Movie Recommendation System

PROJECT SYNOPSIS

Machine Intelligence

BACHELOR OF TECHNOLOGY- V Sem CSE

Department of Computer Science & Engineering

SUBMITTED BY

Batch No:- 10

NAME: VIJITH BG SRN: PES2UG20CS402
NAME: ARNAV KUMAR SRN: PES2UG20CS403
NAME: SAMAY JAIN SRN: PES2UG20CS405

PES UNIVERSITY

(Established under Karnataka Act No. 16 of 2013)

100 Feet Ring Road, BSK III Stage, Bengaluru-560085

Abstract and Scope (should not exceed 1 page)

Problem Statement:

Perform analysis and Basic Recommendations based on Similar Genres and Movies which Users prefer.

Some of the Key Points on which we will be focusing include:

- Profitability of Movies
- Language-based Gross Analysis
- Comparison of Gross and Profit for Different Genres,
- Recommendation systems based on Actors, Movies, Genres.

This Project will help us to understand the Correlation between these factors.

Abstract:

The recommendation system plays an essential role in the modern era and used by many prestigious applications. The recommendation system has made the collection of apps, creating a global village, and growth for abundant information. The recommendation system consists of Collaborative Filtering, Content-based, and hybrid-based approaches. Our project will represent an overview of Approaches and techniques generated in the Collaborative Filtering based recommendation system. It classifies collaborative filtering using various approaches like vectorisation, matrix factorization, user-based recommendation, cosine distance and item-based recommendation. We extract aspect-based specific ratings from reviews and also recommend reviews to users depends on user similarity and their rating patterns. Finally, validating the proposed movie recommendation system for various evaluation criteria, and also the proposed system shows better result than conventional systems.

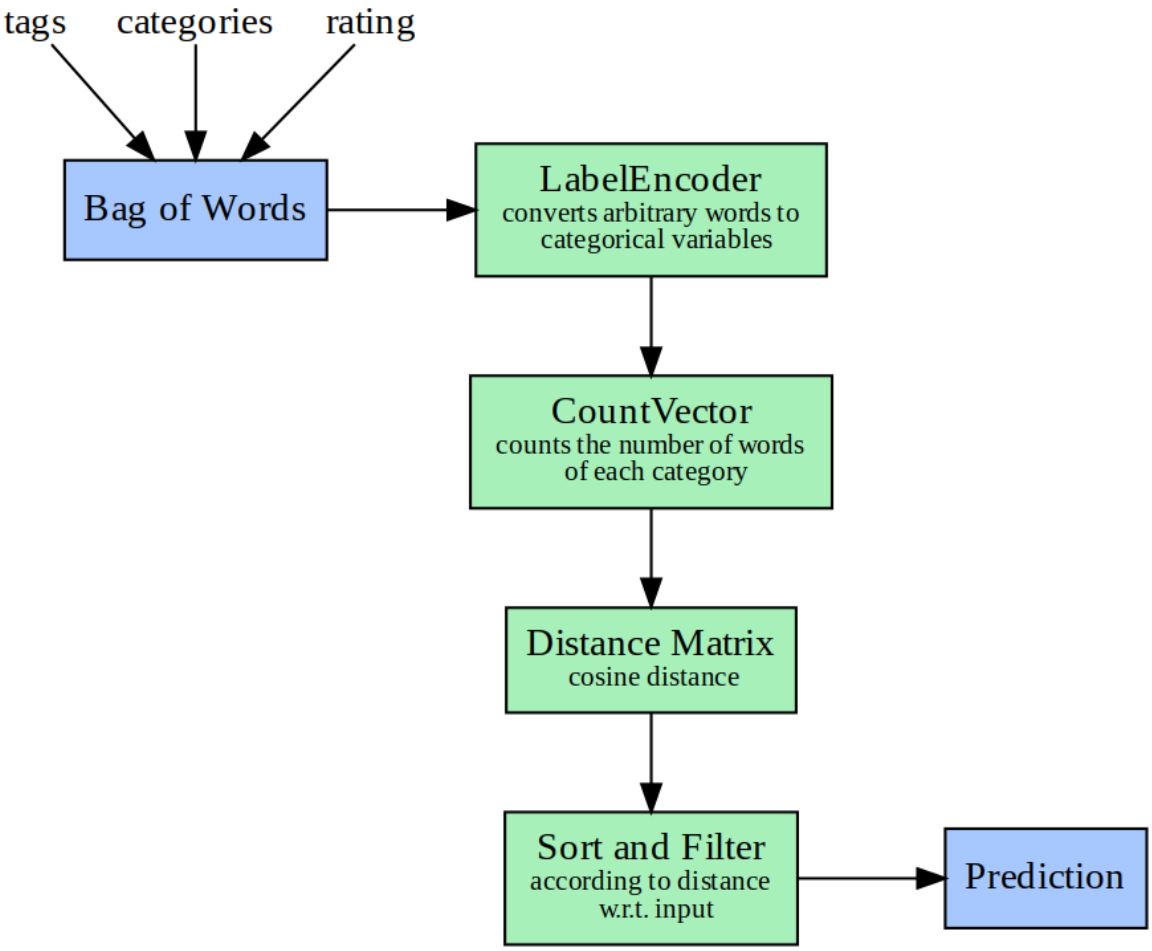
Feasibility Study:

Let us take an example of a website that streams movies. The website is in its nascent stage and has listed all the movies for the users to search and watch. What the website misses here is a recommendation system. This results in users browsing through a long list of movies, with no suggestions about what to watch. This, in turn, reduces the propensity of a user to engage with the website and use its services. Therefore, the simplest way to fix this issue is to use a popularity-based recommendation system. Top review websites like IMDb and Rotten Tomatoes maintain a database of movies and their popularity in terms of reviews and ratings. Utilizing this data to recommend the most popular movies to users based on their star ratings, could increase their content consumption.

The popularity-based recommendation system eliminates the need for knowing other factors like user browsing history, user preferences, the star cast of the movie, genre, and other factors. Hence, the single-most factor considered is the star rating to generate a scalable recommendation system. This increases the chances of user engagement as compared to when there was no recommendation system.

Design Approach/ Methodology/ Planning of work

The study has used a dataset to train the cosine similarity model which is used for recommending movies. Now a movie name is taken as an input and sent to the movie recommendation model to predict similar movies. Through already made web scraping from the IMDB site, the reviews of that movie are obtained and sent to the Analysis model (popularity) for classifying the reviews as positive or negative.



References

[1] N Pavitha, Vithika Pungliya, Ankur Raut, Roshita Bhonsle, Atharva Purohit, Aayushi Patel, R Shashidhar,
Movie recommendation and sentiment analysis using machine learning, Global Transitions Proceedings,Volume 3, Issue 1,2022,Pages 279-284,ISSN 2666-285X, https://doi.org/10.1016/j.gltp.2022.03.012. (https://www.sciencedirect.com/science/article/pii/S2666285X22000176)

[2] Kumar, Yogesh & Kumari, Naveen. (2020). “Movie Recommendation System.” Journal of Interdisciplinary Cycle Research, Volume XII, Issue IX, September 2020. ISSN NO: 0022-1945

[3] P. Karthikeyan and C. Tejasvini, "Review of Movie Recommendation System," 2022 8th International Conference on Advanced Computing and Communication Systems (ICACCS), 2022, pp. 1538-1543, doi: 10.1109/ICACCS54159.2022.9785014.

[4] C. -S. M. Wu, D. Garg and U. Bhandary, "Movie Recommendation System Using Collaborative Filtering," 2018 IEEE 9th International Conference on Software Engineering and Service Science (ICSESS), 2018, pp. 11-15, doi: 10.1109/ICSESS.2018.8663822.

[5] R. E. Nakhli, H. Moradi and M. A. Sadeghi, "Movie Recommender System Based on Percentage of View," 2019 5th Conference on Knowledge Based Engineering and Innovation (KBEI), 2019, pp. 656-660, doi: 10.1109/KBEI.2019.8734976.

[6] N. Kapoor, S. Vishal and K. K. S., "Movie Recommendation System Using NLP Tools," 2020 5th International Conference on Communication and Electronics Systems (ICCES), 2020, pp. 883-888, doi: 10.1109/ICCES48766.2020.9137993.

[7] Anuja Gaikwad, Samradnyee Kudalkar, Ashwin Jethawa.
Journal, IRJET. "IRJET- MOVIE RECOMMENDATION SYSTEM USING MACHINE LEARNING." IRJET, 2021. Volume: 08 Issue: 04 | Apr 2021, e-ISSN: 2395-0056, p-ISSN: 2395-0072

[8] Abhishek Singh, Abhishek Rawat , j Shanmukh Rao, Samyak Jain, Uppalpati Yogendra Reddy.
Journal, IRJET. "IRJET- A Research Paper on Machine Learning Based Movie Recommendation System." IRJET, 2021. Volume: 08 Issue: 03 | Mar 2021, e-ISSN: 2395-0056, p-ISSN: 2395-0072

[9] Prof. Sanober Shaikh, Adhithyaram S, Aryak Deshpande.
Journal, IRJET. "IRJET-Movie Recommendation System." IRJET, 2021. Volume: 08 Issue: 05 | May 2021. e-ISSN: 2395-0056, p-ISSN: 2395-0072

[10] Aayush Ladda, Meet Shah, Ruchi Davda, Ms. Dhanashree Toradmalle, Mr. Harish Motekar. "IRJET- Recommendation System Using Hybrid Filtering." IRJET,2021. Volume: 08 Issue: 05 | May 2021, e-ISSN: 2395-0056, p-ISSN: 2395-0072

[11] Rutuja Dinde, Saloni Zarkar, Yashasvini Varma, "Movie Recommendation System using Collaborative Filtering", Volume: 08 Issue: 05 | May 2021, . e-ISSN: 2395-0056, p-ISSN: 2395-0072