MOVIE RECOMMENDATION SYSTEM

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PROJECT OVERVIEW

- Introduction to recommendation systems
- Relevance in the movie industry
- Brief overview of the movielens dataset

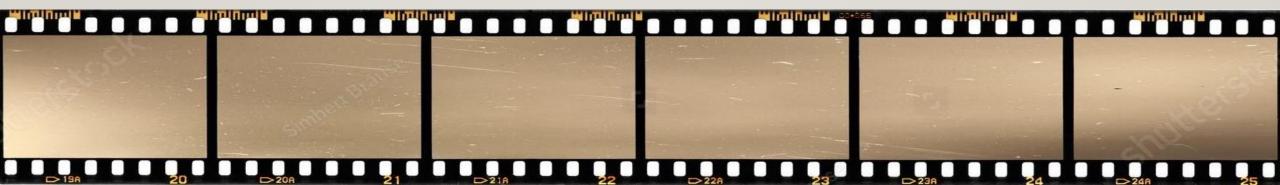
BUSINESS UNDERSTANDING

Goals of the movie recommendation system:

- Enhancing user engagement and satisfaction
- Improve user retention

Challenges addressed:

- Cold start problem
- Data sparsity

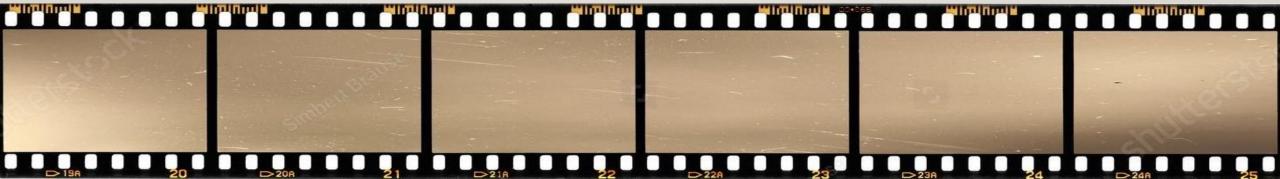


DATA UNDERSTANDING

Data source: Movie Lens Dataset by GroupLens Research Lab

Dataset Composition:

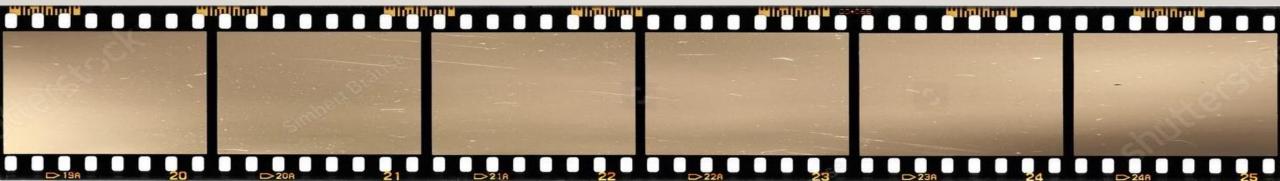
- 100,836 ratings across 9,742 movies
- Data collected from 610 users



THE PROCESS

- Data cleaning
- Exploratory data analysis
- Building a hybrid recommender system:

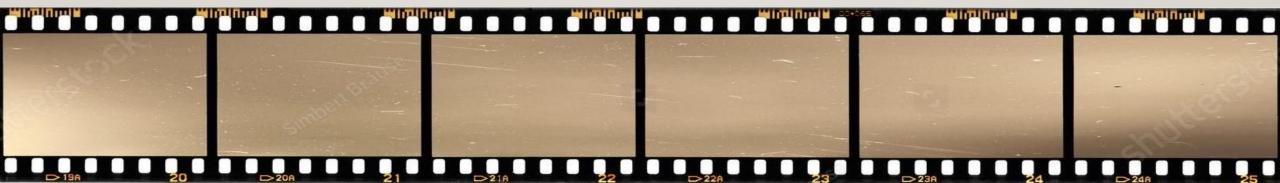
Combining collaborative and content-based filtering for better recommendations while addressing challenges like the cold start problem.



CONCLUSION

Implementation of a hybrid system avoids the shortcomings of either collaborative or content-based systems while achieving accuracy, diversity and novelty from the generated recommendations.

The effectiveness of the subject system leads to enhanced user experience and higher platform engagement.



RECOMMENDATIONS

Optimization Strategies:

- Continuously Refine: Update algorithms with user feedback and new data.
- Innovate: Explore advanced models like deep learning for better personalization.

Engagement and Diversity:

- Enhance Content Variety: Focus on diverse and novel recommendations to keep users engaged.
- Monitor and Adjust: Use engagement metrics to refine strategies and expand movie coverage.

Testing and Feedback:

- Implement A/B Testing: Experiment with various approaches to optimize user satisfaction.
- Feedback Integration: Systematically analyze user feedback to drive

THE END

