Movie Recommendation System Using Sentient Analysis

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Abstract*— *The purpose of the project entitled as "Movie Review System" is to computerize and recommend movies based on the genre preferences which is user friendly simple, fast, and cost – effective. It deals with the collection of various movie databases provided through movie review module. Traditionally, it was done by critics and the choices of users weren't taken into account. The main function of the system is register and store movie details and retrieves these details as and when required, and also to use these details meaningfully System input contains user login modules, movie review modules, admin control and system design. To tackle this issue we have proposed a fully automated system to retrieve data and present it to the user using sentient analysis.

Keywords: Recommendation System, Sentient Analysis Recommender System, ML Model

I. INTRODUCTION

We usually encounter movie rating websites where users aren't allowed to rate and discuss movies online. These ratings are provided as input to the online site rating system. The admin then checks reviews, critic's ratings and displays a web rating for each movie. Here we are introducing a new concept that allows users to post reviews and storage of these reviews supported by sentiments. The system now analyses this data to see for user sentiments related to each comment. Our system has a sentiment library designed for English and for Hindi sentiment analysis. The system breaks user comments and sees for sentimental keywords which then predict user sentiment related to it. Once the keywords are done being associated, the comment is given a sentiment rank. The system now gathers all comments for a selected movie then calculates a mean ranting to achieve it. This score is generated for every movie within the system. The system further sorts and displays top rated movies as per ratings and analysis given both by the user and critics, then calculates a top ten list automatically. This provides an automatic movie rating system supported sentiment analysis.

It is a user-friendly, simple, fast and price effective system designed to recommend user their movies supported their preferences.

II. EXISTING WORK

Some of the common approaches of recommender system are:

1. Content-based filtering

2. Collaborative filtering

A. Content Based Filtering

This approach filters the items based on the likings of the user. It presents results upon what the user has previously liked. The method to model this approach is the Vector Space Model (VSM). It calculates the similarity of the movies based upon its description and gives the concept of TF-IDF (Term Frequency-Inverse Document Frequency).

Advantages of content-based filtering are:

- They capable of recommending unrated items
- The working can easily be explained by of the recommendation system, by categorizing the content features of an item.
    - This filtering system needs only the rating history of the user and does not concern itself with any other user of the same system.

Disadvantages of content-based filtering are:

- It does not work for a new user that haven't rated anything yet, as atleast some ratings are required by the contentbased recommender to evaluate the user preferences and provide accurate recommendations.
- No recommendation of serendipitous items.
- Limited Content Analysis- The system fails it is not able to distinguish the item hat. That is what a user likes and dislikes.

B. Collaborative Filtering

Collaborative filtering system recommends items supported similarity measures between users and/or items. The system recommends items that are either preferred by the user or preferred by other user but with similar tastes. This is supported the scenario where an individual asks his colleagues, who have similar preferences, to recommend him movies.

Advantages of collaborative filtering based systems:

- It's depends upon the relation between users which means that it is content- independent. CF recommender systems can recommend similar movies based upon observing similar-movie preferences between different user behavior.

- They can make assessment of movies by taking into account other peoples experience.

Disadvantages of collaborative filtering are:

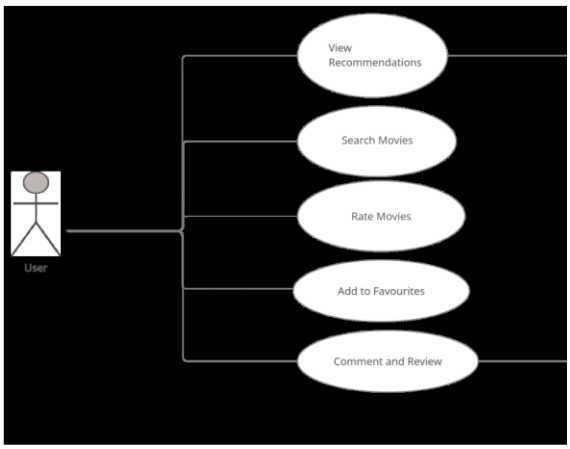
- Early rater problem: This system cannot provide any recommendations for brand new items since there are no user ratings on which a prediction can be based.
- Gray sheep: For the system to recommend anything, another group will be needed which has similar characteristics and even if such group exists it will be difficult to recommend to users who don't consistently agree or disagree to these groups.
- Sparsity problem: In majority cases the amount of movies present often exceed the total number of users

present which makes it difficult to assess items rated by enough items.

III. Proposed Model

The Movie Recommendation System is designed for an easier and smoother way to browse through to replace their existing system. The new system is to control and add the information through data scrapping which will be fully automated using API. These services are to be provided in an efficient manner, with the goal of reducing the time and resources currently required for such tasks. It will fully automate and will bind different pools of data to make it more effective.

IV. USE CASE DIAGRAM



V. FUTURE SCOPE

- Can be additional extended for generating reviews associated with the product in on-line Shops.
- Can also be used for generating reviews for the net videos.
- Can also be used for generating reviews associated with the universities throughout admission.
- Can also be used for generating reviews of the candidates within the election.
- It can used in medical field to analyze the best consultant and doctors

VI. CONCLUSION

This solution is carefully analysed and after the evaluation of the possible solutions, the most feasible solution for this project is identified and selected, so the project turns to be cost-effective, vital and practical. Thus processing information will be faster. It guarantees accurate maintenance of details. It easily reduces the book keeping task and thus reduces the human effort and increases accuracy speed. The Movie Review System can be entered using a username and password. It is accessible either by an administrator or registered user. Only the admin can add data into the database. The data can be retrieved easily. The data is well protected for meant only for personal use and makes the data processing faster.

VII. References

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