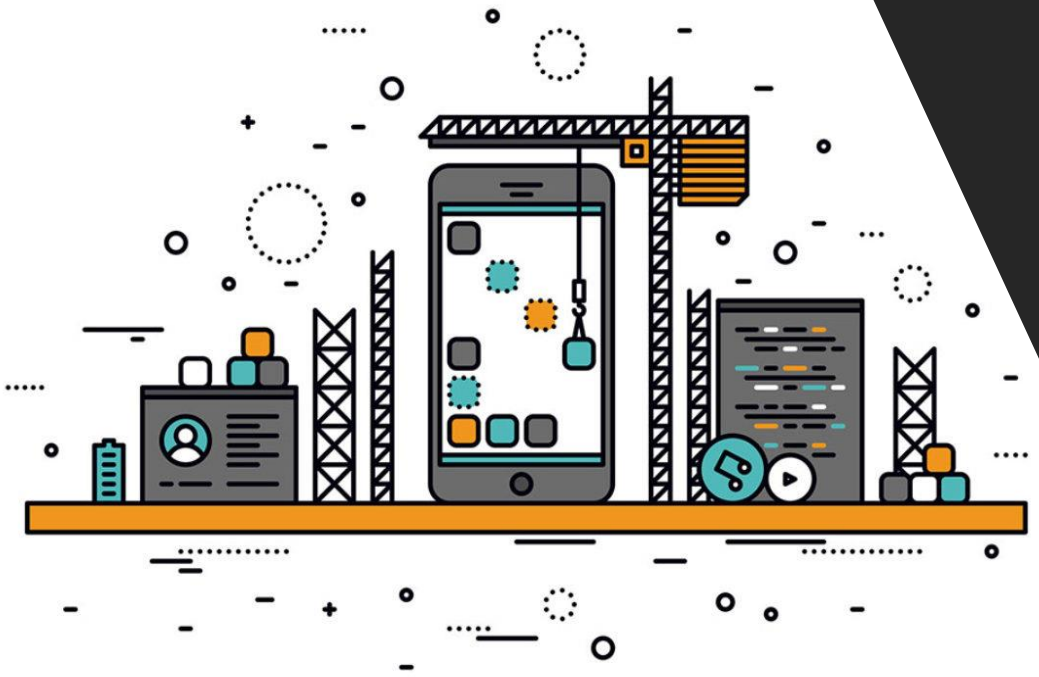
Preparing our data



- **Data cleaning**
- **Dealing with missing values**
- **Engineer new features**

Modeling


Training
Extract patterns from data
101010
010101
101010
Evaluating
Use patterns to predict results

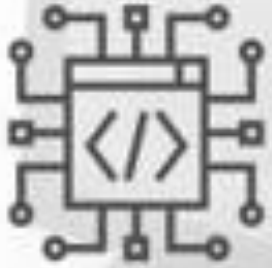


App Development

4 Stages of App Development

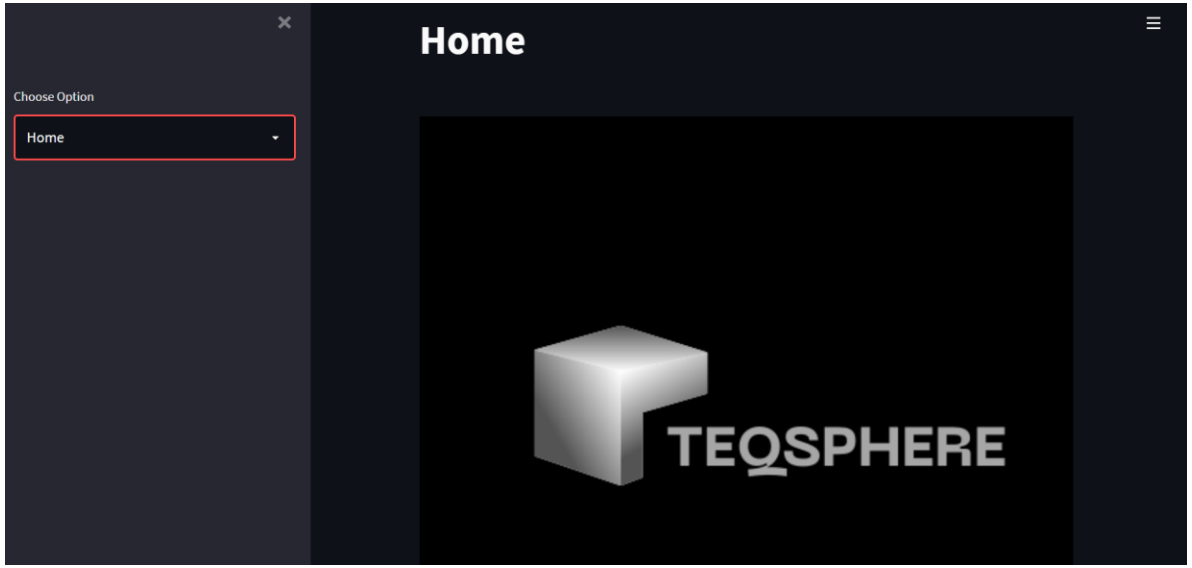
Pre-design

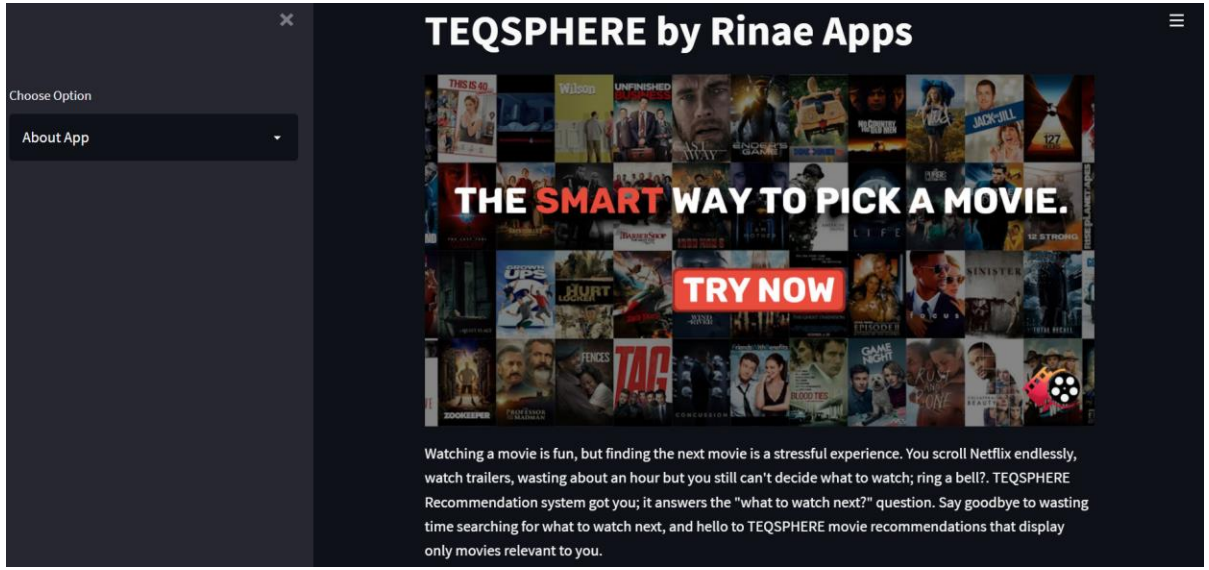
Design

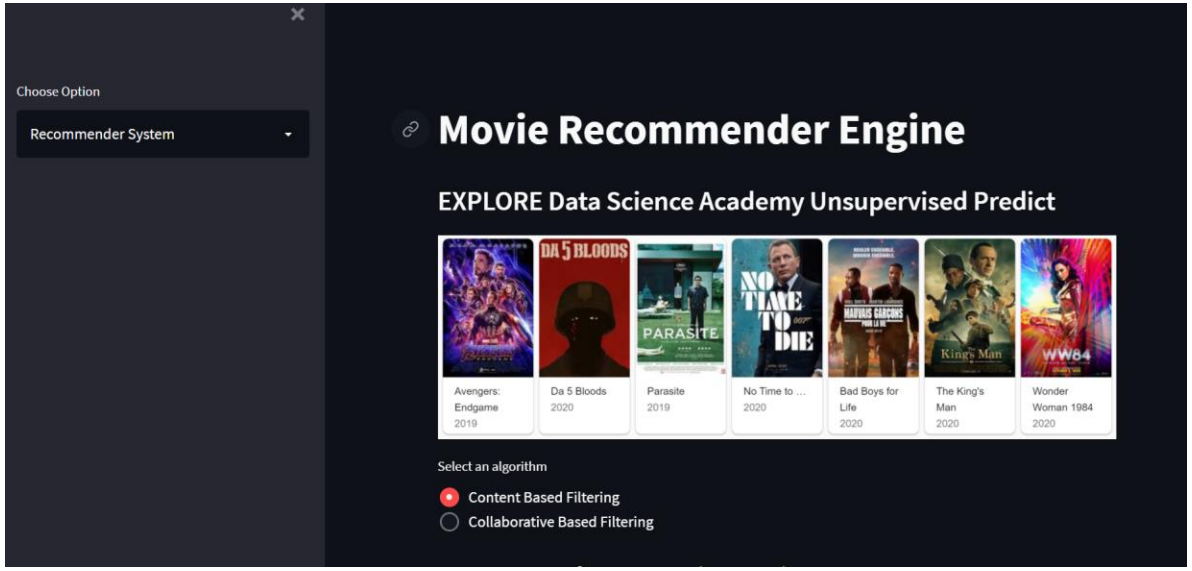


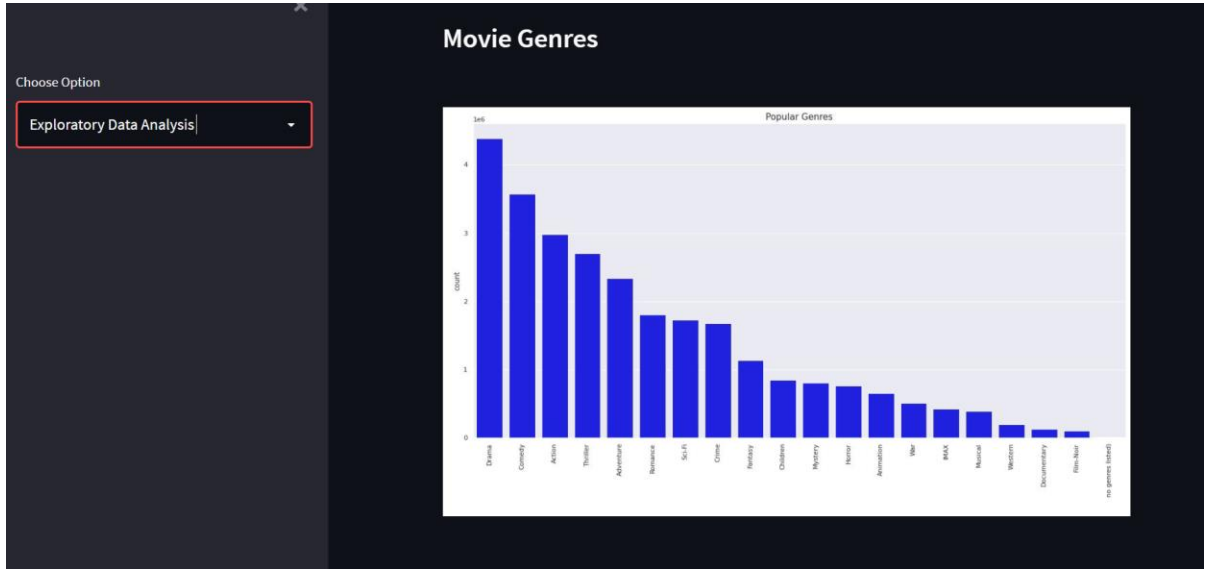
Development

Support


Home
Choose Option
Home
TEQSPHERE


TEQSPHERE by Rinae Apps
Choose Option
About App
THE SMART WAY TO PICK A MOVIE.
TRY NOW
Watching a movie is fun, but finding the next movie is a stressful experience. You scroll Netflix endlessly, watch trailers, wasting about an hour but you still can't decide what to watch; ring a bell?. TEQSPHERE Recommendation system got you; it answers the "what to watch next?" question. Say goodbye to wasting time searching for what to watch next, and hello to TEQSPHERE movie recommendations that display only movies relevant to you.

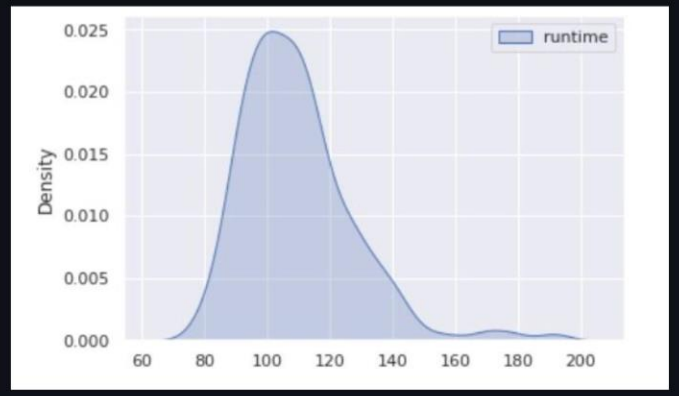

Choose Option
Recommender System
Movie Recommender Engine
EXPLORE Data Science Academy Unsupervised Predict
Avengers: Endgame 2019
Da 5 Bloods 2020
Parasite 2019
No Time to ... 2020
Bad Boys for Life 2020
The King's Man 2020
Wonder Woman 1984 2020
Select an algorithm
Content Based Filtering
Collaborative Based Filtering


Choose Option
Exploratory Data Analysis
Movie Genres
Popular Genres
count

Choose Option

Exploratory Data Analysis

Movie Runtime

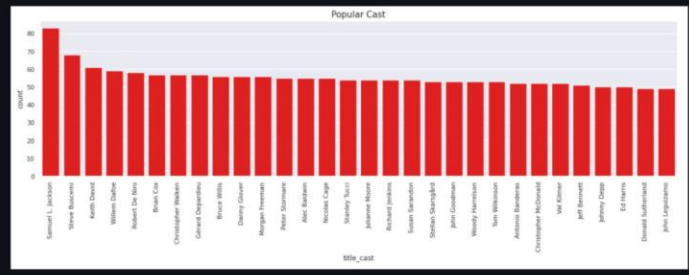


An average movie plays for 100 minutes.

Choose Option

Exploratory Data Analysis

Popular cast



The most well-known cast members are Samuel L. Jackson and Steve Buscemi, with the remaining members having a slight variation in recognition.

Choose Option

Recommender System

Enter Your Three Favorite Movies

Fisrt Option

So Proudly We Hail! (1943)

Second Option

Star Wars: Episode VII - The Force Awakens (2015)

Third Option

Ten Little Indians (Ein Unbekannter rechnet ab) (And Then There Were None) (1974)

Recommend

We think you'll like:

Choose Option

Solution Overview

Solution Overview

After weighing on the differences between the collaborative filtering and content based filtering, the former approach wins. The criteria is not only based on the implementation.

Content-based filtering:

- Would not recommend products that have less content: if less information about a certain product, it would not be easy to find similar products for recommendations.
- Would not recommend popular products to users who have never used them.

The collaborative filtering solves the novelty problem. The collaborative filtering is easy to implement. Similarities between the ratings that users give to certain products can be modelled way better than in the content-based recommmender systems. We use the rating data with user information(movies they have seen and also the ratings given to those movies). The Singular Value Decomposition is used to make the predictions on the ratings that a user would give to a movie they have never seen. Similarities are computed between the users, the same is computed for movie ratings. Ten most similar movies to the ones that the user likes will be recommended to the user.

Conclusion

Thank You