PYTHON PROJECT LINK

https://github.com/Phantom-Creator12/Python-Project-Submission

1. The Movie Recommender is using TMDB api to fetch data based on user inputs and store as a csv file

2. Then 10 random recommendations are generated from the saved file

README

Movie Scraper and Recommendation System

This project consists of two main scripts: *tmdb_scraper.py* and *tmdb_recommender.py*

These scripts work together to scrape movies data from TMDB based on user input and provide random movie recommendations based on the data.

Prerequisites

Before running the scripts, ensure you have the following Python packages installed:

- requests
- time
- urlencode
- random
- pandas

Can be installed using pip:

pip install requests pandas time urlencode random

Scripts Overview

1. tmdb_scraper.py

- Scrapes movie data from the TMDB API based on user input (genre, minimum rating, minimum vote count, etc.).
- Saves the scraped data to a CSV file with the genre name.

2. tmdb_recommender.py

- Reads the saved CSV file containing movie data for a given genre.
- Recommends a random selection of 10 movies from the dataset.
- Displays the recommended movies with their titles, release years, ratings, and vote counts.

Usage

Scraping Movie Data (Can be run as a standalone file to scrape and save data in csv file)

1. Run the tmdb_scraper.py script:
2. Follow the prompts to enter:
   • Enter your API key : (Prompt to enter your API key) :
   • Movie genre (a list of genre is shown e.g., action, comedy, drama) :

• Start year (e.g., 2000) :
• Minimum rating (e.g., 7.0) :
• Minimum votevount for the ratings (e.g., 1000) :

3. The script will fetch all the results based on search criteria and save the data to a CSV file named after the genre.

Recommending Random Movies

1. Run the tmdb_recommender.py script
2. The script will automatically call the Movie_Scraper function from tmdb_scraper.py script
3. Follow the prompts to enter:
    - Enter your API key :
    - Enter the genre:
    - Enter the release date start year (e.g., 2000):
    - Enter the minimum rating (e.g., 7.0):
    - Enter the minimum vote count (e.g., 500):
4. After the file is saved, the function reads the csv file and gives 10 random movie names with release year, ratings and vote_count.

Example

Here's an example of how to use the scripts:

1. Run the tmdb_recommender.py script
2. Enter the following inputs when prompted:
   • Enter your API key : xxxxxxxxxxxxxxxxxxx
   • Enter the genre: action
   • Enter the release date start year (e.g., 2000): 2000
   • Enter the minimum rating (e.g., 7.0): 7.0
   • Enter the minimum vote count (e.g., 500): 500
3. The script will save the data to tmdb_movies_genre.csv
4. The script will read the tmdb_movies_genre.csv file and print the details of 10 random movies from the list.

Error Handling Scrape Movies Script

• If an invalid genre is entered (non-alphabetic characters), the script will prompt you to enter a valid genre.
• If an invalid year is entered (non-4-digit year), the script will prompt you to enter a valid 4-digit year.
• If an invalid rating is entered (non-numeric values), the script will prompt you to enter valid numeric values.
• If an invalid vote_count is entered (non-numeric values), the script will prompt you to enter valid numeric values.

Recommend Movies Script

• If the CSV file is empty or improperly formatted, the script will print an error message and guide you to check the file.