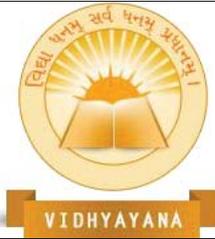**6**

Movie Recommender System

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Abstract-

A Recommendation framework could be a framework that gives suggestions to users for certain assets like movies, motion pictures, web series, etc., based on a few data that system collects from user. The Movie Recommendation System is a web-based application that provides best movie recommendations to users based on their preferences. The system uses data-based filtering techniques to analyze user behavior and generate recommendations based on similar preferences of other users. The system utilizes a large dataset of movies and their attributes such as genre, cast, director, year of release, and ratings to generate recommendations for users. The users can provide their preferences by rating movies they have watched, and the system then generates a list of recommended movies based on their ratings. The Movie Recommendation System is designed to be user-friendly and interactive. Users can browse through the recommended movies, view their details, and even watch trailers of the movies. The system also provides users with the option to add movies to their watchlist or mark them as already watched. The system is beneficial for users who are looking for new movies to watch but are overwhelmed by the vast amount of options available. The personalized recommendations make it easier for users to find movies that they are likely to enjoy, based on their preferences and past behavior.

Index Terms- Index Terms- K-means, vector space method, recommendation framework, information mining, substance-based filtering.

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INTRODUCTION

In today's world recommendation systems plays important role in human life for business perspective as it helps to grow business and it is also user friendly, it is used in various companis. Also, it makes the life of any individual easy by giving suggestion so it can save the fruitful time of any individual. The Movie Recommendation System is a web-based application that provides personalized movie recommendations to users. The system is designed to help users find new movies to watch based on their preferences and past behavior. The system uses collaborative filtering techniques to generate recommendations based on the behavior of other users with similar preferences.There are mainly three types of recommendation system like data based, hybrid mode filtering and collaborative filtering.We worked here on content or data based filtering method.In content based filtering method user only get suggestion on what he like to watch by various categories by favourite actor ,favourite actress, favourite category of movie like romantic, horror based, biography, action etc.

Objectives

The main objective of the Movie Prediction System is to provide users with personalized movie recommendations based on their preferences and past behavior. The system aims to make it easier for users to find new movies to watch and avoid the overwhelming number of options available.

Study of work done so far -Within the field of Recommandation Framework parcels of work, consider, term paper has been distributed and analyst, understudieshave done gigantic work to unravel issues like: - untrue recommendtaion, off-base predictaions etc.

Features:

The Movie Recommendation System has the following features:

Personalized Recommendations: The system provides personalized recommendations based on user behavior and preferences.

User-Friendly Interface: The system has a user-friendly interface that is easy to navigate.

Large Dataset: The system uses a large dataset of movies and their attributes such as genre,
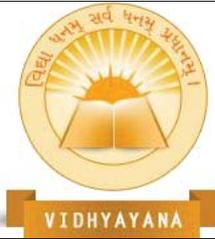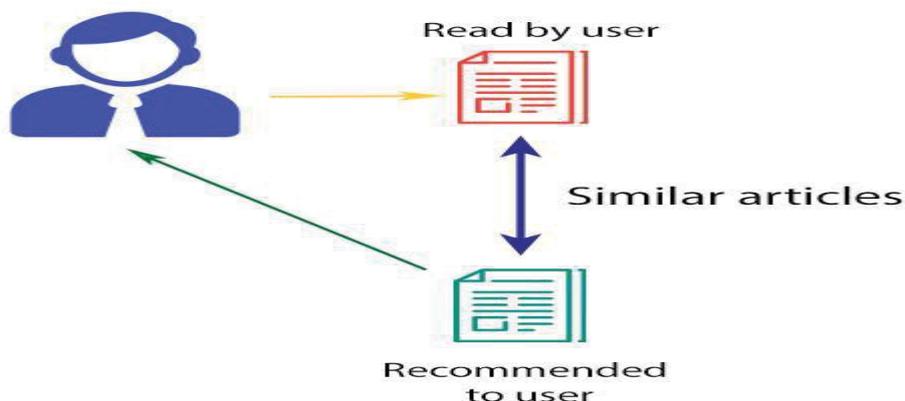
cast, director, year of release, and ratings.

Watchlist: The system allows users to add movies to their watchlist and mark movies as already watched.

Trailers: The system allows users to watch trailers of the recommended movies.

Analysis and Design

Content-based filtering-Content-based sifting is one well known procedure of proposal or recommender frameworks. The substance or qualities of the things you like are alluded to as "content."Here, the framework employments your highlights and likes in arrange to prescribe you with things merely might like. Its employments the data given by you over the web and the ones they are able to assemble and after that they clergyman proposals concurring to that. The objective behind content-based sifting is to classify items with specific catchphrases, learn what the client likes, see up those terms within the database, and after that prescribe comparable things. This sort of recommender framework is gigantically subordinate on the inputs given by clients, a few common illustrations included Google, Wikipedia, etc. For case, when a client looks for a bunch of watchwords, at that point Google shows all the things comprising of those keywords

Digram 1: Design Model

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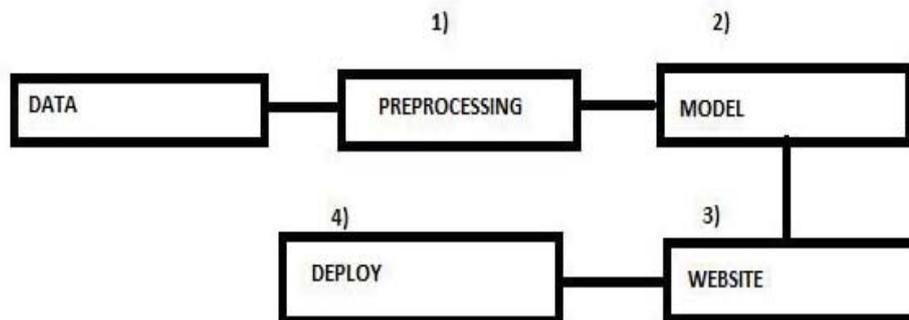
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Digram 2: design model

Techniques to be used -The vector space method

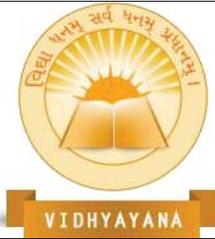Design ModelTechniques to be utilized -The vector space method. Let us assume you studied a wrongdoing thriller book by Gone girl, you audit it on the web. Moreover, you survey one more anecdotal book of the comedy sort with it and audit the wrongdoing thriller books as good and the comedy one as terrible. Presently, a rating framework is made agreeing to the data given by you. Within the rating framework from to 9, wrongdoing thriller and criminologist sorts are positioned as 9, and other genuine books lie from 9 to and the comedyones lie at the most reduced, perhaps in minus. With this data, the following book suggestion you'll get will be of wrongdoing thriller classes most likely as they are the most noteworthy appraised classes for you. For this positioning framework, a client vector is made which positions the data given by you. After this, an thing vector is made where books are positioned concurring to their sorts on it.With the vector, each book title is doled out a certain esteem by duplicating and getting the speck item of the client and thing vector, and the esteem is at that point utilized for recommendation.Like this, the dab items of all the available books looked by you're positioned and concurring to it the best 5 or top 10 books are assigned.This strategy was the primary strategy utilized by a content-based suggestion framework to prescribe things to the user.

Technology Stack:

Programming language : Python (3.8)

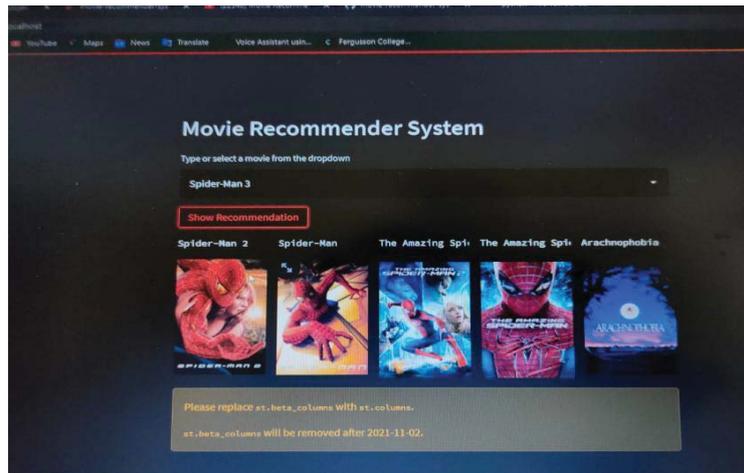**Tools** : Excel, Pycharm

Testing Env : Jupiter Notebook

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Packages : NumPy, pandas

Hardware Requirement : Windows 7 or newer 4GB Minimum Ram

Result:

Output Image of Movie

CONCLUSION

In this paper we have presented movie recommendation system. It permits a user to choose the options based on what he liked or   based on what he watch before or his intrest.We are getting good response from users.By using vector space method and cosine similarity algorithm we are giving best suggestions to the users by minimum inaccuracy.The system is user-friendly and provides users with the option to add movies to their   watchlist or mark them as already watched.Overall, the Movie Recommendation System is a valuable tool for movie lovers who are looking for new and   exciting movies to watch.

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