MINOR PROJECT

ON

MOVIE RECOMMENDATION SYSTEM

PROPOSAL FILE

BACHELOR OF TECHNOLOGY

(COMPUTER SCIENCE & ENGINEERING)

SUBMITTED BY:

Nitesh Kesharwani

Nisha Kumari

Vinay Pratap

UNDER THE GUIDANCE OF:

Mr Sachin Singh

IN

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ROORKEE INSTITUTE OF TECHNOLOGY

ROORKEE, UTTRAKHAND, INDIA

(2021-2022)

CERTIFICATE

I hereby certify that the work which is being presented in these entitled "**Movie Recommendation System**" in partial fulfilment of the requirement for the award of degree of Bachelor of Technology and submitted in Department of Computer Science of Roorkee Institute of Technology, Roorkee, is an authentic record of my own work carried out under the supervision of **Mr Sachin Singh.**

The matter presented in this report has not been submitted by me anywhere for the award of any other Degree of this or any other institute.

NITESH KESHARWANI

NISHA KUMARI

VINAY PRATAP

This is to clarify that the above statement made by the candidate is correct to the best of our knowledge.

Date: 04 MAY 2022

HOD

(DR. DEEPAK ARYA)

Project IN charge

Mr Sachin Singh

STUDENT INFORMATION

- NAME: ***NITESH KESHARWANI***
  - ***NISHA KUMARI***
  - ***VINAY PRATAP***
- COURSE: ***BTECH***
- BRANCH: ***COMPUTER SCIENCE AND ENGINEERING***
- UNIVERSITY ROLL NUMBER: ***190240101067***
  - ***190240101066***
  - ***190240101122***
- YEAR: ***3rd YEAR (2019-23)***
- COLLEGE NAME: ***ROORKEE INSTITUTE OF TECHNOLOGY***
- PROJECT NAME: ***Movie Recommendation System***
- SUBMITTED TO: ***Mr Sachin Singh***

ABOUT PROJECT

Have you ever been on an online streaming platform like Amazon Prime, Voot, Netflix, and so on? After watching a movie on these platforms, that platform starts recommending us different movies and TV shows related to the previously watched content. Just wonder, how the movie streaming platform can suggest users the content that can appeal to them. This can be achieved by a system known as Movie Recommendation System. This system is capable of learning user's watching patterns and providing them with relevant suggestions for more such movies. Having witnessed the fourth industrial revolution where Artificial Intelligence and other technologies are dominating the market, it is sure that everyone must have come across a recommendation system in their everyday life. So, our team of three people had tried to develop a similar recommendation system model through machine learning, and R language. In this project of making an recommendation system, I will be feeding the genre types a particular movie is watched by a user and accordingly similar recommendations are provided to that user.

Mechanism involved in developing the Movie Recommendation System–

- Machine learning which covers almost full concept of this project inculcating concepts as feeding of data, prediction, making conclusive outputs.

- R language for doing the programming part.

- Libraries of R such as recommenderlab. Data.table, ggplot2, reshape2.

- Movies have different genres as per their story; we will be categorizing user interest in a particular movie as per their genre and suggesting them similar movies of the same genre.

FUTURE SCOPE OF THE PROJECT

1. Recommendation systems help E-commerce sites to increase their sales. A very famous movie recommendation system named MOVREC, based on collaborative filtering approach makes use of the information provided by users, analyses them and

then recommends the movie that is best suited to the user at that time using k-means clustering algorithm.

2. Recommendation system helps to personalize a platform and help the user find something they like. It really enhance the user experience through personalized recommendations, we need dedicated recommender system. In today's scenario where everyone is opting for online platforms to watch movies, these recommendation systems give users more and more suggestions to watch movies on their developed platforms.
3. The Movie Recommendation System develops interest in users to watch more movies as users' brain stimulated interest in them to watch more and more movies.

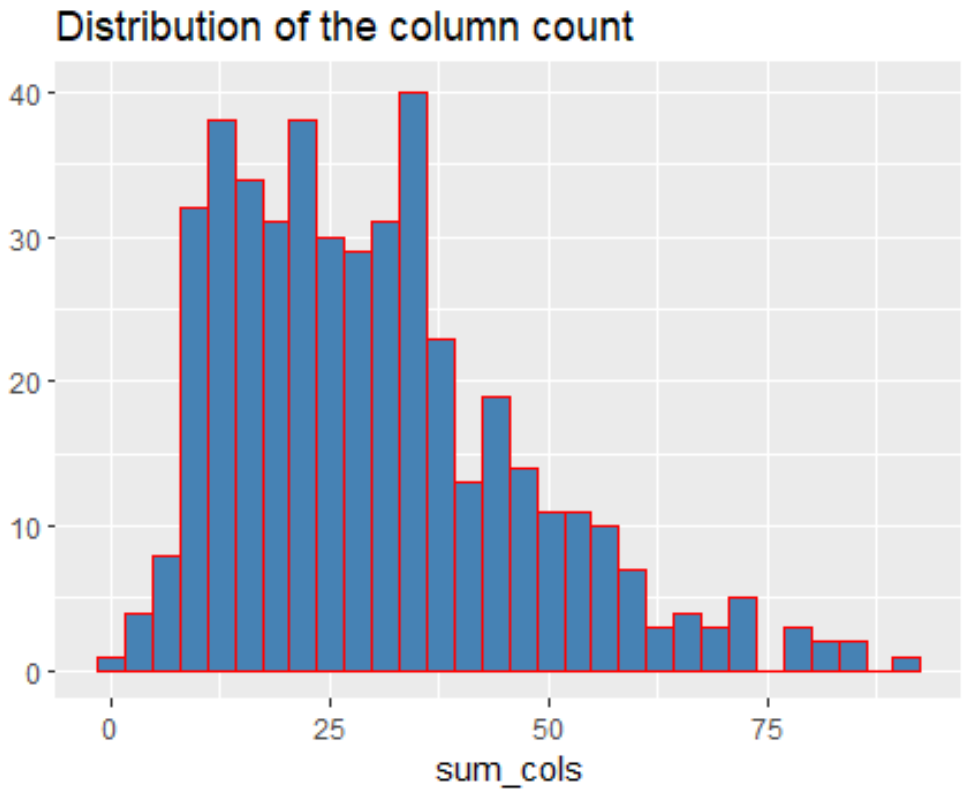
LANGUAGES USED IN THE PROJECT

In this project, Recommendation System, 'R' programming language is used. In this language various libraries have been imported so that the code can run efficiently and give the desirable output.

Few of the libraries that are used here are:

1) recommenderlab
2) ggplot2
3) data.table
4) reshape2

- An image from the data stat of the project



SUMMARY

In today's scenario, many people opt online movie watching systems rather than going out to cinema halls gradually and gradually. Secondly, many a times people due to their busy schedule are not able to watch movies in theatres, then to go on to online platforms to watch movies, while watching such movies, people come across other movies of similar genres as per their watch. This gives users wider scope of watching movies of their interest and also these platforms earn more money when people watch more and more movies. Recommendation Systems are the most popular type of machine learning applications that are used in all sectors. They are an improvement over the traditional classification algorithms as they can take many classes of input and provide similarity ranking based algorithms to provide the user with accurate results. These recommendation systems have evolved over time and have incorporated many advanced machine learning techniques to provide the users with the content that they want.