

# SYLLABUS BASED BOOK RECOMMENDATION

Samruddhi Nandedkar, Minal Mendhe, Pallavi Dhanvij,

Megha Khobragade, Someshwar Jani

BE Final Year

Department of Information Technology

Datta Meghe Institute of Engineering Technology & Research, Sawangi (Meghe) Wardha, India.

## Abstract:

There are number of books available on internet in the form of e-books, PDF, EPUB, PRC, Fiction Book, AZW, Rich Text Format, and BBeB. However it is becoming difficult task to search the proper required book. Especially, students face this type of problems in their academics. Therefore there should be some system which will provide proper navigation to the student for accessing the appropriate book. This paper provides a proper syllabus based book recommendation system that helps students to find the required book quickly. The whole architecture of the system has been described in the paper. This system is mainly based on the content matching algorithm. For recommending the best book we have applied three filters and they are mainly the content matching, cost of book and ratings. Also, the system provides the proper navigation to the students so that they will not get confused from the large information, books and suggestions from the internet and all the available different sources.

Keywords- Content matching, recommendation system, syllabus, filters, navigation.

## I. INTRODUCTION

There is huge information on the internet today. There is really a rapid growth of data on the same. Students take help from the internet. But searching the necessary required information is difficult or may say a task. So, there is a requirement of such a system which will help students to quickly access the required information. Today so many sites making the benefits from the recommendation system for the publicity & to sell their products like movie, articles, music, cooking, etc. which can be recommend to the customers. And this can be recommend based on their profiles on social network, their internet shop, the browsing history. And thus, online shopping retailers increasing their sales by using such systems.

In this paper we are providing the recommendation of books. We have developed such system, which will recommendation best book to the students of their subjects and the output book will be the result of the inputs syllabus by the students.

## II. Related Work

The work in the field of recommender system is increasing from last 21 years. The researches show that different techniques are used to make the system more efficient.

Various approaches are used for providing the diversity in the recommendation systems. At first, the collaborative filtering and content based approach were more popular. The collaborative filtering works on the principle that the users who agreed in the past will also agree in the future. On the other hand, the content based approach works on the idea that it learns the content of the item and categorizes it to the user.

Different kinds of book recommender systems are present today. The authors of [1], [2], [3] & [7] used collaborative filtering technique; works for recommending the books. [4], [5] & [6] based on the content based technique; from which [6] is the community driven book recommendation system. The author

of [8] used users opinion mining technique in which the user's outlook is taken for the recommendation purpose. [9] refers to the novel approach for book recommendation system based on the frequent pattern intersect algorithm which overcomes the drawback of apriori algorithm. The author of [10] presented an online book recommendation system based on the web services which provides a new way for the librarians to acquire the reader's demands. It also works on the user opinion mining technique.

In this paper we propose a Syllabus Based Book Recommendation System which works on the content based approach. This system navigates the users for selecting the appropriate book which they required. When the user enters the syllabus the system provides an output as book cover, book link, ratings of users and in addition the system shows the video link. The system is beneficial to the users as it saves the time, it is easy to use, easy to understand and provides well results.

### III. PROPOSED WORK

A recommended system also called as replacing system. These are the systems in which the input is given by the user and the system makes an aggregation and provides the output to the recipients. Majorly there are six types of recommender systems and they are listed below.

Collaborative recommender system, Content based recommender systems, Demographic recommender systems, Knowledge based recommender system, Hybrid recommender system and utility based recommender system.

Recommendation systems are used in many areas such as movies, news, books, articles, social tags, music and products. Some of the examples of recommended systems are video clip recommendation on you tube product recommendation in e bay and purchasing product recommendation, etc. However, our system aims for ease of use and efficiency. This recommender system is based on content, matching i. e. the second type of the recommender system as above. Firstly, the user makes registration on the web portal and the user id and password assign to the user. Then the user enters the syllabus or content or any specific topic. Then by using content matching algorithm the system provides an output from the database.

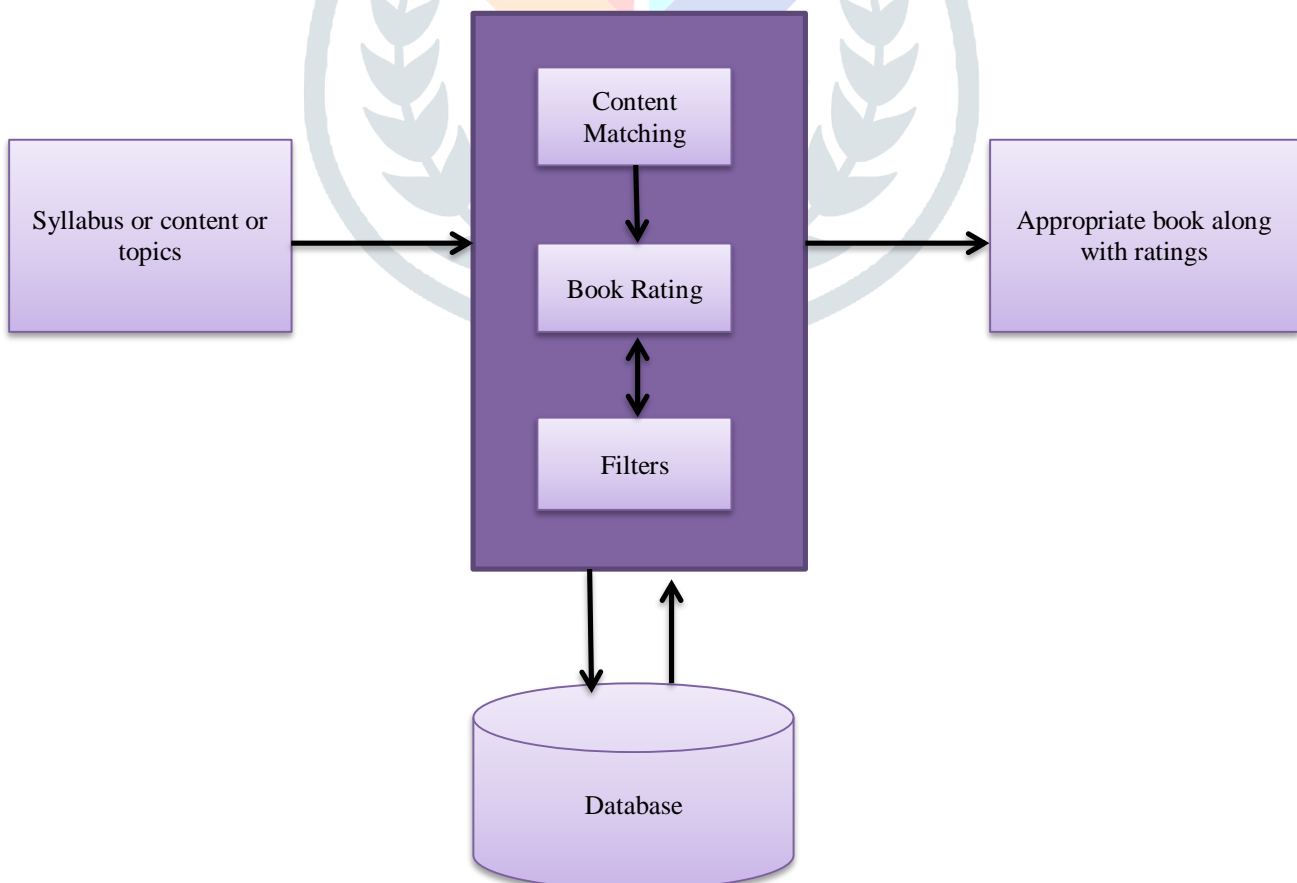


Fig. Architecture of System

- A. Data collection- Collection of data is the most significant part of the system for that we require large amount of data. We collect that data from the internet. Our system focus on students specifically so, we collect data from [www.pdfdrive.net](http://www.pdfdrive.net) site for an access to millions of books. We collected data and stored into MYSQL query browser.
- B. User Navigation- System having two types of users which are already registered and the new users. The new user has to register first and the registered user can enter input, give rating and then the output is shown to the user by the system. After registration process , the user enter the syllabus of any subject which he or she required as, the system provides three filters , the user choose one of them as per their requirement.
- C. Recommendation- After choosing the filtered option the system makes an output that is the required recommendation.

To do this task we finalise to use content matching. Content matching works on matching string of characters. When user enters syllabus it is then match with the data available in database is firstly pre-processed and then the clusters of data form by using k-means algorithm and then by using KNN (K-Nearest Neighbour) algorithm to match the content and get the desire output.

We used different kinds of software for different purpose. These are mainly eclipse, apache tomcat, MYSQL, bootstrap in order to build efficient, user friendly and fateful system users.

## IV. EXPERIMENTS RESULT

There is always a need to checkout and test the system which will helps to know about the performance of the system. It also helps to find out the errors so that we can make the corrections and implement it to our system.

We came to know that the students of information technology were facing problems in their Studies. So we have suggested our system to them after using the system is time saving as searching on web takes too much time and makes confusion. In addition, the system gives the accurate results. However the students can choose the books as per their requirement with the help of filter applied in the system.

## V. CONCLUSION

In this paper we present a syllabus based book recommendation system. This system is based on content matching. The main aim was the efficiency and ease of use that is to construct a system which can give proper input and easy to use for users. They get appropriate book which helps them in their studies. Experiment result clarifies that the system works properly and give the correct recommendation of books.

The proposed work can be applied to any of the field to get the more accurate recommendations like movies, online marketing, music and many more.

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