

Movie Recommendation System

Abstract

The Movie Recommendation System is a Flask-based web application designed to provide users with personalized movie suggestions. The system employs a machine learning model that analyzes movie similarities using a precomputed similarity matrix. The user-friendly interface, inspired by Netflix's design, allows users to explore movies, search for specific titles, and receive recommendations based on their selected films.

The backend is built using Flask (Python), while the frontend is developed with HTML, CSS (Bootstrap), and JavaScript. Movie posters and details such as ratings, release dates, and overviews are dynamically fetched using the TMDb API. The application can be deployed locally on a personal computer or hosted on an Android device using Termux, allowing accessibility within the same network or globally via Ngrok.

This project demonstrates the integration of machine learning, web development, and API-based data retrieval to create an intelligent and engaging movie recommendation platform. Future enhancements may include user authentication, personalized watchlists, and deep learning-based recommendations to further improve accuracy and user experience.