

Movie Recommendation System - Project Report

Introduction

The Movie Recommendation System is a project that demonstrates how machine learning techniques can be applied to suggest movies to users based on their preferences. The goal is to provide personalized movie recommendations to improve user experience.

Abstract

This project combines content-based filtering and collaborative filtering techniques to build a hybrid recommendation system. The system uses datasets containing movies and user ratings to suggest relevant movies to the user.

Tools Used

1. Python 2. Streamlit 3. Pandas 4. NumPy 5. Scikit-learn 6. MovieLens Dataset

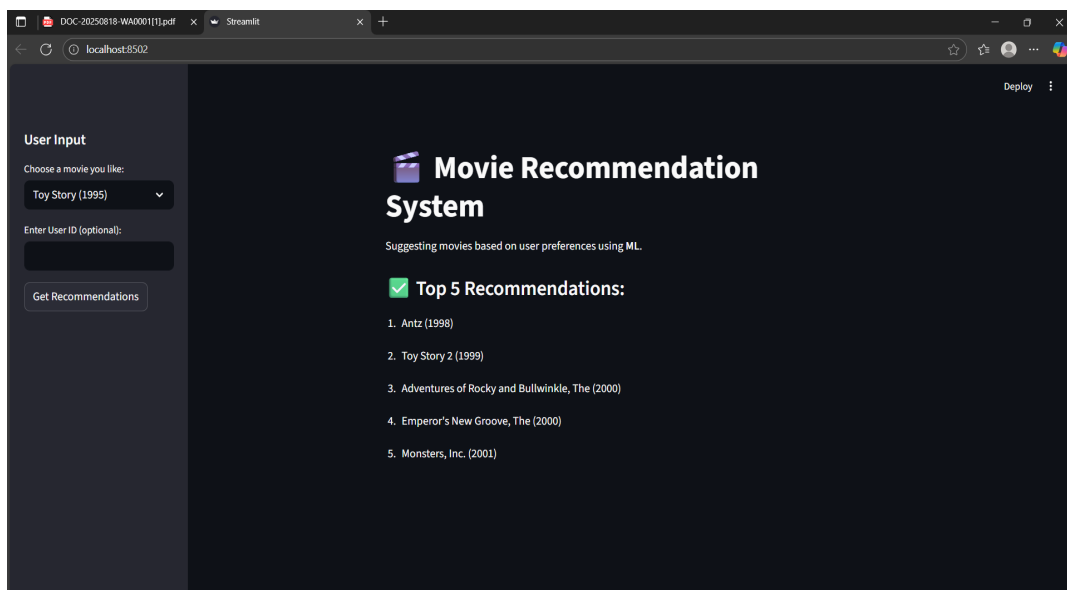
Steps Involved in Building the Project

1. Data collection and preprocessing from MovieLens dataset. 2. Implementation of content-based filtering using cosine similarity. 3. Implementation of collaborative filtering using user ratings. 4. Development of a hybrid model combining both methods. 5. Building an interactive user interface using Streamlit. 6. Deployment and testing of the application.

Requirements.txt

streamlit pandas numpy scikit-learn

Project Screenshot



Conclusion

The Movie Recommendation System successfully demonstrates the use of machine learning in building personalized applications. By combining both content-based and collaborative approaches, the system provides relevant and accurate movie recommendations.