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**TOPIC:MOVIE RECOMMENDATION SYSTEM**

**ABSTRACT**

This project presents a Movie Recommendation System that suggests movies based on user preferences using machine learning. It uses the MovieLens dataset and combines content-based filtering (using genres) and collaborative filtering (using user ratings). The system is built using Python, Pandas, scikit-learn, and Streamlit to provide the top 5 relevant movie suggestions through a simple user interface**.**

**INTRODUCTION**

Countless movies available, users often face difficulty choosing what to watch. A recommendation system solves this by suggesting movies based on past preferences and genres. This project uses machine learning techniques to build such a system, applying both collaborative and content-based filtering. A Streamlit web app allows users to input preferences and receive personalized movie recommendations.

**TOOLS AND TECHNOLOGIES**

* Python 3
* Pandas – for data manipulation and analysis
* Scikit-learn – for machine learning models
* Streamlit – for web app interface
* MovieLens dataset – source of movie metadata and user ratings

**DATASET**

Dataset is downloaded from open source platform kaggle

<https://www.kaggle.com/datasets/aigamer/movie-lens-dataset>

Files used here are:

* movies.csv – movie metadata (title, genres)
* ratings.csv – user ratings (userId, movieId, rating, timestamp)

**CONCLUSION**

This project demonstrates how machine learning and NLP can be applied to build a movie recommender system. It combines multiple filtering techniques for improved accuracy and allows real-time interaction through a web-based interface.

**SCREEN SHOT**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Content based**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Collaborative based**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Genre based**

**A screenshot of a computer

AI-generated content may be incorrect.**