Information Sharing Mechanism in Academic Network Community

Ansari Shama ¹, Bhinderwala Juzer ², Shaikh Shahid ³, Er. Zainab Pirani ⁴

^{1, 2, 3} B. E Students, Computer Engineering Department, M. H. Saboo Siddik College of Engineering,

Mumbai University, India.

⁴Lecturer, Computer Department, M. H. Saboo Siddik College of Engineering,

Mumbai University, India.

Abstract----Current day scenario speaks more of social networking websites rather than educational ones. This trend has led to decrease in relevant information sharing among the students throughout the globe. Various websites are developed in favour of making it educational and interactive but they lack the appropriate information sharing mechanism among the users.

Our academic network community focuses on how the information is shared among all the users of that particular university with the help of a unique mechanism so that the users can easily share data within their group or among users. Our community even helps in providing information regarding various upcoming events occurring in different institutions of that university which helps in easy publicity of that event. And a live interactive communication comprising of audio, video and text so that users can communicate with each other in real-time.

Keywords—Information Sharing mechanism, Socio-educational, easy files sharing, Academic network community, databases.

1. INTRODUCTION

One of the major features that characterize social networks these days is the way information is shared. From documents to pictures to videos, everything can be shared via such networks, because in this way a user can communicate and share information irrespective in which manner he/she is communicating. But such networks lack in helping students to provide them knowledge relevant to their educational course. An educational web community should mainly focus on sharing knowledge relevant to the students and providing them with the updates of various events and competition which can help them participate and earn rewards, in a way this will also help them increasing their skills and knowledge on various other activities. Teachers of the registered institution can also be the part of such communities. They can help the students in providing information related to their current curriculum, which helps in faster communication with the students. Even various teachers of that institution can share data among each other or with teachers of other institution.

Such communities will just not be constrained to the present day students or teachers but to the members who are now the alumni of the particular institution. An alumnus can also be a former member, employee, contributor, or inmate, as well as a former student. As such communities can be termed as E-Learning websites but such websites don't just help in providing knowledge, instead it helps to share and socialize with others also, though keeping in mind that even socializing with other people helps in generating and spreading more admissible knowledge. After all, the main purpose is to feed all the users with data they require to help them learn, share and socialize. To make this possible we are making an academic network community where we target on helping in communicating students, teachers and the alumni members of various institutions of a university and mainly providing them with an innovative information sharing mechanism to share data among each other in a way that data stored can be retained easily at any time and can be accessed from a single point of storage.

2. LITERATURE SURVEY

Through literature survey for this project, it has been discovered that many researches are based on information sharing mechanism. According to the classification principles of educational information in LOM, and the characteristics of grid community and resource distribution in grid, on the basis of a proposed model of grid community based education resource, the brief paper puts forward constructing the concept of Equivalent grid community group, building the mechanism of resources-sharing and information-spreading between communities, which help to achieve mutual communication and information- sharing between communities[1]. As per the increasing advancement in information technology. It has extended the availability of information. Due to this reality, libraries are rethinking old practices related to acquisition, storage, organization, and dissemination of this growing quantity of information and knowledge. The organization of libraries into resource sharing consortia and networks are alternatives to address the former problems. With the information overload, the quantity of information

produced and made available brings crescent difficulties to search for and to access it; the alternative to libraries is cooperation. The Academic Resource Sharing Consortia of Rio de Janeiro (CBIES/RJ) started its activities in 2000. This organization had the aim of developing cooperative activities between academic libraries of Rio de Janeiro [2]. Our project is based on cooperation among various users, in this way users can take out activities easily. Even government use computer and networking technologies to develop infrastructure to support information sharing within government organization as well as external stakeholder. A major obstacle to information sharing is the lack of a framework and an infrastructure that allows government organizations to share information selectively with different user group [3]. Our project provides a user friendly framework which will not only help to contain the information in orderly manner but it will help in less consumption of space.

3. EXISTING SYSTEM

Systems or academic networks which are partially or completely based on our project are being discussed.

Some of existing systems are as follows.

3.1 Blogger

From an educational standpoint, blogs allows educators and students to collaborate, share instructional resources, create content and connect to mainstream social media channels such as YouTube, podcasts, other blogs, tweets, social bookmarks, etc. all on a single centralized page.

3.2 Voki

Voki is a unique tool to engage students in creative expressions. Voki is a great way to have students share their knowledge of a topic in 60 seconds or less. Makes students organize their thoughts to focus on key details. Voki is not so much popular in general people but still its making it place to academics.

3.3 Wikispaces

Our mission is to help teachers help students. There are countless ways to teach and learn. Our job is to make fast, simple, delightful tools that respect and empower teachers so they can spend their time helping their students.

3.4 Thinkfinity

It is an amazing place to collaborate and share ideas with other educators through discussions and sharing

of resources in groups. It is a virtual online Professional Learning Community.

3.5 Kubbu

Kubbu is another great site that performs this service. Essentially, educators go on the site to create, share, exchange ideas, and make them accessible to students. This is great for the educators, students and parents alike.

3.6 UCLA Alumni (University of California, Los Angeles Alumni)

The UCLA Alumni Association gives you access to a vast network of professionals and offers you endless opportunities to connect, build relationships, participate and continue to learn from the incredible UCLA community.

3.7 ConnectU

ConnectU(originally HarvardConnection) was a social website launched on May 21, 2004. Users could add people as friends, send them messages, and update their personal profiles to notify friends about themselves. Users were placed in networks based upon the domain name associated with the email address they used for registration. The site has since launched and is an active online community.

4. SCOPE

The community can be used to share information with the registered members of the community only. It is accessible for all the students, teachers and alumni members of the university irrespective of the college, branch, batch or division they are associated with. But groups are bifurcated according to the category mentioned earlier. This helps in automatically connecting yourself to your current or passed out members of the association.

5. PROPOSED SYSTEM

Block Diagram of Information Sharing Mechanism in Academic Network Community includes the modules which needs to there in order to run the system.

5.1 Login / Registration

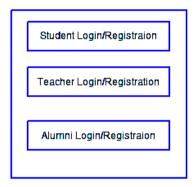


Fig 5.1 Login/Registration

Our project provides the interactive way to register the user according to their type i.e. Student, Alumni and teacher and similarly the login facility will be provided and then the user can see their profile page and set their profile accordingly.

5.2 Profile Setup

Once User is registered to the project for first time, we will ask them to select the college and batch which is must for all. We will give them a Stream option to filter the college among the list

and accordingly select the batch. This is must have step for all users.

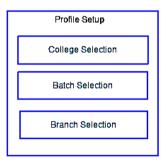


Fig. 5.2 Profile Setup

5.3 Syndication Module



Fig.5.3 Syndication Module

This is one of the very important module, which is kind of heart of our system. As soon as there is any update happen in system, our script will look over it and accordingly syndicate it to users to whom the information belongs without any kind of user's input.

5.4 Information Sharing Module

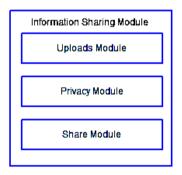


Fig. 5.4 Information Sharing Module

For the system, the information can be file, text or any kind of details which a person wants to share it to the people, this module is responsible for handling the uploading stuff and also deal with the constraint related to upload and share the module.

5.5 Presentation Module

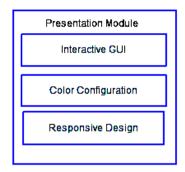


Fig. 5.5 Presentation Module

This module deals with presentation of information to the user. With the interactive GUI and responsive design, system will offer easy way to interact with eye friendly color schemes. Responsive design deals with handling various screen sizes of mobile devices and making the GUI compatible with each of them.

6. DESIGN DETAILS

To elaborate the working of our academic network community, and how the information is shared we have designed the flow chart. This helps us to gain more knowledge regarding the process and steps required to share information in a disciplined and easy, so that no information is considered irrelevant or not useful.

6.1. Information Sharing

Information Sharing will get the file from client computer and recognize the type. If file size exceed the limit then error will be thrown else it will be uploaded by asking whether to share with a particular member or to make it public. The information shared over here can be a document regarding information based on an event occurring in the university or also about the job opening or campus placements. In this way we just not share information which will be useful to just a single use but to all others connected in the same network.

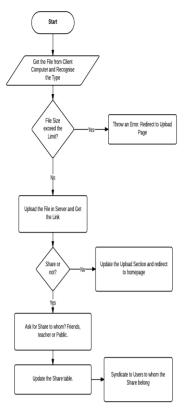


Fig. 6.1 Information Sharing

7. COMPARISON GRAPH

All the social and educational networks have few parameters in common which helps to compare various levels of their efficiency among the users. Following are the parameters which helps us to graph and compare different networks with our proposed system.

7.1 Educational Index

This parameter helps to describe how closely the particular network provides the educational facility.

Educational Index

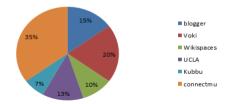


Fig 7.1 Educational index comparison

7.2 Interactivity

A given network requires a good level of GUI in order to attract more users and also at the same time keep it as simple as possible.

Interactivity

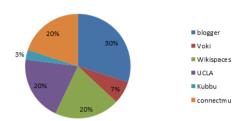


Fig 7.2 Interactivity comparison

7.3 Information sharing efficiency

Information is key thing inn any social and educational network. An ideal educational network should provide information sharing with ease.

Information Sharing Capability

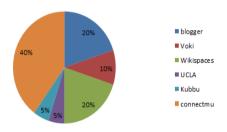


Fig 7.3 Information sharing capability

8. ACKNOWLEDGMENT

We are thankful to Mohammed Haji Saboo Siddik College of Engineering, for providing us the opportunity to do constructive work. We also thank anonymous reviewers for their constructive suggestions.

9. CONCLUSION

Our academic network community will allow teachers, students and alumni to share files, videos and other relevant information with desired users in appropriate and very efficiently.

10. REFERENCES

- Yan Ma, Qin Yang, Juhua Zhang, Yuhui Qui, "A research on a grid community group model based education resource". Published in: Computing, Communication, Control, and Management, 2009. CCCM 2009.ISECS International Colloquium on (Volume:1) on 8-9 Aug. 2009.
- Volmer A. Geronimoa, Claudia Aragon. Resource sharing in university libraries: A tool for information interchange. Library Collections, Acquisitions, & Technical Services 29 (2005) 425 – 432.
- Bhoopalam K., Maly K., Mukkamala R., Zubair M. Published in: Availability, reliability and security,2007. ARES2007. The Second International Conference on: 10-13 April 2007.
- 4. Wen He, Peng Lu, Chao Zhou, Xuelian Lin, "Web based e-government information sharing system". Published in: Conference on Information Reuse and Integration, 2006 IEEE International, pp.63-68.