Movie Recommendation System

Introduction

The objective of this project is to create a movie recommendation system that improves the quality of search results and provides more relevant movies according to the search history of users

Business Problem

A movie streaming platform receives complaints about irrelevant movie recommendations from users. Improving their recommendation system is highly important to decrease the retention rate and keep their current subscribers more engaged.

Datasets

This dataset contains files containing 5,000 movies listed in the Full MovieLens Dataset.

Data features include cast, crew, plot keywords, budget, revenue, posters, release dates, languages, production companies, countries, TMDB vote counts, and vote averages.

https://www.kaggle.com/datasets/tmdb/tmdb-movie-metadata

Anticipated Data Science Approach

I will use three types of recommendation systems:

- **Demographic Filtering**: Recommending the same movies to customers with similar demographics features
- **Content-Based Filtering**: Recommending similar movies based on metadata (genre, director, actors, etc.)
- **Collaborative Filtering:** Matches persons with similar interests and gives recommendations based on this matching

Deliverables

- Jupyter Notebook for Data Wrangling, EDA, Feature Engineering and Modeling
- A written final report
- A presentation slide deck