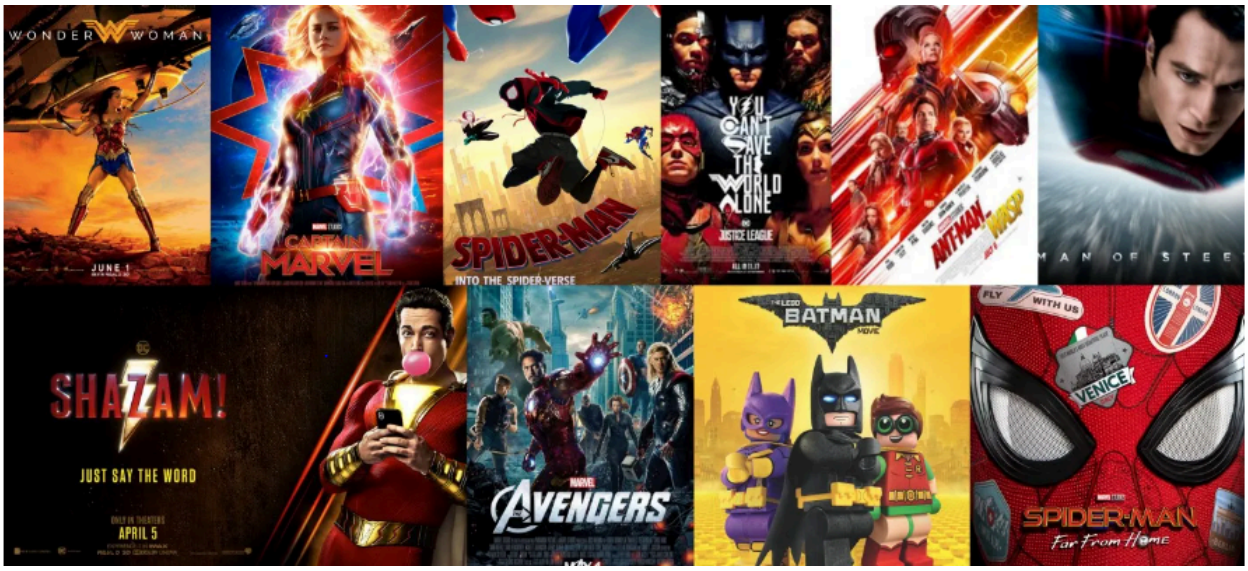
Movie Recommender System Project

A Recommendation System is a filtration program whose prime goal is to predict a user's "rating" or "preference" toward a domain-specific item or item. In our case, this domain-specific item is a movie.
Therefore, the main focus of our recommendation system is to filter and predict only those movies that a user would prefer.

The Movie Recommendation System is a machine learning-based application that provides personalized movie recommendations to users. It utilizes content-based as well as collaborative filtering techniques to analyze user preferences and similarities among movies to generate accurate and relevant recommendations.
The system is built using Python programming language and incorporates popular machine learning libraries such as scikit-learn and pandas.



The project utilizes the MovieLens dataset, a widely used dataset in the field of recommender systems, containing movie ratings and metadata. The dataset is preprocessed to create a user-item matrix and to calculate item similarity using cosine similarity. This enables the system to identify movies that are similar to the ones the user has previously enjoyed and recommend them accordingly.

There is also a bonus Collaborative filtering notebook from the ALX Movie Recommendation Project 2024 that predicts the ratings for a given user - movie pair using SVD Singular Value Decomposition technique .

Movie recommendation systems are not just about convenience; they represent a fascinating intersection of data science, machine learning, and user experience design.

These systems can make highly personalized recommendations that keep you engaged and satisfied by analyzing vast amounts of data, such as your viewing history, ratings, and even the time you spend watching certain genres.
One of the most famous websites for movie recommendations is IMDB.