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Intelligent Recommender System for Students using Bayes Classification Algorithm

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Abstract: ***With the advanced development of resource technology, more and more digital resources are available in Internet. To maintain college study material repository online as i propose a "Intelligent study material recommendation system for college students". this system provides document classification as well as recommender system for college students. It helps staff to upload study material and students to get the study material by convenient way and allow to provide rating for every study material to re-rank the links of study material uploaded by the staff. Re-ranking concept increases the interest of the student as he will get what he wants easily and overcome the resource restriction problem by providing additional live recommender system to student by using educational search engine.***
Keywords: Document classification, recommender system, re-ranking concept, educational search engine.

I. INTRODUCTION

Today's generation is a digital generation, every thing is going online. To maintain college study material repository online we propose a document classification as well as recomender system for college students. System proposed different modules like Admin panel, Staff, Document classification, Student , Recommender system.

In our system, staff members will upload any document on server. The document will get classified by weka tool using bayes document classification techniques and stored on server, The uploaded documents will be given to students as per their profile along with this we propose recommender system which recommend rating and liking wise study materials to student.

In case if the study material is not available for any subject, our system will recommend live data to the student by using educational search engine enabled.

II. LITERATURE SURVEY

With the advanced development of resource technology, more and more digital resources are available in Internet. The DL is introduced to provide readers with information and knowledge service at anytime from anywhere. Also, with the extension of network applications, more and more information is delivered and shared in the digital world. Digital Library (DL) has gradually been viewed as one of the most important digital information and knowledge resources because it could easily represent a variety of digitalized contents with text, image, video and audio without considering time and location limitation. Therefore, DL has become a convenient and successful solution for information services. It replaces large part of services with the capability of information delivery via Internet.

Many intelligent mechanisms applied in DLs have been proposed, which could help users retrieve information that are required with less time [2],[3],[4]. For example, Song et al. (2007) [5] suggested a document automatic classification system with an intelligent agent. To support on-line users to conveniently browse and search news, a hierarchical news map is offered in an automatic generation system [6].

In particular, the map gradually becomes one of the main trends that provide users with an integrating mechanism to efficiently gather different kinds of knowledge contents from different resources in DLs.

On the other hand, as the volume of digital materials and information sources are getting larger and larger, the DL has to move from being passive with little personalization for users to being proactive with tailored information for individual users. Personalization can help satisfy individual's need by understanding their preference.

It has gradually become one of the important ways to improve the service quality of DLs [1],[7],[8]. Research literature indicated that personalization could be achieved by the user-guided approach (called adaptable) or automatic approach (called adaptive) [1],[7],[9],[10]. The former indicates that the personalized pattern is directly created by the information provided by each user. For example, the My Yahoo! and MyLibrary are introduced with adaptable personalization.

III. ANALYSIS OF PROBLEMS

In existing literature, personalized study material recommendation is proposed. To recommend study material, user's personal information is used, Existing system only recommends the study material in any order. The concept of re-ranking is not discussed. In existing system, the resources are restricted and dependent on administrator.

To overcome these drawbacks, we propose a new re-ranking technique in which system will use ratings given by x students/other students to re-rank the links of study materials. Re-ranking concept increases the interest of the student as he will get what he wants easily. We also overcome the resource restriction problem as we are providing additional live recommender system to student.

IV. PROPOSED WORK AND OBJECTIVE

A. *Proposed Work*

To maintain college study material repository online we propose a document classification as well as recommender system for college students.

In our system, staff members will upload any document on server. The document will get classified by weka tool and stored on server. The uploaded documents will be given to students as per their profile. Along with this we propose recommender system which recommend rating and liking wise study materials to student in case if the study material is not available for any subject, our system will recommend live data to the student by using education search engine provided.

FOLLOWING FIGURE SHOWS WORKING OF THIS SYSTEM.

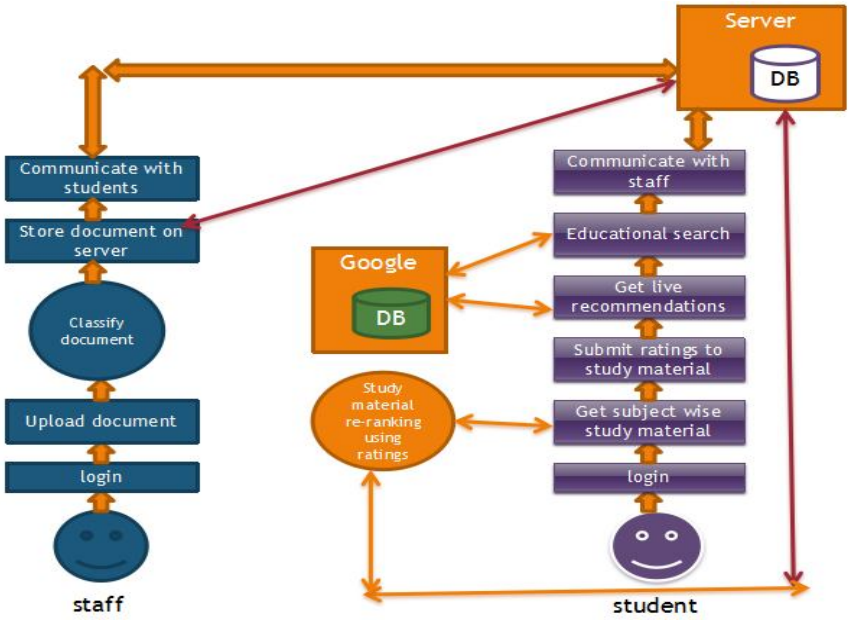

Fig. 1 Flow Diagram

System proposed two types of recommendation techniques.

1) Study material recommendation: The study material uploaded by the guide will recommend to student as per his profile.

2) Live study material recommendation: The relevant study materials will be extracted from Google using Google API.

B. *Objective*

1) To Implement Bayes classification algorithm for document classification.

2) To develop a recommender system for students which recommends proper study material with the help of student's profile and ratings given by x-student.

3) To develop a educational search engine for college student.

4) To develop a live recommender system which extract subject relevant data from Google db and recommend it to student.To develop a communication system between student and staff.

V. DESIRED IMPLICATIONS

By using this system we simplified the process of sharing the study material online. System propose the log in process to authenticate the valid users, Following are the Modules provided by the system:

A. Admin Panel

To Manage the system process like Register staff, Create staff log in, View staff details, Approve pending student registrations, View students, Register branches, Register branch wise subjects, Allocate subjects to staff.

B. Staff

Staff will do Log in, View allotted subjects, Upload documents, Delete document, Communicate with student, Communicate with other staff members.

C. Document Classification

The document uploaded by the staff member, will be processed by weka tool using bayes document classification techniques.

D. Student

Student will do Registration, Log in, View recommended notes/study material, View live recommended links for every subject, Search any educational study materials if necessary. View own search history, Communicate with staff.

E. Recommender System

System propose two types of recommendation techniques.

VI. CONCLUSION

The Intelligent Recommender system for students using Bayes Classification Algorithm is great improvement over the manual work. The system proposed different modules like Admin panel, Staff, Document Classification, student Registratation. So that it will reduces time as well as easy to handle. In the current manual work managing is very slow. So that the Intelligent Recommender system base on document classification by weka tool.

V. ACKNOWLEDGMENT

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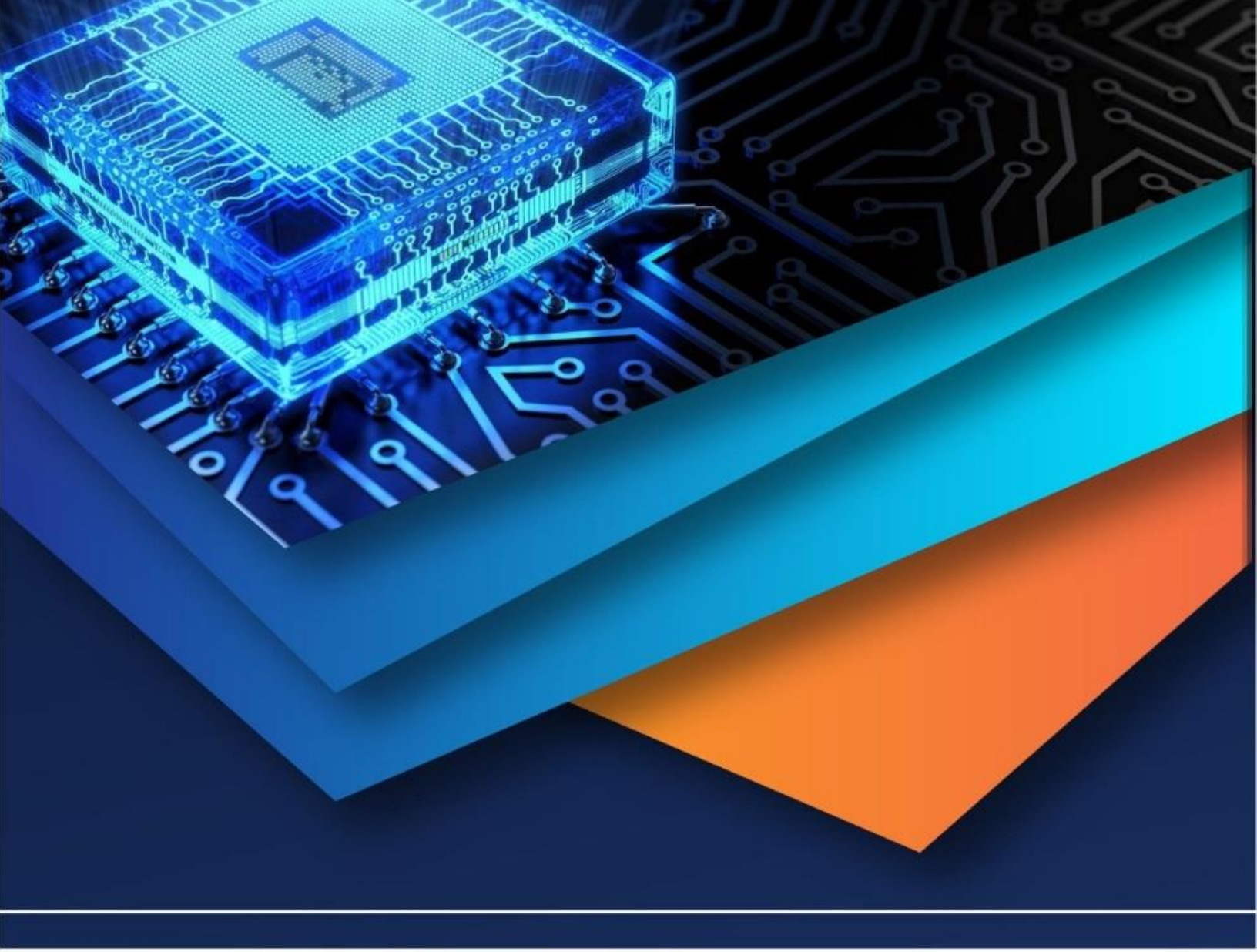

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