

Student Hub

Asif . A . Ansari

*¹Department of Information Technology, Bharati Vidyapeeth Deemed University College of Engineering, Pune, Maharashtra

Abstract: To develop a website which is beneficial for students, teachers, head of department and placement officer to share the information related to study, any official notes, placement Notices easily. As students have lack of time for going to library or other source of information for reading and getting information, this serves a best purpose for them to learn within restricted time and place. For this review research was done by interacting with students and mentors and knowing what are their views on balancing the proportion of time, resources and eagerness to *learn*.

Index Terms - Information Exchange, Knowledge, Students, Mentors, Time management, Resource utilization

I. INTRODUCTION

The Internet has enabled new forms of social interaction, activities, and social associations. People are very enthusiastic and eager to learn and implement new things. Mainly, Students are the one with enormous amount of energy; they are the one researching on different types of fields and always in greed of learning new things. Student Hub is a web portal which will help people by making their task of learning more simple, interesting and innovative. This web portal serves the purpose of sharing information between students and mentors. As we all know students have lot many things to share, which includes Study materials, various events and competitions, mentors can also share various notices and other information with students directly with the help of web portal.

Student section includes – Academics, Projects, Ideas, Competitions and Blog/ views. Mentors section includes - Circulars , Schedules and Placement Circulars. In Student section, Academics will have sub sections which includes First year, Second Year, Third Year and Fourth Year. Students will be classified according to their academic year. This student section will allow students to share various assignments and study materials. The very important part is, they can restrict the amount of people to share their information with, this feature would help students if they want to keep some information confidential to certain group of people.

II. METHODOLOGY

This is a software or application used for designing, monitoring trouble shooting and analysing the technical and economic performance of students [6].

The steps used for running were as follows:

- i. To reduce paperwork.
- ii. Reduced operational time.
- iii. Increased accuracy and reliability.
- iv. Increased operational efficiency.
- v. Information sharing.

III. Flow of Software

The Architecture of the system or software are as discussed below

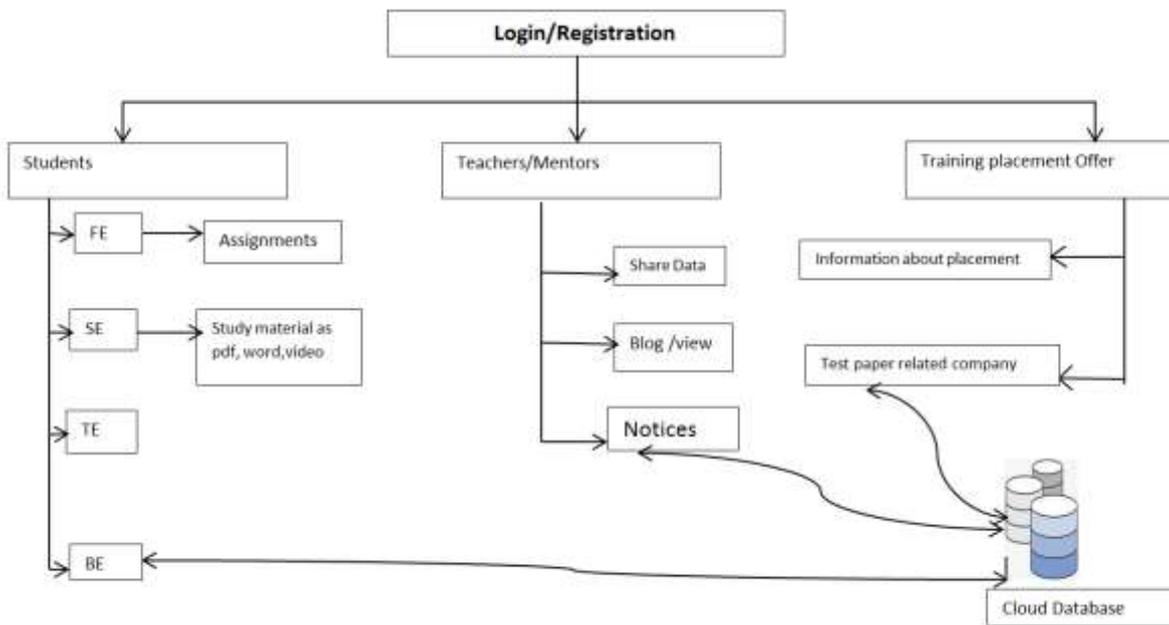


Figure 1: Architecture of System/Software

In the architecture above we provide registration and login page for students, teachers and training placement department. For particular person particular page will display. In student section multiple branches and multiple year of engineering are there. We have provided security for a particular year or branch students, where they can see particular branch information like assignments, study materials like pdf, word, jpeg, png, video files. The security is the Permanent Registration Number (PRN) of the student. Since each student have his or her unique PRN. There are also some common section like competition, workshop, seminars which can be viewed by all year engineering student. In Teacher or mentor section they can share data related to study, some notices and blogs or views. In Training placement section they can provide information related to company and test papers related to company. This data so big in size, so it is stored on cloud database. So in the application we have used a cloud database for storage purpose.

IV. Literature Survey

© Providing Security and Integrity for Data Stored In Cloud Storage [7]

Author: Chandrashekhar S. Pawar, Pankaj R. Patil, Sujitkumar V. Chaudhari Abstract: A scheme by which there provided a secure saving of confidential data in cloud storage in an efficient manner which requires low computational power and time and disallowing hacker from penetrating into private data storage. So there provided a simple and easy integrity checking mechanism when compared to other already present one by which verification can be done whether data is not corrupted and deleted or modified ours is an efficient. Integrity checking mechanism is simple that it does not take more computational power. This mechanism even prevents the TPA who maintains our data in cloud storage from editing our file.

1. Providing Security The data that the user stores in the cloud storage should be secure so that it prevents intruders from accessing our private data. To provide security we use a security key which is automatically generated for each unique user and we use RSA encryption algorithm to encrypt the file and store it. It is a public key encryption algorithm, which eliminates the need to send our secret key over the network. The public key is shared but the private key is not shared. The sender encrypts the file or data that is to be stored in the cloud storage using the Third party auditor public key. So the receiver with the particular private key can only decrypt the file.

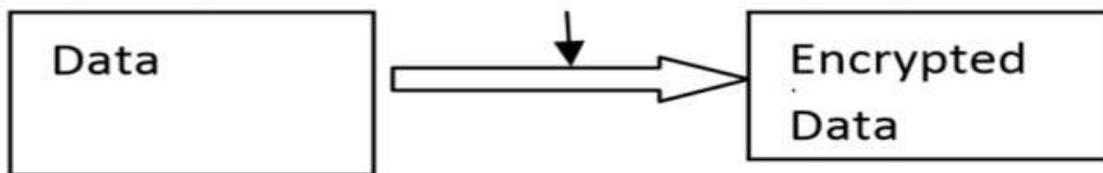


Figure 1: Use Side Encryption for storing data on database

© “Achieving Secure, Scalable, and Fine-Grained Data Access Control in Cloud Computing,”

AUTHORS: S. Yu, C. Wang, K. Ren, and W. Lou,

Cloud computing is an emerging computing paradigm in which resources of the computing infrastructure are provided as services over the Internet. As promising as it is, this paradigm also brings forth many new challenges for data security and access control when users outsource sensitive data for sharing on cloud servers, which are not within the same trusted domain as data owners. To keep sensitive user data confidential against untrusted servers, existing solutions usually apply cryptographic methods by disclosing data decryption keys only to authorized users.

© “Shared Data in the Cloud,”

AUTHORS: B. Wang, B. Li, and H. Li,

With cloud data services, it is a common place for data to be not only stored in the cloud, but also shared across multiple users. Unfortunately, the integrity of cloud data is subject to skepticism due to the existence of hardware/software failures and human errors. Several mechanisms have been designed to allow both data owners and public verifiers to efficiently audit cloud data integrity without retrieving the entire data from the cloud server

V. POSSIBLE OUTCOMES

In project section, students will be able to share their ideas with others and know their views on it. Others can help by suggesting more ideas that can be included in it. They can assist each other by helping them to give a start to their idea and suggesting different ways of implementing them. Competition section will include various events taking place and purpose of the event. There can be various types of events, such as technical events, cultural events, sports events etc. various circulars regarding schedule of each event, including date and time, venue and other information regarding the particular event.

VI. ADVANTAGES

1. **Performance:** Instances can be added instantly for improved performance. Clients have access to the total resources of the Cloud’s core hardware.
2. **Scalability:** Auto-deploy cloud instances when needed.
3. **Easy to access:** In that we can provide easily access to study material.
4. **Uptime:** Uses multiple servers for maximum redundancies. In case of server failure, instances can be automatically created on another server.
5. **Easy communication:-** Student can directly communicate with faculty or administration.
6. **Administration message Broadcasting:-** Administrator can be broadcast and send common message to all student and faculty members.
7. **Centralized Control:-** Administrator controls enable one-state monitoring and control of all users/faculty members.

VII. CONCLUSION

Cloud situations can present particular security provokes, some of which relate to covering trust limits forced by a cloud supplier imparting IT assets to different cloud customers. A cloud purchaser's operational administration can be restricted inside of cloud situations because of the control practiced by a cloud supplier over its stages. In Student Hub, they can directly post the notice which will reach to students within few seconds of time. This would help to post schedules for various exams, seminars, workshops etc. Training and Placement cell will have control to post various details of companies coming for campus recruitment, their requirements, what is the criteria and how to prepare for it. It is a very innovative way to passing information and making human task simple and efficient. It provides effective mechanisms for higher education institutions to manage students and faculty and their interaction with each other and external systems. This would reduce the consumption of time and energy by working smartly.

VIII. REFERENCES

- [1]. http://www.ijarest.com/papers/finished_papers/150509214624.pdf
- [2]. Q. Wang, C. Wang, J. Li, K. Ren, and W. Lou, Enabling public verifiability and data dynamic for storage security in cloud computing
- [3]. S. Yu, C.Wang, K. Ren, andW. Lou, Achieving secure, scalable, and fine-grained access control in cloud computing.
- [4]. C. Wang, Q. Wang, K. Ren, and W. Lou, Privacy-preserving public auditing for data storage security in cloud computing, auditing for data storage security in cloud computing.
- [5]. Cloud computing: Concept, Technology & Architecture. By Thomas Erl published in MAY2013
- [6]. Cloud Security Alliance, Security guidance for critical areas of focus in cloud computing, 2009.
- [7]. Principles of Concurrent and Cloud Programming book.
- [8]. http://www.tutorialspoint.com/cloud_computing/cloud_computing_tutorial.pdf
- [9]. <https://www.uscert.gov/sites/default/files/publications/CloudComputingHuthCebula.pdf>
- [10]. RESOURCE PROVISIONING ALGORITHMS FOR RESOURCE ALLOCATION IN CLOUD COMPUTING 2017

