ANIME RECOMMENDER SYSTEM

EG4 Studios: Enhancing Anime Viewing Experience

EG4

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PROBLEM STATEMENT

Anime lovers often face a challenging task of browsing through large catalogues of titles, genres, and recommendations.

OBJECTIVES

1. Develop a Recommender System
2. Develop collaborative and content-based filtering techniques
3. Evaluate Model Performance
4. Develop a Streamlit app

METHODOLOGY

DATA LOADING

PREPROCESSING

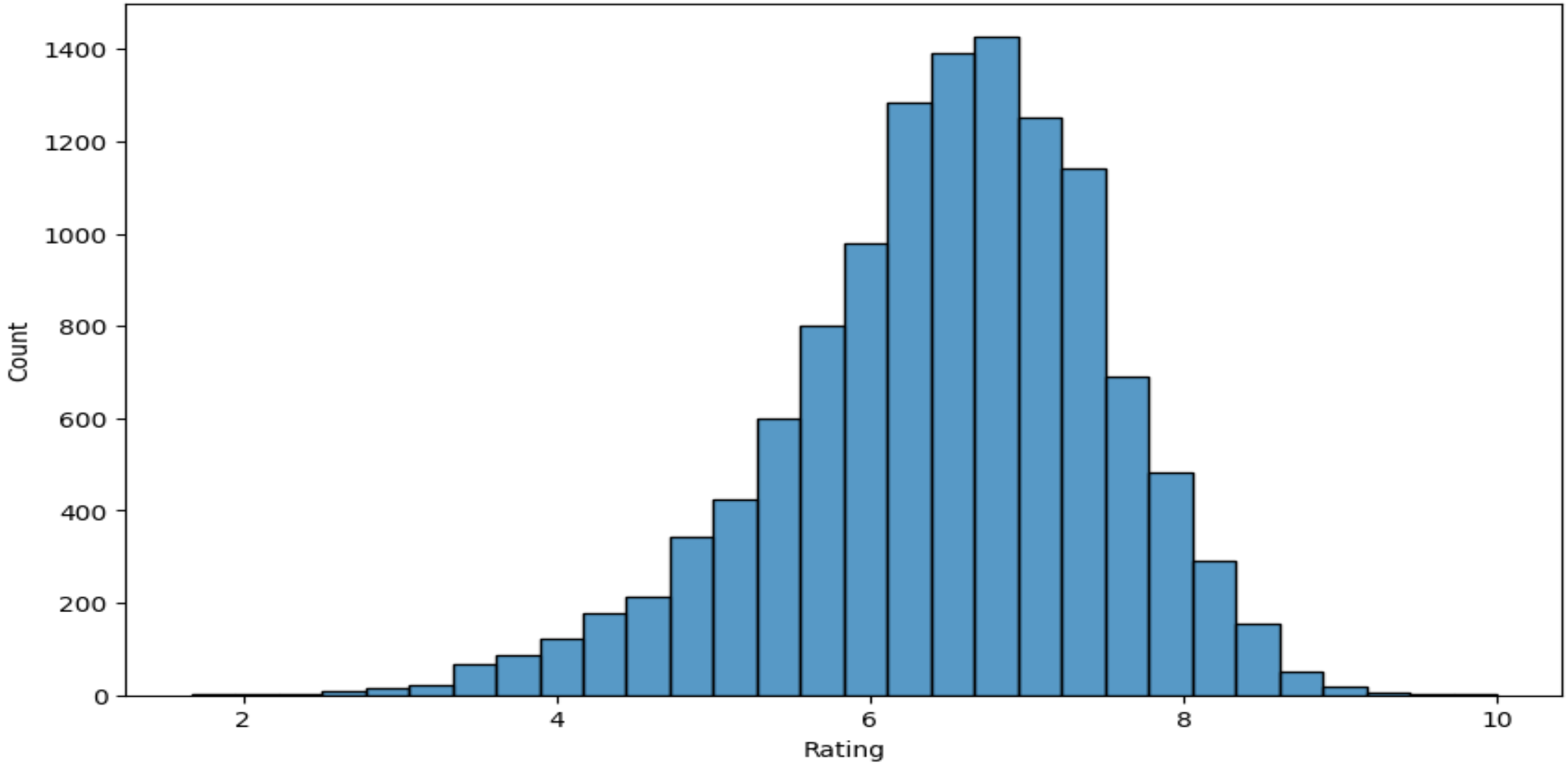
EDA

MODEL TRAINING & EVALUATION

DEPLOYMENT

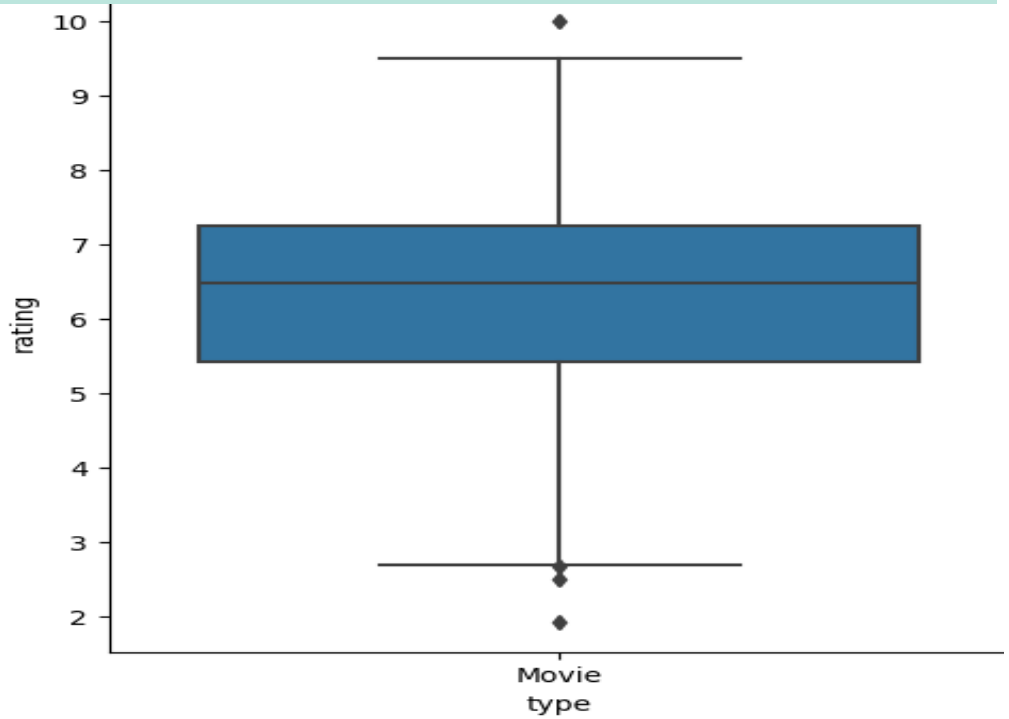
EXPLORATORY DATA ANALYSIS

DISTRIBUTION OF ANIME RATINGS

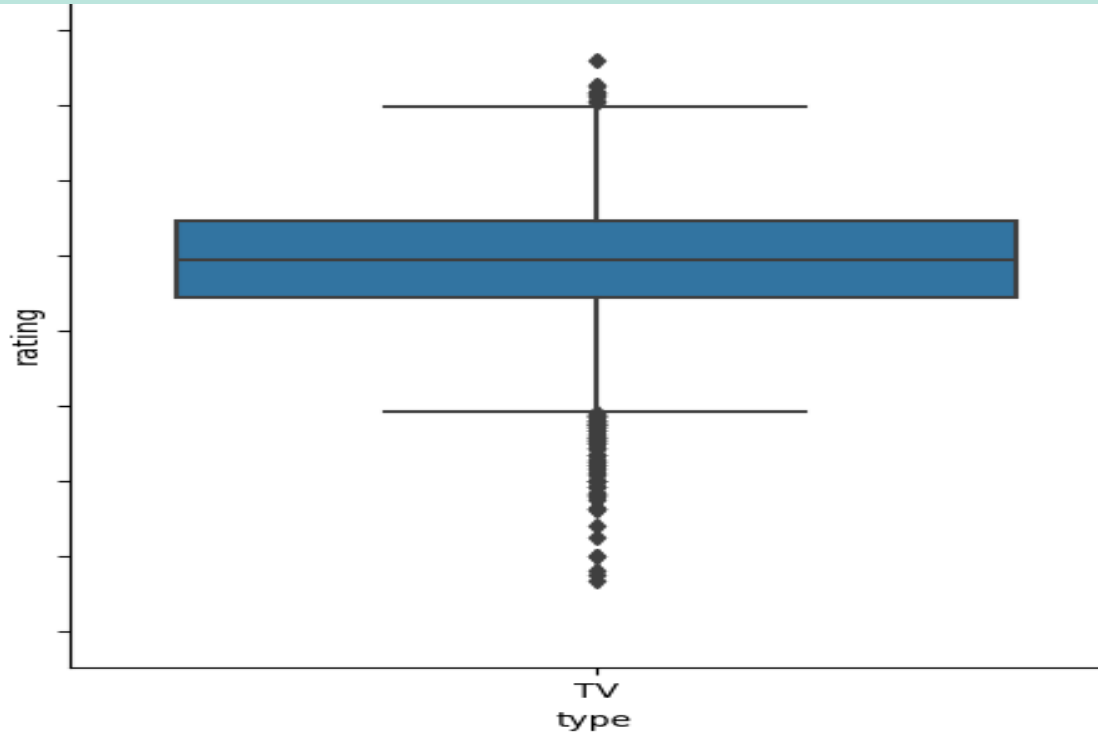


MOVIE VERSUS TV SHOW RATINGS

DISTRIBUTION OF RATINGS FOR MOVIES

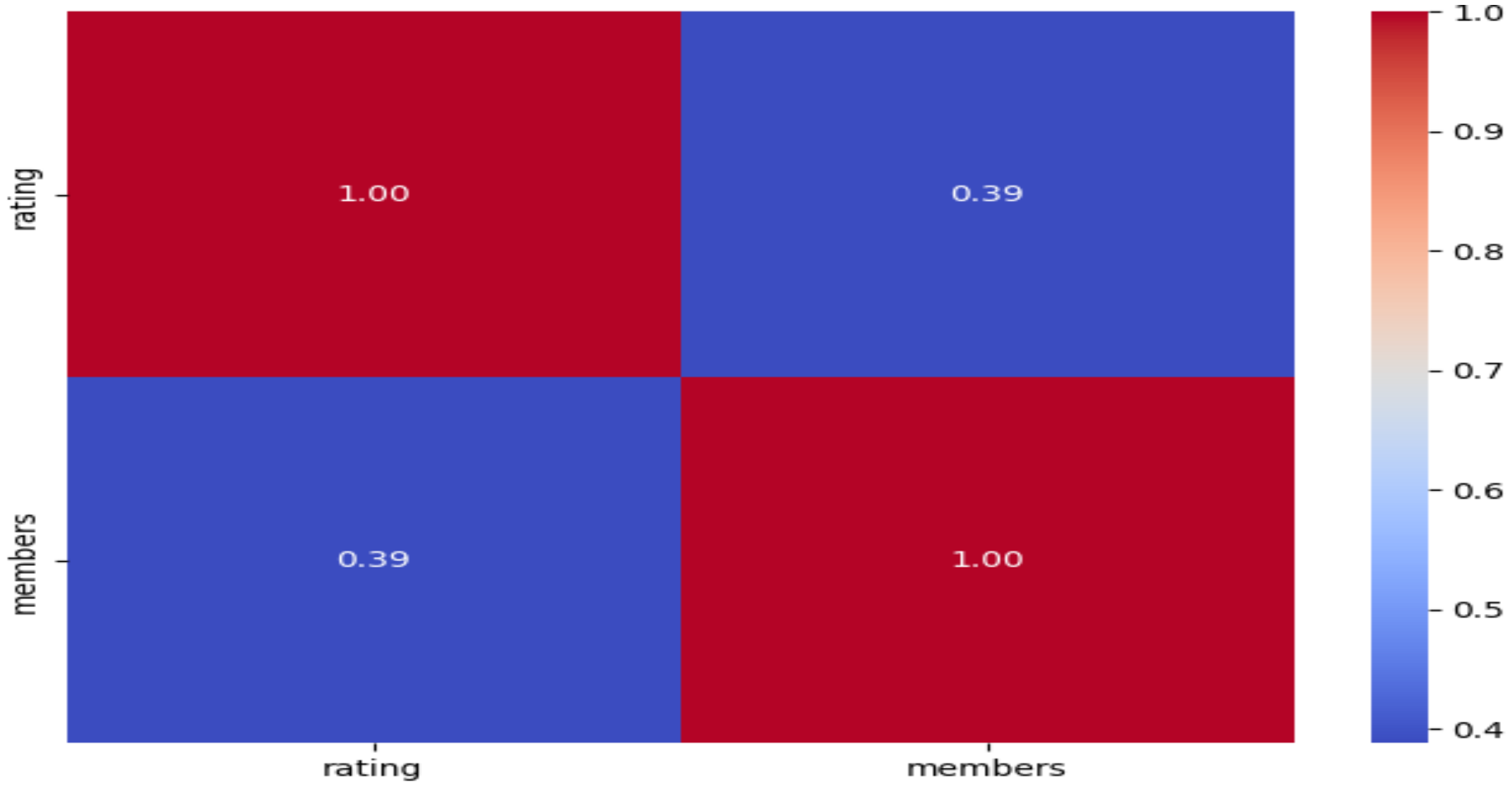


DISTRIBUTION OF RATINGS FOR TV SHOWS



WORD CLOUD PER GENRE

ANIME RATINGS AND MEMBERS



MODEL DEVELOPMENT

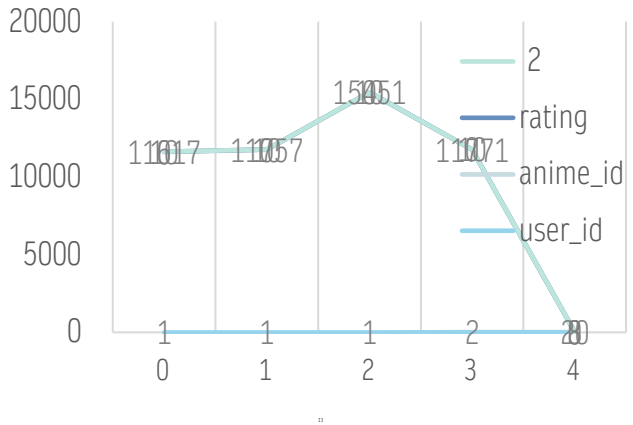
CONTENT-BASED RECOMMENDER MODELS

Cosine-similarity matrixTfidf vectorizer

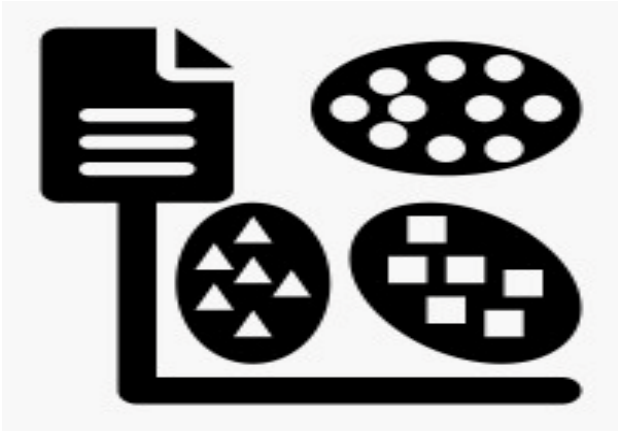
We used: title, genre, type and ratings

USER-BASED RECOMMENDER MODEL

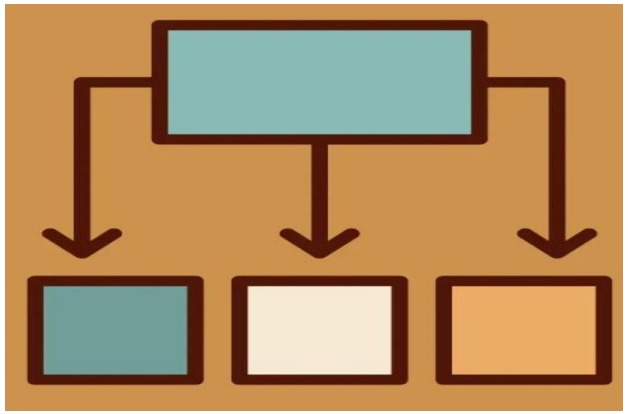
BaseLine Model



KNN



SVD



ANIME RECOMMENDATION SYSTEM OVERVIEW

Model	Aspect	Details
Singular Value Decomposition (SVD)	Performance Metric	RMSE (Root Mean Squared Error): **Approximately 1.248**
Baseline Model	Performance Metric	RMSE (Root Mean Squared Error): from **1.207** to **1.203**

MODEL DEPLOYMENT

STRENGTHS, LIMITATIONS AND CONCLUSION

STRENGTHS

- Personalized Recommendations
- User-Friendly Interface
- Comprehensive Data Handling
- Scalability

LIMITATIONS

Limited Data Coverage

Algorithm Constraints

Complexity of Implementation

CONCLUSION

- Developed an anime recommender system.
- Our baselineAchieved an RMSE of 1.207, indicating accurate predictions.
- Created a user-friendly Streamlit app for interactive recommendations and insights.

THANK YOU