

ANIME RECOMMENDER SYSTEM

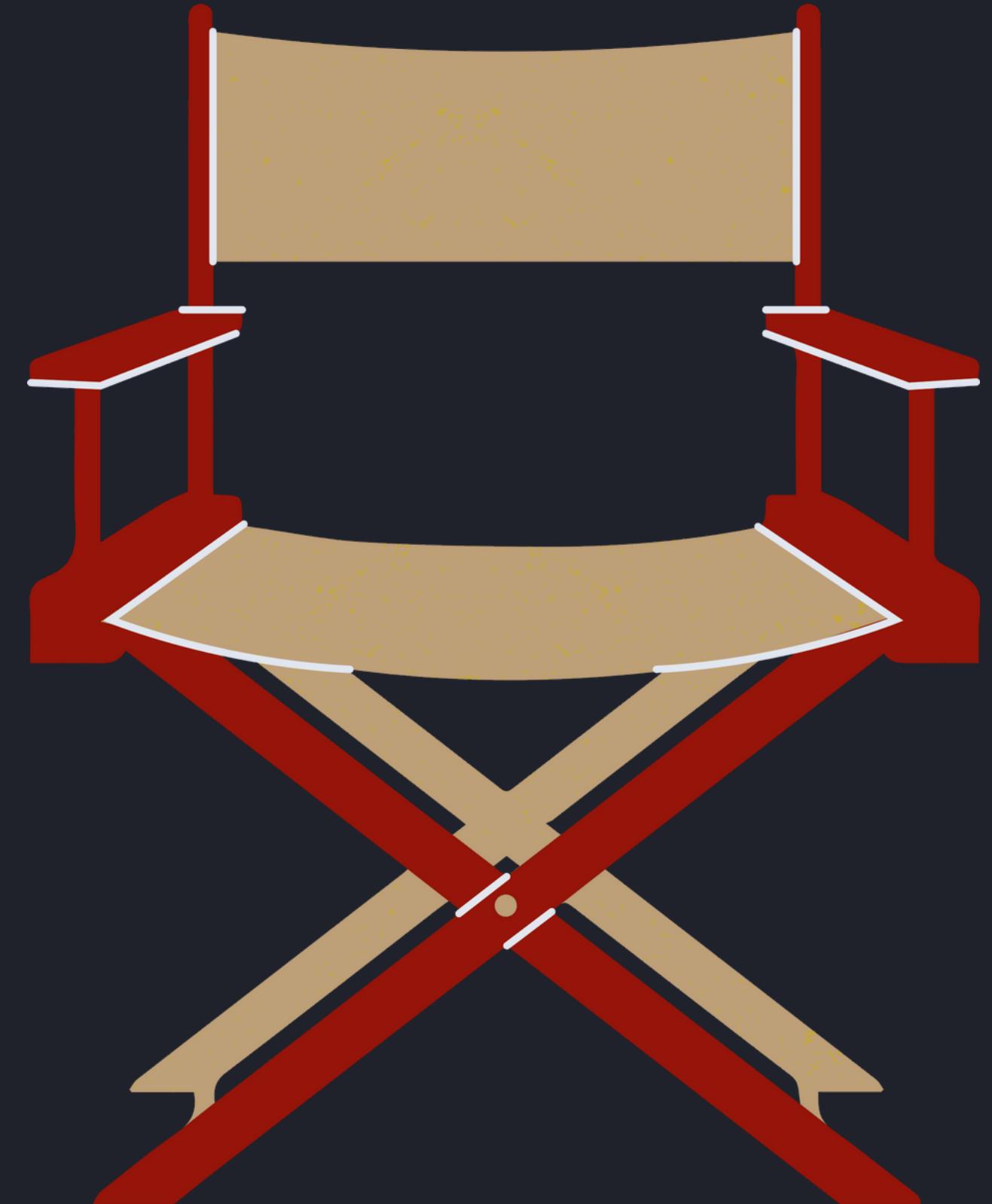
Discover Your Next Favorite Anime





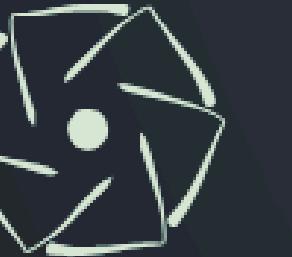
MEET THE TEAM:

- Clement Moshohlo Mphethi
- Makhutjo Lehutjo
- Prishani Kisten
- Johannes Malefetsane Makgetha



INTRODUCTION

- How can we harness the power of collaborative and content-based filtering to create a personalized anime recommendation system that delights users with tailored suggestions based on their unique viewing history?



ANIMEXPLORE

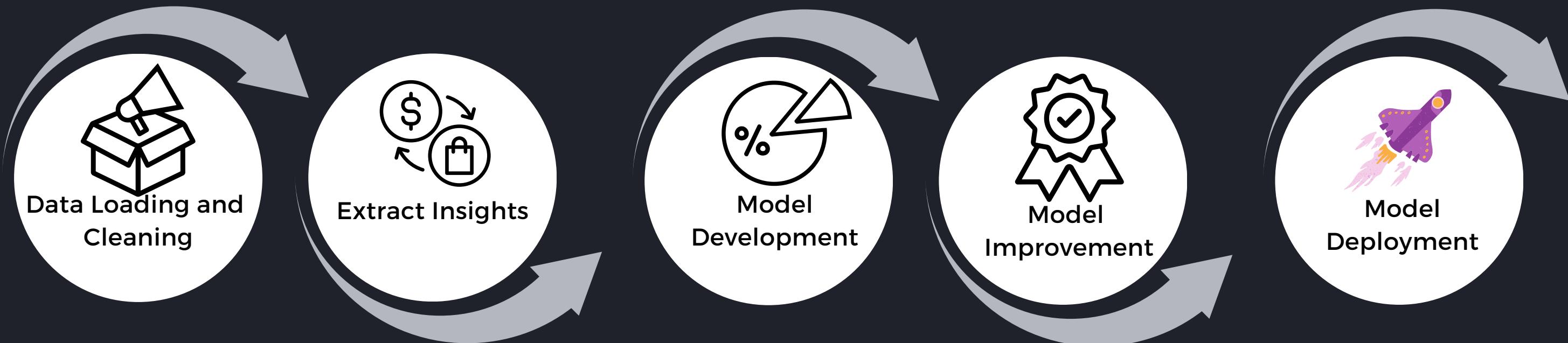


PROJECT OVERVIEW

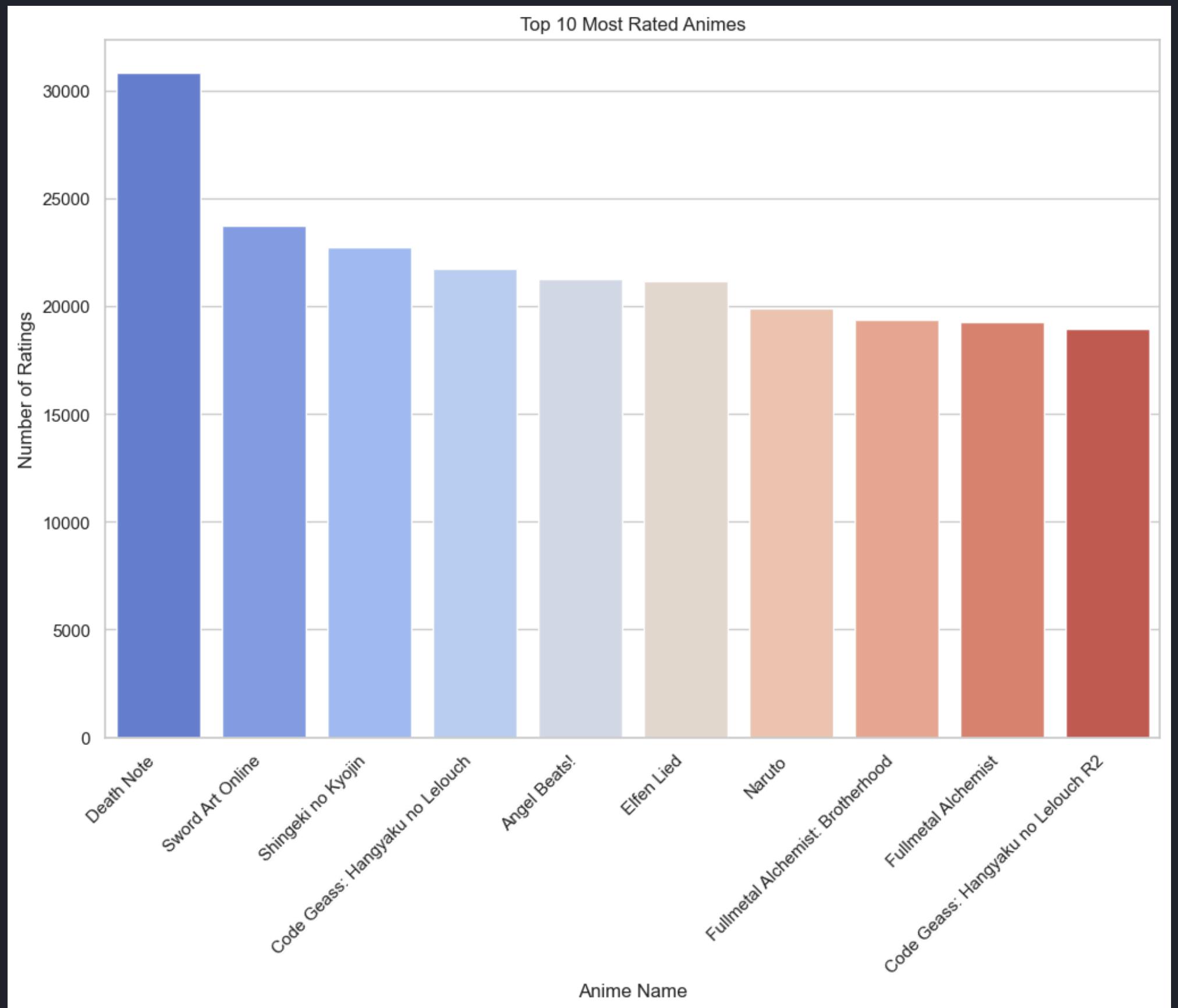


- How can we create a recommender system that predicts and suggests anime based on user preferences and anime features?

PROJECT WALKTHROUGH



INSIGHTS



TOP RATED ANIMES

- Death Note is the top-rated anime
- Other highly-rated animes include Sword Art Online, Shingeki no Kyojin, and Code Geass.

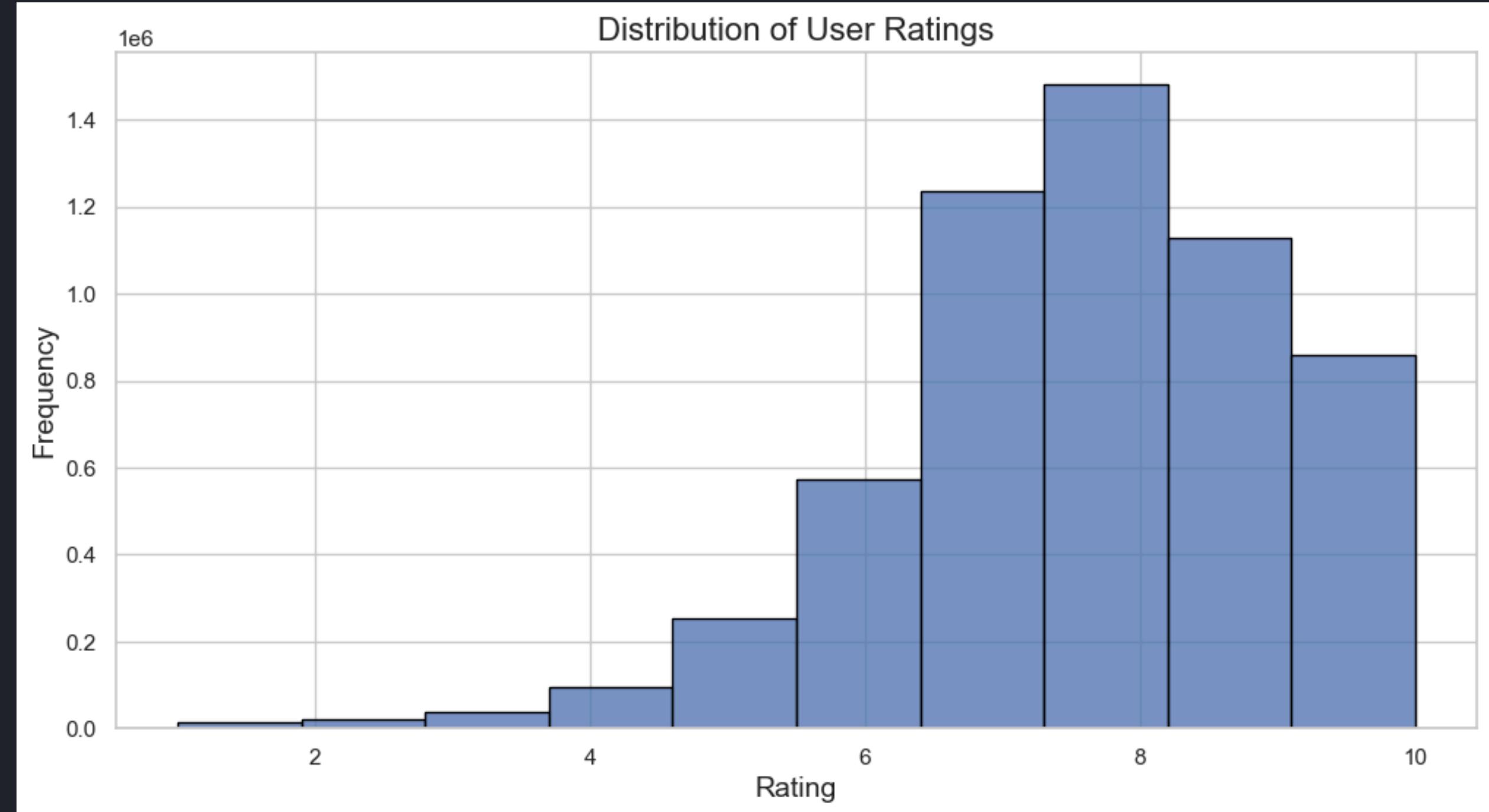




INSIGHTS

DISTRIBUTION OF USER RATINGS

- Most ratings are positive, with 8 being the most common.
- Ratings are mostly between 6 and 9.
- Fewer ratings below 4 and above 9.



INSIGHTS

AVERAGE RATINGS PER GENRE

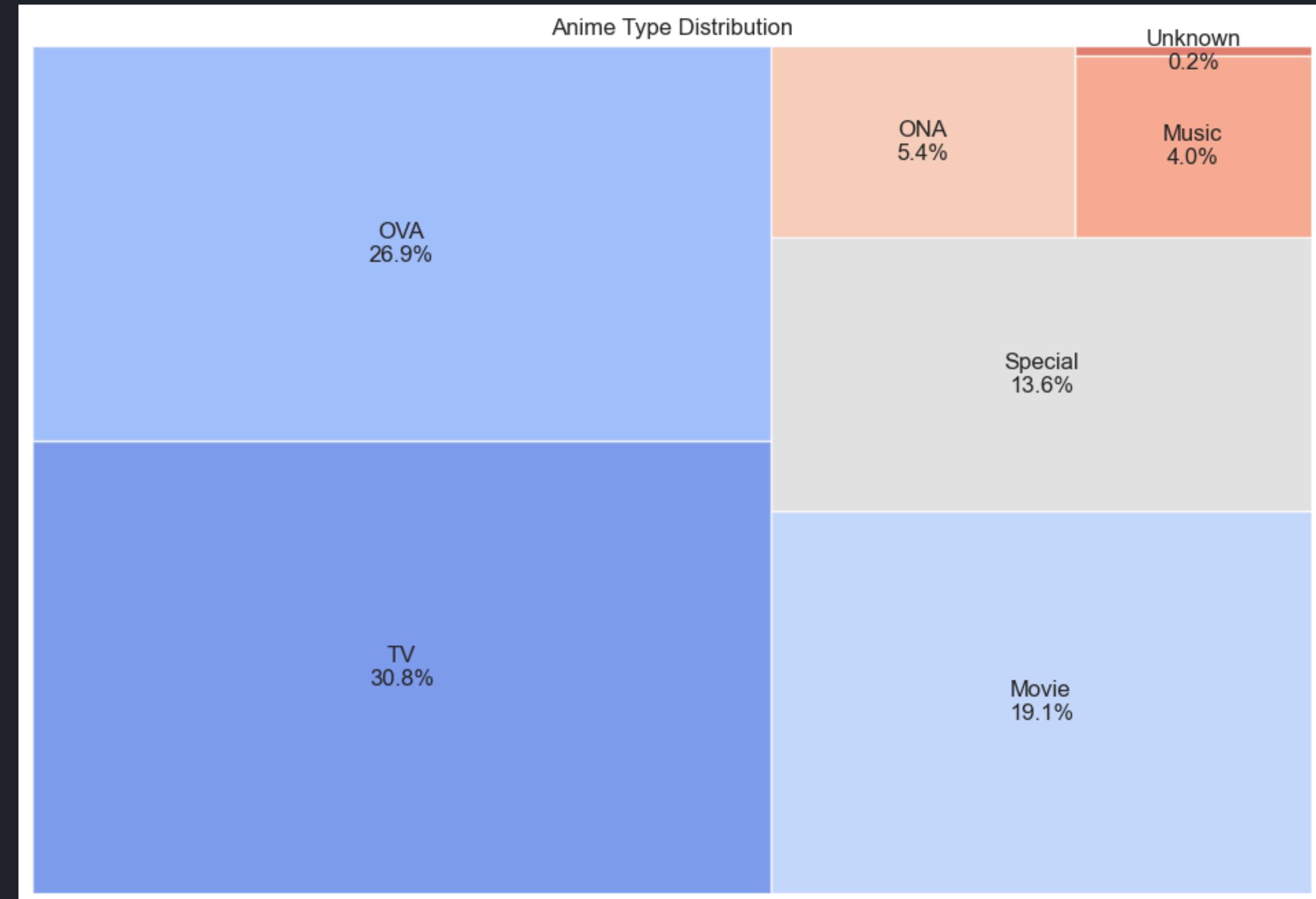
- Higher Rated Genres: "Mystery," "Police," "Thriller."
- Lower Rated Genres: "Yaoi," "Sports," "Unknown."
- Genre Diversity: Includes "Shounen," "Seinen," "Action."



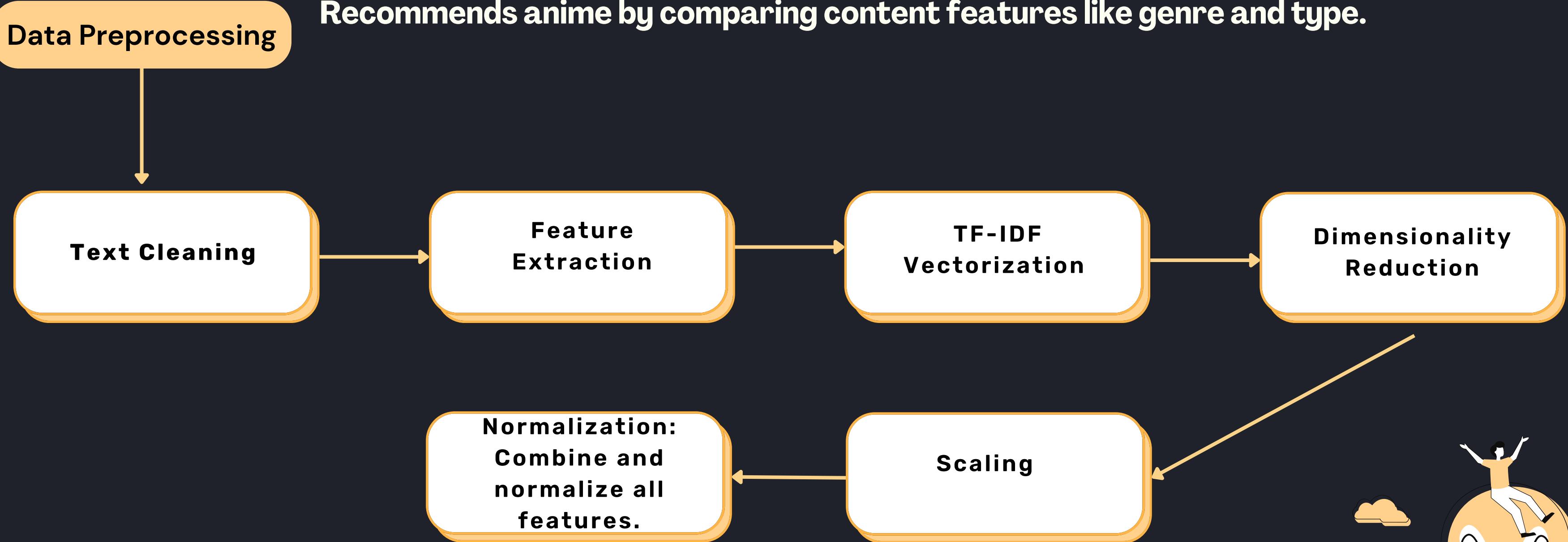
INSIGHTS

ANIME TYPE DISTRIBUTION

- TV anime series are the most popular type.
- OVAs and Movies are also popular types.
- ONA and Music cater to specific audiences.



CONTENT-BASED FILTERING



CONTENT-BASED FILTERING

Generating Recommendations using Cosine Similarity



Drama, Romance,
School,
Supernatural

Enter anime ID/name



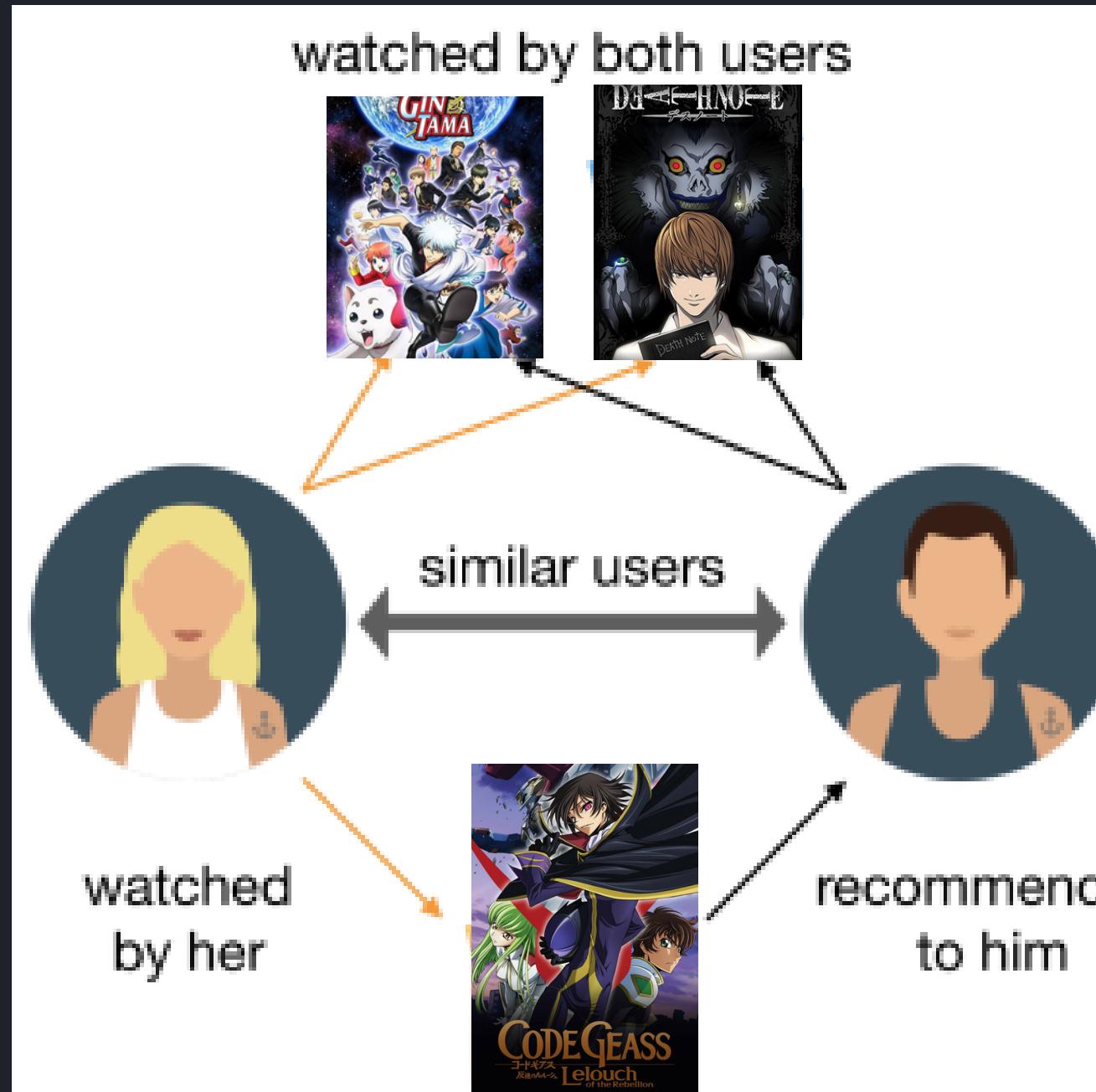
Action, Comedy,
Martial Arts, Shounen,
Super Power



Action, Adventure,
Comedy, Fantasy,
Martial Arts, Shounen,
Super Power

RECOMMEND!

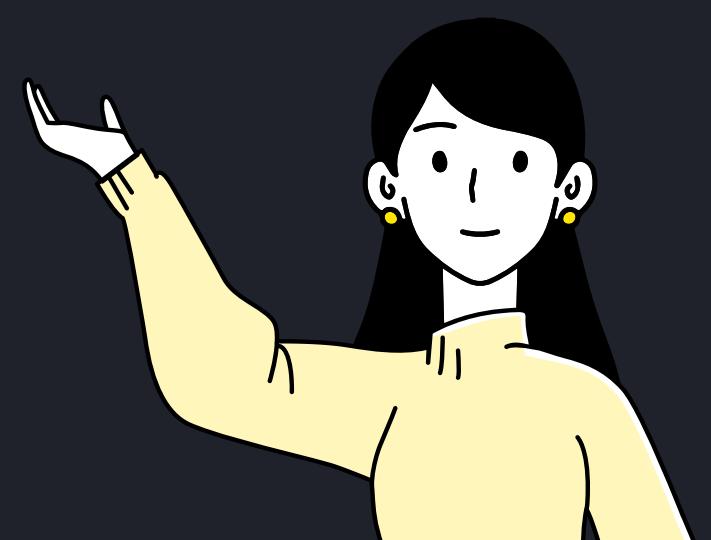
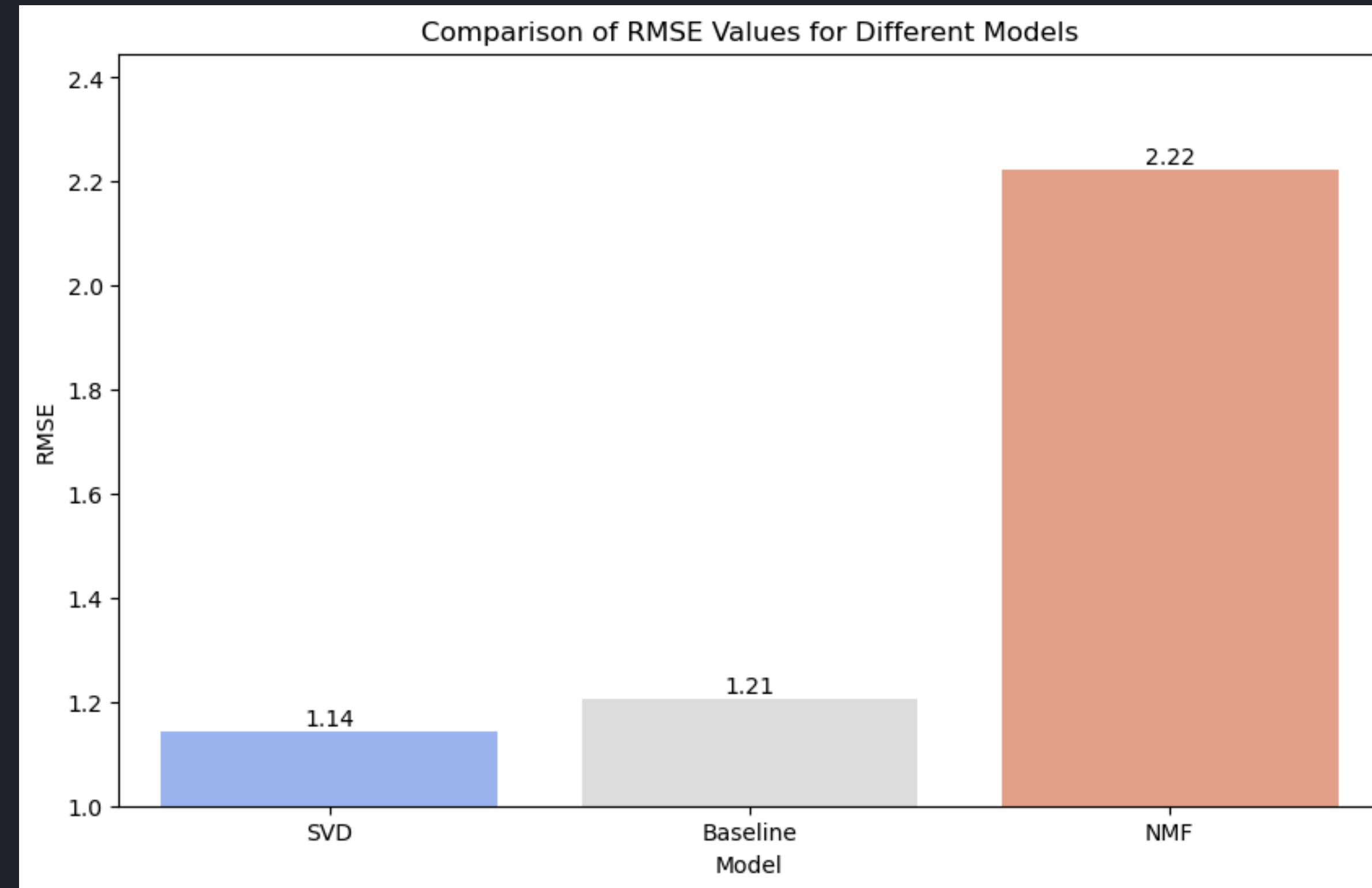
COLLABORATIVE FILTERING



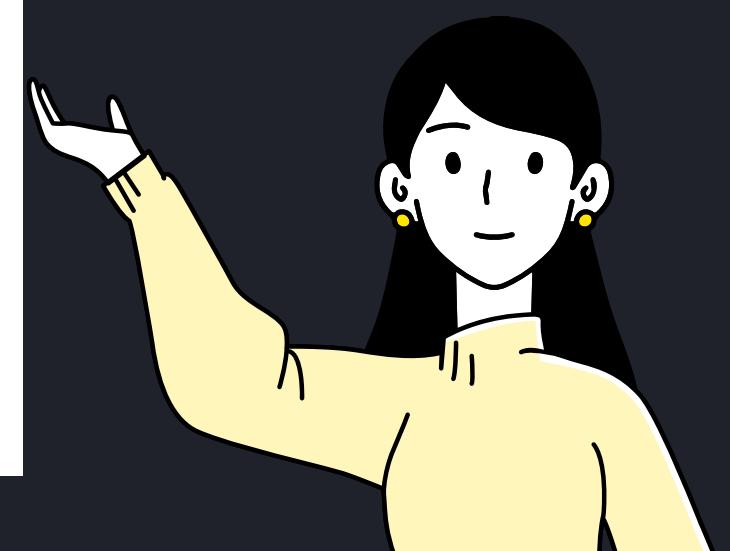
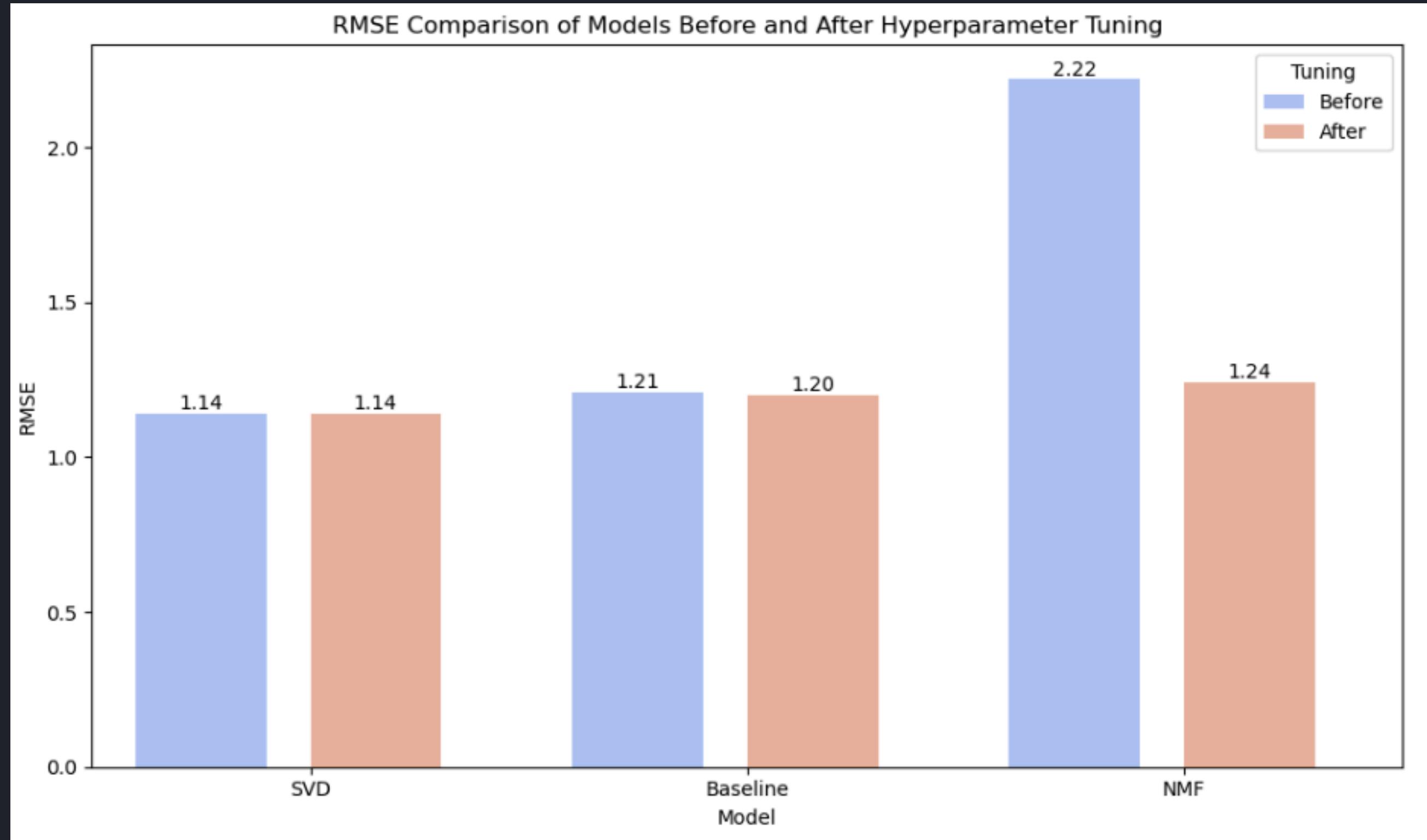
Using the Surprise Library:

1. Train models
 - Baseline
 - Singular Value Decomposition (SVD)
 - Non-negative Matrix Factorization (NMF)
2. Evaluate models using RMSE

COLLABORATIVE FILTERING



HYPERPARAMETER TUNING





ANIMEXPLORE

ANIMEXPLORE APP



RECOMMENDATIONS

- EXPAND DATA FEATURES
- DEVELOP HYBRID MODELS
- ENHANCE USER INTERFACE
- GATHER USER FEEDBACK



CONCLUSION



- The recommender app effectively tackles the challenge of finding personalized anime recommendations by leveraging advanced filtering techniques to provide tailored suggestions, enhancing the user experience and making it easier for anime fans to discover series that align with their unique interests.

THE END

THANK YOU!

