Movie Recommender System Project -1

**Project Flow:**

**Data 🡪 Preprocessing 🡪 Model 🡪 Website 🡪 Deploy**

Data Loading: movies.csv and credits.csv

Data Merging: Merge the movies and credits datasets on the 'title' column to form a comprehensive dataset containing relevant information for each movie.

**Key Outputs:**

* A clean and processed dataset ready for model training.
* A content-based recommender system using cosine similarity.
* A function to fetch movie recommendations based on a given movie title.

**Example Recommendations:**

* For the movie 'Avatar', the recommender system suggests similar movies based on their content🡪

Output: Titan A.E.

Small Soldiers

Independence Day

Ender's Game

Aliens vs Predator: Requiem

#### Start:

* **Importing Libraries and Loading Data :**

**import numpy as np**

**import pandas as pd**

**movies = pd.read\_csv("C:/Users/ishav/OneDrive/Desktop/MachineLearning/Project1/archive/tmdb\_5000\_movies.csv")**

**credits = pd.read\_csv("C:/Users/ishav/OneDrive/Desktop/MachineLearning/Project1/archive/tmdb\_5000\_credits.csv")**

* **Exploring the Data:**

**movies.shape**

**credits.shape**

**movies.head()**

**credits.head()**

**credits.head(1)['crew'].values**

* **Merging Datasets:**

**movies = movies.merge(credits, on='title')**

**movies.head(1)**

**🡪** Merge movies and credits datasets on the title column to combine relevant information.

* **Removing Unneccessary Columns :**

**movies.info()**

**movies['original\_language'].value\_counts()**

**movies = movies[['movie\_id', 'title', 'overview', 'genres', 'keywords', 'cast', 'crew']]**

**movies.head()**

* **Handling Missing And Duplicate Values :**

**movies.isnull().sum()**

**movies.dropna(inplace=True)**

**movies.isnull().sum()**

**movies.duplicated().sum()**

* **Converting Stringified Lists into Python Lists :**