iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** XII **Month of publication:** December 2021

DOI: https://doi.org/10.22214/ijraset.2021.39658

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 9 Issue XII Dec 2021- Available at www.ijraset.com

Book Recommendation System Using Machine Learning

Prof. S. R. Hiray[1], Mr. Atish Bhosale[2], Ms. Komal Patil[3], Ms. Amruta Gaikwad[4], Mr. Riddhesh Deshmukh[5]
[1, 2, 3, 4, 5]*Department of Computer Engineering, SKN Sinhgad Institute of Technology and Science, Lonavala, Pune, India*

Abstract: ***Users can use book recommendation systems to search and select books from a number of options available on the web or elsewhere electronic sources. They give the user a little bit selection of products that fit the description, given a large group of objects and a description of the user needs. Our system will simply provide recommendations. Recommendations are based on previous user activity, such as purchase, habits, reviews, and likes. These systems gain lot of interest. In the proposed system, we have a big problem: when the user buys book, we want to recommend some books that the user can enjoy. Buyers also have a great deal of options when it comes to recommending the best and most appropriate books for them. User development privacy while placing small and minor losses of accuracy. Recommendations. The proposed recommendation system will provide user's ability to view and search the publications and using the Support Vector Machine (SVM), will list the most purchased and top rated books based on the subject name given as input.***
Keywords: Recommender System, Support Vector Machine (SVM), Machine Learning, Classification etc.

I. INTRODUCTION

In simple terms, the recommendation system is any system that automatically suggest content for website readers and users. These programs emerged as smart algorithms, which can produce results in the form of recommendations for users. They require a large database and a fast computer system that can perform calculations the same between half a second. Various alternatives have been proposed so far today by making recommendations. Machine learning has improved commendation programs, and it brings many opportunities to improve performance of the recommendation program. Machine learning methods use a multiple processing layers to learn hierarchical representations of data.

Recommender systems are highly customized recommendation systems are collaborative filtering and content based filtering respectively. In collaborative filtering, this is also called social filtering items are selected based on the relationship between the current user and other system users. However, content-based filters are recommended based on user interactions and preferences

User interests are first analyzed and the result of the user profile analysis is compared with them items available in the system to provide user recommendations to the user.

II. LITERATURE SURVEY

A. Book Recommendation System using Machine learning [Fatima Ijaz (2020)].

Suggestion framework is a common and cold e-commerce issue. Recommendation system performs in many ways including faculty member base on quality, suggestion for reciprocal filtering, and hint for the mix technique. This article proposes a collective suggestion filtering system focused on naive Bayesian approach. The recommendation method does have a good performance, according to both the undertake experimentation, than numerous prior implementations, including the praised k-NN algorithm being used by suggestion especially at longer length.

B. Online Book Recommendation System [Nursultan Kurmashov, Konstantin Latuta, Abay Nussipbekov(2015)]

Moment of the quantum of information in the internet growth veritably fleetly and people need some instruments to find and pierce applicable information. Recommendation systems help to navigate snappily and admit necessary information. Generally they're used in Internet shops to ameliorate the profit. This paper proposes a quick and intuitive book recommendation system that helps compendiums to find applicable book to read. The overall armature is presented with it's detailed description. We used a cooperative filtering system grounded on Stoner correlation factor. Eventually the results grounded on the online check are handed with some conversations

©IJRASET: All Rights are Reserved

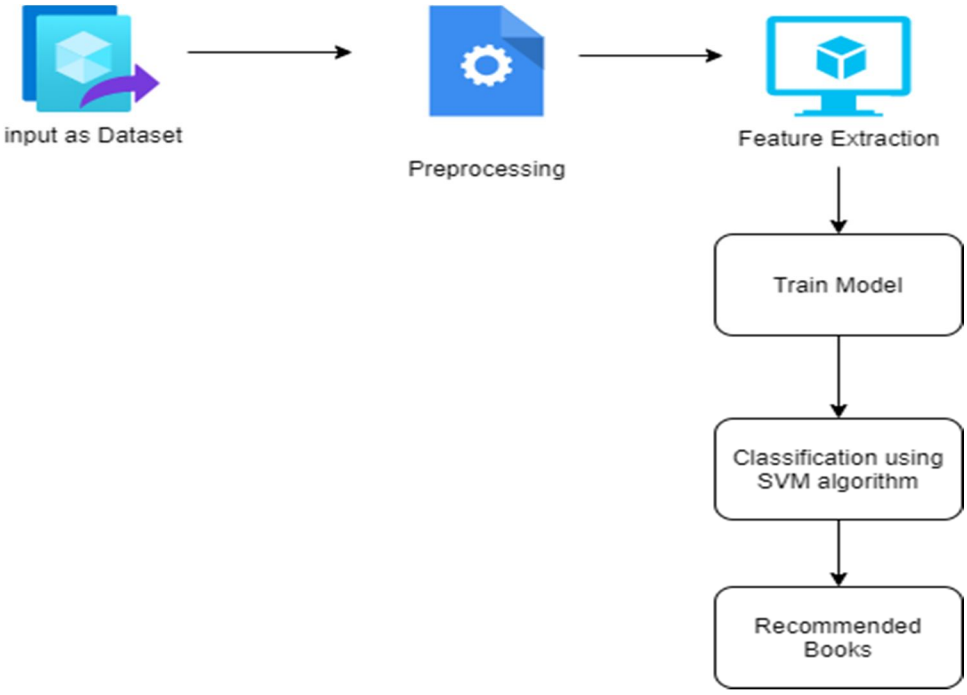
C. The Design and Implementation of Books Recommendation System[Yongen Liang, ShimingWan (2018)]

Individualized recommendation technology is a new technology which can mine products by using stoner's information, and that match stoner's preferences through a series of algorithms, so as to achieve better recommendation effect. The number of books in university library is adding fleetly. How to find intriguing books from a large number of books is a problem that every anthology is concerned about. In order to help these druggies find the books that they're interested in, this author designs a books recommendation system grounded on cooperative filtering algorithm The system can principally meet the requirements of druggies to recommend functions, and achieved good results.

III. COMPONENTS REQUIRED

1) *Python:* Python is an interpreted, object- acquainted, high- position programming language with dynamic semantics. Its high-position erected in data structures, combined with dynamic typing and dynamic list, make it veritably seductive for Rapid Application Development, as well as for use as a scripting or cement language to connect being com-ponents together. Python's simple, easy to learn syntax emphasizes readability and thus reduces the cost of program conservation. Python supports modules and packages, which encourages program modularity and law exercise. The Python practitioner and the expansive standard library are available in source or double form without charge for all major platforms, and can be freely distributed.
2) *Anaconda Navigator:* Anaconda Navigator is a desktop graphical user interface (GUI) included in Anaconda distribution that allows you to launch operations and fluently manage Anaconda packages, surroundings, and channels without using command-line commands. Navigator can search for packages on Anaconda.org or in a original Anaconda Repository. It's available for Windows, macOS, and Linux.
3) *Spyder:* Spyder short form is "Scientific Python Development Environment." It's intended for use as a workbench for scientific computing with Python, and that's reflected in the features set, the packaging, and the overall geste of the IDE. Spyder has useful features for general Python development, but unless you work substantially with Python and scientific computing packages, you 're presumably more off with a different IDE. The biggest reason not to use Spyder as a general- purpose Python development terrain isn't the point set, but the setup process. Spyder isn't delivered as a standalone executable in the manner of a product like Visual Studio or PyCharm. Rather, it's installed as a Python package. Your easiest path to Spyder is to install a Python distribution that comes with it preloaded, similar as Continuum Analytics Anaconda.
4) *DBSqlite3:* SQLite DB Browser (DB4S) is a high quality, intuitive, open source tool for creating, designing, and editing SQLite-compliant web files.DB4S is for users and developers who want to create, search, and edit information. DB4S uses a spreadsheet-like interface, and complex SQL commands do not need to be read.

IV. SYSTEM ARCHITECTURE



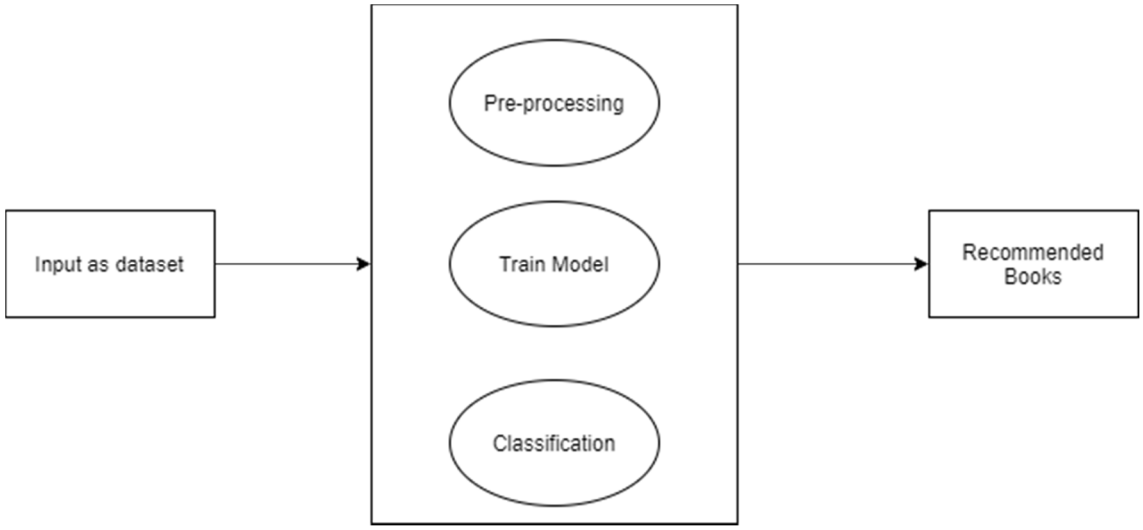


Fig. Data Flow Diagram

V. PROPOSED SYSTEM

In the proposed program, the desktop system is designed for library book recommendations. In this system, all the books in the library will be rated. Library users who borrow books submit their ratings (5 star ratings) and high rating books will be displayed to users in this program. This is an automated program that will help the library user select the best version of his or her favorite book in a few seconds depending on the ratings provided for that book. The user can select a book, borrow a book and deliver the book to his or her address by simply sitting in front of a computer. This program uses a shared filtering algorithm that filters books based on user ratings and recommendations. This process takes user ratings and user feedback to consider recommending letters to users.

VI. CONCLUSION

In this paper we present a recommendation system based on a collaborative filtering approach. The main goal was to speed up recommendations which is to create such a system, which can provide quality recommendations to their users without the need for long-term registration and have a great profile experience, browsing history etc. Test results indicate that the proposed approach provides appropriate recommendations.

The proposed activity can be used in other domains to promote such things as movies, music and other products.

REFERENCES

[1] Rana, Avi, Deeba, K, "Online Book Recommendation System using Collaborative Filtering" International Conference on Physics and Photonics Processes in Nano Sciences, (2019).

[2] Dharna Patel, Jitendra Dangra " A Book Recommendation System for Cloud Computing: A Survey", International Journal of Computer Applications (2017)

[3] Kurmashov, Nursultan; Latuta, Konstantin; Nussipbekov, Abay," Online Book Recommendation System", IEEE (2015)

[4] G.Naveen Kishore, V.Dhiraj , Sk Hasane Ahammad Sivaramireddy Gudise, Balaji Kummara, Likhita Ravuru Akkala "Online Book Recommendation System", international journal of scientific & technology research , (2019).

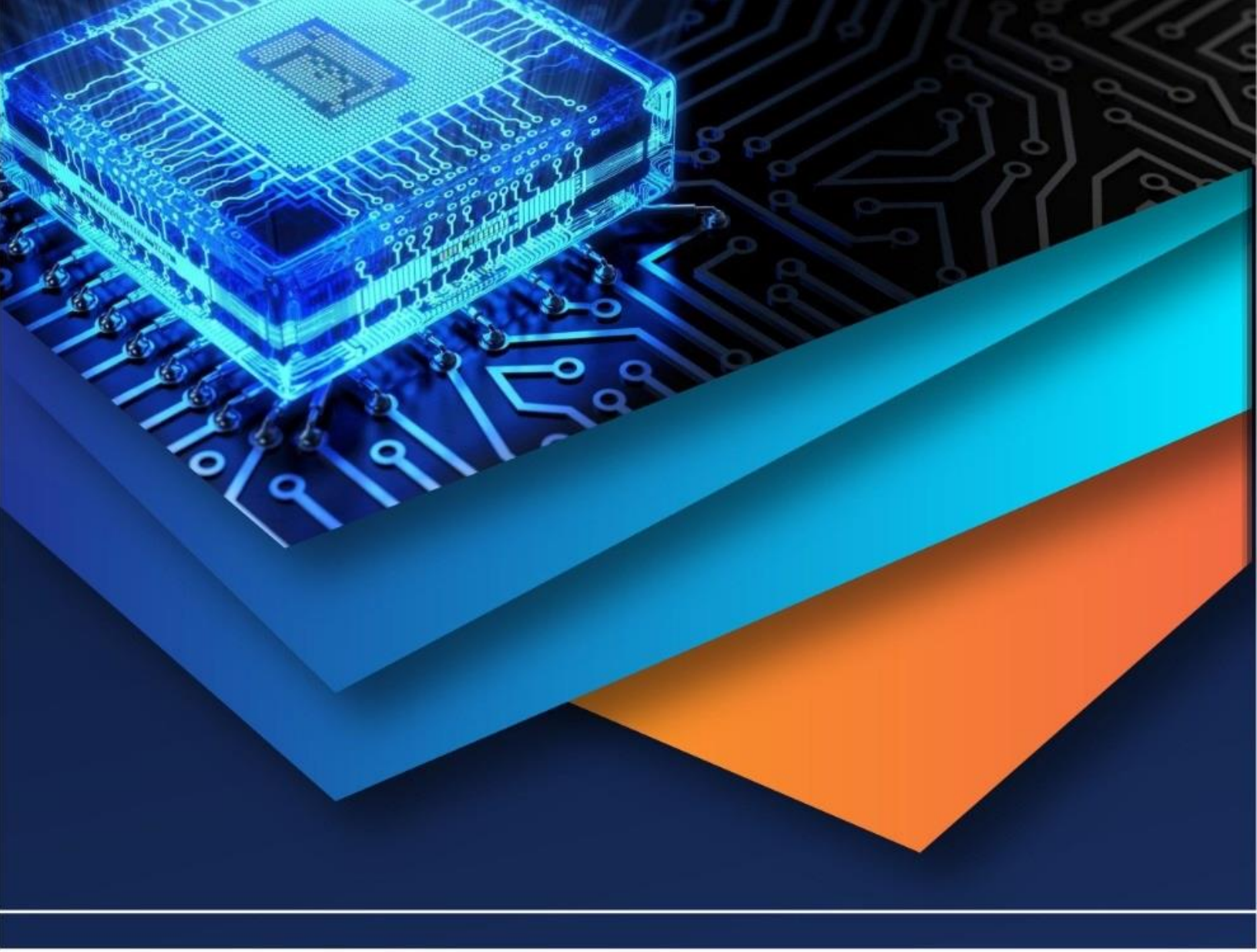
[5] Pijitra Jomsri, "Book Recommendation System for Digital Library Based on User Profiles by Using Association Rule" , IEEE Fourth International Conference on Innovative Computing Technology (INTECH), 2014

[6] Ms. Praveena Mathew, Ms. Bincy Kuriakose, Mr.Vinayak Hegde, "Book Recommendation System through Content Based and Collaborative Filtering Method", IEEE International Conference on Data Mining and Advanced Computing (SAPIENCE),2016

[7] Raghuwanshi, Sandeep K., and R. K. Patreiya, "Collaborative Filtering Techniques in Recommendation Systems" , International Journal of Scientific & Technology Research(2019.)

[8] Anwar, Khalid; Siddiqui, Jamshed; Saquib Sohail, Shahab, " *Machine Learning Techniques for Book Recommendation: An Overview*" , SSRN Electronic Journal, (2019).

[9] http://naelshiab.com/tutorial-send-email-python



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)