Online Study Material Recommender System for Students

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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 "Online 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.

***Index Terms* - 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 recommender system for college students. System proposed different modules like Admin panel, Staff, classification Analysis, Student , Recommender system.

In our system, staff members will upload any document on server. The document will get classified first by Rake Algorithm and then this output will get provided 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]. The former indicates that the personalized pattern is directly created by the information provided by each user. For example, the My Yahoo! and My Library 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

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:

4.1 Admin Panel

The Admin is working as a head of the panel.so that it has an Authority like register all types of branches this will be the first step of admin. after initialing step's admin will get this report.then Admin will register respected staff with all details.then admin will allocating the subject to respected staff with this registered subject details.also in admin panel the document categories are available for the attachment of documents.so from all this facility admin also view staff detail and student pending request details for approving or declared. for more security purpose I provided a password changing facility for admin.at last admin will log out himself after finishing his work.

4.2 Staff

Respected staff logging himself and do registration for his subject related topic title and upload documents for his registered branch students. in staff panel document category function is provides to remove unwonted data keywords. so that the document classification process will done smoothly. staff also has an authority to approve or declines student request. also staff has facility to recommend document as study material. for interaction purpose I provided as offline mail facility to communicate with student. this is an two way communication processes. so for security purpose it has password changing facility. after finishing his task he/she will log out himself.

4.3 Student

Student will do Registration Log in him/herself to View recommended notes/study material. to View live recommended links for every subject which will provided by 'Online Document Recommendation' facility. for that respected subject staff will upload document then he will registered that subject related topic title and then he will recommended that document to that student. so on that basis student will get that recommended document search as online. if student don't wont online study material to search then off line document recommendation facility also provided by student name as 'college document recommendation'.in that study document will display with re-ranking conception the basis of student rating. for communication purpose student will also get off line mail system facility to communicate with staff.

In student portal the special type of search engine is provided named as' Educational Search Engine'.this will provides only educational/study related data to search. maintaining security password changing facility is provided. after finishing task do log-out for redirection on home page.

4.3.1 College document recommendation : Which will provide offline study material recommendation to student.

4.3.2 Educational Search Engine : The relevant study materials will be extracted from Google using Google API.
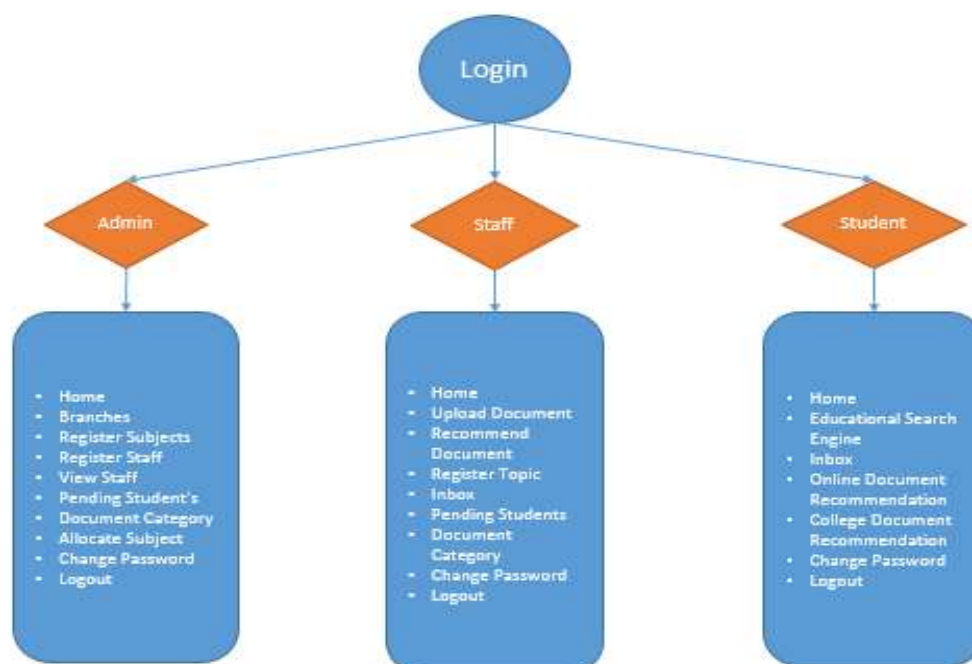
Fig.1 Flow Digram

V. CONCLUSION

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. The Intelligent Recommender system for students using Bayes Classification Algorithm is great improvement over the manual work.

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REFERENCES

[1] Martina Holenko Dlab (2017)**, "**Experiences in using educational recommender system ELARS to support e-learning**"**

[2] Hong, J., Suh, E.H., Kim, J. & Kim S. (2009), "Context-aware system for proactive personalized service based on context history" Expert Systems with Applications, 36(4), pp. 7448-7457

[3] Jiang, X. & Tan, A.H. (2009), "Learning and inferencing in user ontology for personalized Semantic Web search", Information Sciences, 179(16), pp.2794-2808

[4] Chen, L.S. (2009), "Design and implementation of intelligent library system", Library Collections, Acquisitions & Technical Services, 32(3-4), pp.127-14

[5] Song, D., Lau, R.Y.K. & Chen, P. (2007), "An intelligent information agent for document title classification and filtering in document-intensive domain", Decision Support Systems, 44(1), pp. 251-265

[6] Ong, T.H., Chen, H. & Sung, W.K. & Zhu, B. (2005), "Newsmap: a knowledge map for online news", Decision Support Systems, 39(4), pp.583-597

[7] Frias-Martinez, E., Magoulas, G., Chen, S. & Macredie, R. (2006)," Automated user modeling for personalized digital libraries", International Journal of Information Management, 26(3), pp.234-248

[8] Feng, L. & Jeusfeld, M.A. & Hoppenbrouwers, J. (2005), "Beyond information searching and browsing: acquiring knowledge from digital libraries." Information Processing and Management 41(1), pp.97-120