Entertainment recommendation website/web application

Project Report

submitted in partial fulfillment for the

award of the degree of

BACHELOR OF TECHNOLOGY

Submitted by

Shivam Shukla-19SCSE1010408

Shadman Azim - 19SCSE1010196

IN

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

Under the Supervision of

Mr. Subhash chandra, Assistant Professor

GALGOTIAS UNIVERSITY

(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

October/November - 2021

GALGOTIAS UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

Certified that this project report **"Movie recommendation website/web application "** is the bonafide work with Shivam Shukla,Shadman Azim who carried out the project work under my supervision.

SIGNATURE	SIGNATURE
Dean of School	SUPERVISOR

Approval Sheet

This the report **Entertainment recommendation website/web application**by SHIVAM Shukla, Shadman Azim is approved for the degree of Bachelors of technology

Examiners

_____

_____

Supervisor (s)

_____

_____

_____

Chairman

_____

Date:_____

Place:_____

Statement of Project Report Preparation

Thesis title: **Movierecommendation website/web application**

1. Degree for which the report is submitted: B.tech in Computer Science and engineering

3 Project Supervisor was referred to for preparing the report.

4. Specifications regarding thesis format have been closely followed.

5. The contents of the thesis have been organized based on the guidelines.

6. The report has been prepared without resorting to plagiarism.

7. All sources used have been cited appropriately.

8 The report has not been submitted elsewhere for a degree.

(Signature of the Students)
Name: Shivam Shukla
19SCSE1010408

Shadman Azim
19SCSE1010196

ACKNOWLEDGEMENT

In the present world of competition, there is a race of existence in which those who are willing to succeed will only come forward as the better. A project is like a connecting bridge, connecting theoretical learning with practical working**.**

We took up this project with this willing. For which, we would first and foremost like to thank the Almighty for guiding us on the right path. Next to him, are our parents, whom we greatly indebted for brought up with love and courage to this day. We are feeling oblige in taking the opportunity to sincerely thank our Instructor/ProfessorDr.Jayakumar V,AssistantProfessor, for helping us and guiding us through different stages of the project. We are thankful to all our teachers' for imparting the knowledge to us that we are capable now to conduct this project on our own. We have no valuable words to express our gratitude and thanks, but our hearts are still full of the favours received from every person**.**

TABLE OF CONTENTS

ABSTRACT

The amount of entertainment source like movies,anime,web series,short videos,music has increased nowadays,that anyone can get confused what to watch or where to watch.Therefore to find the right source of entertainment through the existing method can be very hard and user utilize all their time in searching what to watch.

So, the user needs a system that can suggest them the source of entertainment so that they can get the clear idea what to watch and can save their time in searching.This system will get the data from user like in which genre and in which type of entertainment the user is interested or willing to watch and how the user is feeling at that time and more .Using the database in which we will categorise data in different genre or types it will show the relevant data to user.Also this system enables user to add comment about what they have watched so that the right keywords can be extracted and added in database that will be helpful for another users.Hence this will become all-in-one entertainment recommendation system including-:movies,series,anime,music.further changes will be made to make it more efficient.

Keywords

Entertainment Recommendation,Suggestion,Entertainment,top games,top movies,suggestion assistant

INTRODUCTION

1.1 General

The recommendation system has become an indispensable part of e-commerce applications. The recommended system of collecting information about a user's preferences, the variety of products (for example, movies, shopping, tourism, VIDEO, only, two-way, implicitly or explicitly. To open the details of a user to purchase usually include observation of the behavior, for example, watched movie, the products ordered, and downloaded applications. On the other hand, to get the information directly for most of the collection of the previous score, or user's history. Collaborative filtering (CF) is one of the ways to filter, or to count objects, other people's emotions and feelings. The first gathering in the film the score, which is given by an individual person, and to then recommend to the target user's of movies based on the like-minded people with similar tastes and interests in the past. Another effect, which is based on the part that is recommended by the system, the clustering. Clustering is a popular unsupervised mining of the tools that are used to break up the set of data into homogeneous groups based on some measure of similarity or difference. Both the hybrid clustering and optimization techniques are used to improve the accuracy of weather forecasts. This hybrid approach was used to overcome many of the limitations that are typical of content, the focus, and the joint recommendation of the system.

1.2 Targeted Audience

Every user will have different likes and dislikes. In addition, the client's tastes may change, depending on the major qualitative and quantitative aspects, such as: the mood, the season, and what is the nature of the activity the user is doing. For example, the sort of music to which a person prefers to listen to during the training sessions, is very different from that of it is the kind of music that they would listen to when you're cooking for dinner.The opening up of new areas in order to determine what our client is on the way, at the same time, as those terms are defined, you can say it all is already known about the customer.

LITERATURE REVIEW

As of now there are many ‘Entertainment recommandations systems’ present but so far there is none which is up to the mark, because they recommend movies,series,games etc based on ratings,year,genre and use other common filters.Many are not even systems or user based, simply they are blogs which top lists the movies or other entertainment sources.Most relevant of them that we found till now is itcher.com which recommends entertainment to user.But it has very limited database and does not use too many filters to filter the data like it does not sort things on the basis of how user is feeling right now.Also it has very limited genre and does not include anime which is trending nowadays.

In our system we will introduce an updated database which contains too many genres of entertainment by which user has large variety of things to choose between and will never get bored.The other systems which exists are blogs that take too much time of user to decide what to watch.But in our system user needs to enter the things in which user is interested and how he is feeling. Then using this information the system will generate most relevant data from the database and show it to the user.We will use modern web frameworks of Django,python and database management systems like MySql or MongoDB in this project that makes it more better.

PROBLEM FORMULATION

In today's world there is no time to stay put and give all the time in searching. But also nowadays youngsters want someone who recommends the best source of entertainment,because at present time new things are out everyday so it is not possible to get to know about every best thing.

It is very difficult to choose between things to watch or game to play as the amount of entertainment gradually increased these days,that one can easily get confused what to watch or where to watch or what to watch first.So the people need someone or some system which recommends them what to choose between entertainment.This will help them in great manner and saves a lot of time.

Required tools

- MySql,MongoDB
- Python(For technique like content based recommendation system etc)
- HTML
- CSS
- JAVASCRIPT
- Bootstrap,Semantic UI
- React.js, Node.js
- Web frameworks(Django etc)

COLLABORATIVE FILTERING

The basic methodology of collaborative filtering systems is that these undetermined ratings can be credited since the noticed ratings are often highly linked across several users and items. For an instance, assume two users who have very comparable tastes. If the ratings, which both have stated, are very similar, then their resemblance can be determined by the fundamental algorithm. In such cases, there is a high probability that the ratings where in just one of them has definite value, are also likely to be similar. This similarity can be used to make interpretations about partly stated values. Almost all the projects for collaborative filtering emphasis on leveraging either item associations or user associations for the calculation procedure.

CONTENT BASED FILTERING

Content Based Recommendation procedure checks for the adores and aversions of the user and creates a User-based Profile. For producing a user profile, we check for the item profiles and their equivalent user rating. The user profile is the combination of sum of the item profiles where combination being the ratings customer or user has evaluated. After profile of the user has been generated, we estimate the resemblance of the user profile with all the items in the database, which is considered using cosine resemblance between the user generated profile and item profile. Benefits of Content oriented procedure is that other user's information or data is not essential, and the recommender system can commend new commodities or anything which are not evaluated presently, nevertheless the recommender system will not recommend the items outside the type of items the user has given ratings of.

WORKING

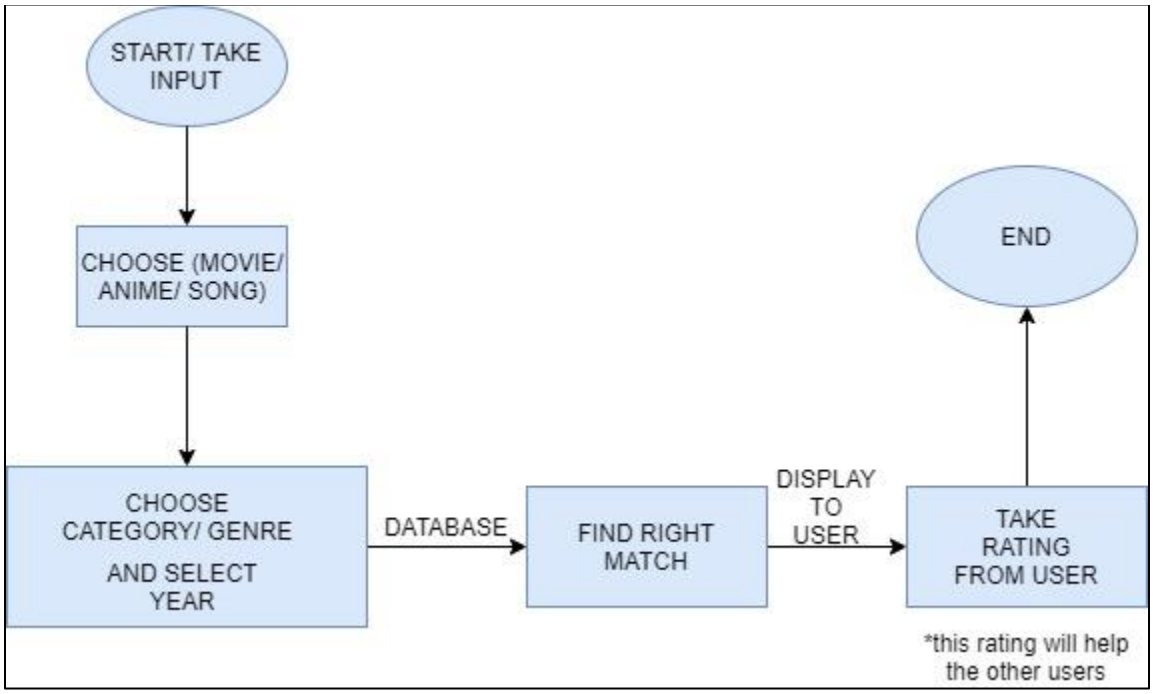
The recommendation system basically works by providing suggestions to the users by using the two techniques explained above.This recommendation system recommends movies, anime, songs to a user or client by evaluating ratings.For creating database, we will used SQL Server since it is convenient.

This system asks user to Enter 3 inputs:-

1. choose between movies/anime/songs.
2. category (eg. horror)
3. select year

The algorithm finds the list of movies/anime/songs from the dataset according to the inputs provided by user and finally displays the list of movies/anime/songs according to rating. The algorithm compares the inputs with the traits of the dataset and formulates the list.It can take more than one category according to user's interest. this system will also allow the user to rate movies that enhance the beauty of this recommender system. This is achieved by using collaborative filtering approach, wherein the system will provide recommendations to other likeminded users which have the same taste.

ARCHITECTURE DIAGRAM



The above Diagram tells about the step by step process of the recommendation system.

At first the user will enter the relevant data, then by using a Content-based filtering algorithm it will find the data according to the input of the user and at last it will present the recommendation to the user.

FEASIBILITY ANALYSIS

- According to our research by using the above mentioned tools and the tools that are present are sufficient to execute this project.
- This project will require the best DBMS as it has to manage the large amount of data and some best databases like MONGODB are present to handle this.
- This recommendation system requires some techniques like a content based filtering system or maybe some more techniques that are applicable.
- Also this project requires a lot of time to execute and great management which will be provided by co-members.
- Considering the present technology or tools,This project is feasible.

CONCLSION

Movie recommendation systems which are existing have poor efficiency due to which movies are suggested in view of aspects for example - movie rated & evaluated by the User. They have almost same viewing tastes, by means of data mining and insisting movies based on juncture of the three methods mentioned above that is - User Based Collaborative filtering, Content-based algorithm & data mining because of which the user will not only be recommended movies but this scheme also delivers the user with additionally advanced and sophisticated endorsements as movies which have a poor rating score in any of the Movie features produced based on data mining will be refined out during the significant allocation platform of the expected three way hybrid movie recommendation system.