SECURE DATA STORING IN CLOUD COMPUTING

Prof. Azhar Baig[1], Megha S[2], Sai lakshmi[3], Maheen[4], Sankeerthana[5]
Department of CSE, Ballari Institute of Technology and Management, Ballari, India.

Abstract: Cloud computing is used to provide security to the users data in the cloud. Cloud computing model is the process of delivering the information that is retrived from the internet through web based tools and applications. Cloud computing however enables to access the data as long as the device in access to the web. Hence, it is very important for both the cloud provider and the user to have a mutual trust such that the cloud provider can be assured that the user is not some hacker.

I. INTRODUCTION

Cloud computing has been envisioned as the next-generation architecture of IT enterprise. To ensure correctness of user's data in the cloud, we propose an effective distributed scheme with two salient features, by utilizing with distributed verification of erasure-coded data; scheme achieves the integration of storage correctness insurance, data error localization, i.e., the identification of misbehaving server(s). New scheme further supports secure and efficient dynamic operations on data blocks, including: data update, delete and append. Several trends are opening up the era of Cloud Computing, which is an Internet-based development and use of computer technology. Moving data into the cloud offers great convenience to users since they don't have to care about the complexities of direct hardware management. The ever cheaper and more powerful processors, together with the software as a service (SaaS) computing architecture, are transforming data centers into pools of computing service on a huge scale.

Purpose of the document

The purpose of developing this application is to provide services to the admin and the user, administrator have the authority to upload the files and can create the new users into the application.

Administrator have authority to restrict the user ip address based on the admin request user can download the file.

Scope for development of this system

Every access to the data should be correctly and automatically logged. This requires integrated techniques to authenticate the entity who accesses the data, verify, and store the actual operations on the data as well as the time that the data have been accessed.

Main Modules of the system.

Admin Module

- Admin is provided with Username and Password to avoid unauthorized access.
- Admin logs in and start server to run application and enable mobile alert
- Admin performs his tasks by adding & removing restricted IP address also View available resources and add new files
- Admin accepts entry fields to register new user
- Mobile alert for client about hackers IP address
- Hackers information provided by Admin

User Module

- User can download the file which is uploaded by the admin only when admin gives permission to the user id not he /she can't able to download the file.
- If unauthorized user tries to download the file admin will get the hacker details

Existing System

Firstly, traditional cryptographic primitives for the purpose of data security protection cannot be directly adopted due to the users' loss control of data under cloud computing. Therefore, verification of correct data storage in the cloud must be conducted without explicit knowledge of the whole data. Considering various kinds of data for each user stored in the cloud and the demand of long term continuous assurance of their data safety, the problem of verifying correctness of data storage in the cloud becomes even more challenging.

Limitaions of the existing system

- Feasibility is reduced.
- Security is not provided and any one can access the application.
- As everything is done manually its slow process.

II. PROPOSED SYSTEM

The development of this new system objective is to provide the solution to the problems of existing system. By using this new system, we rely on erasure correcting code in the file distribution preparation to provide redundancies and guarantee the data dependability. This construction drastically reduces the communication and storage overhead as compared to the traditional replication-based file distribution techniques.requirements and specifications.

Functional Requirements

The main purpose of functional requirement is to define all the activities or operations that take place in the system. These are derived through interactions with the users of the system. Since the Requirements Specification is a comprehensive document & contains a lot of data, it has been broken down into different Chapters in this report i.e.

- Admin
- User

Non-Functional Requirements

Reliability

- The system must be highly reliable as it would be handling critical data regarding the project.
- Unauthorized person should not able to access the details.
- This system must perform all of its operations with high accuracy.

Availability

The application will be available for admin and the user an access this application at any time.

Security

The business logic is hidden from the users and is much safer and thus avoids unauthorized or illegal access or database corruption.

Security of the user's information is also safe as there is a login facility.

Maintainability

Maintenance is typically done after the software development has been completed. As the time evolves, so do the requirements and needs.

It revolves around the understanding of the existing software and the effects of the change.

Portability

Portability is the ability of the system or application that can run in various environments.

As the web application is based on the java language, the application is portable.

Hardware Requirements

- System : Pentium IV 2.4 GHz.
- Hard Disk : 40 GB.
- Monitor : 15 VGA Colour.
- Mouse : Logitech.
- RAM : 256 MB.

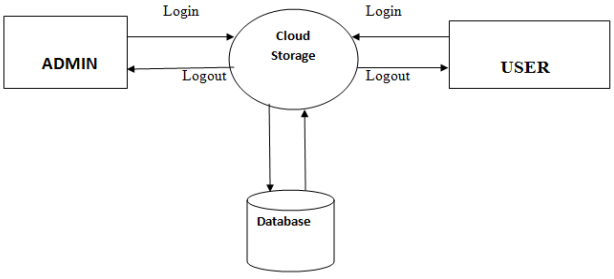
Software Requirements

- Operating System : Windows XP/7/8/10.
- Database : MYSQL.
- Database connectivity: JDBC.
- IDE : Eclipse.
- Coding Language : JAVA, J2ME Swing (JFC), RMI.

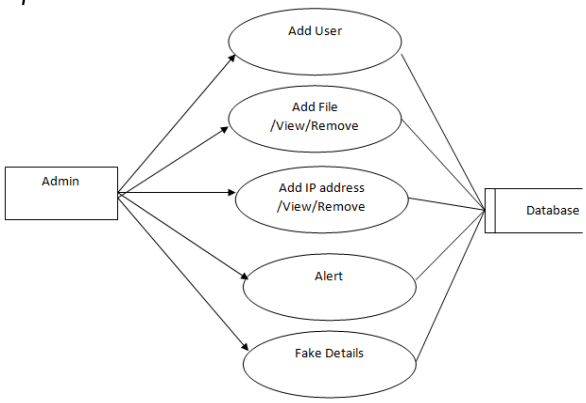
III. SYSTEM DESIGN

DATAFLOW DIAGRAM

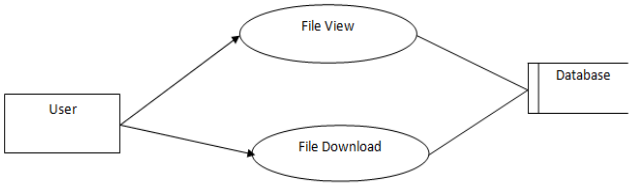
LEVEL 0:



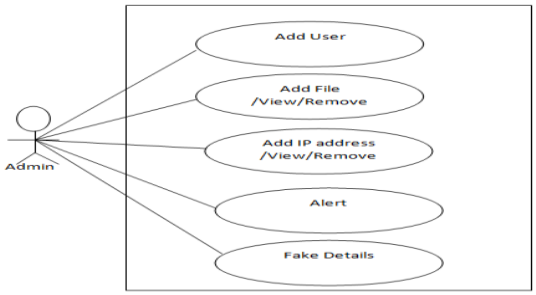
DFD for Admin



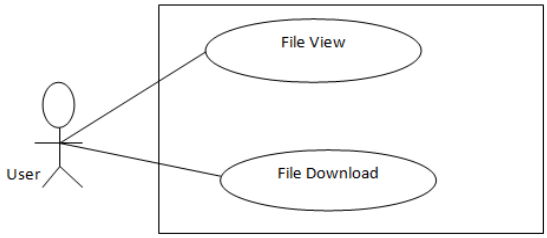
DFD for User



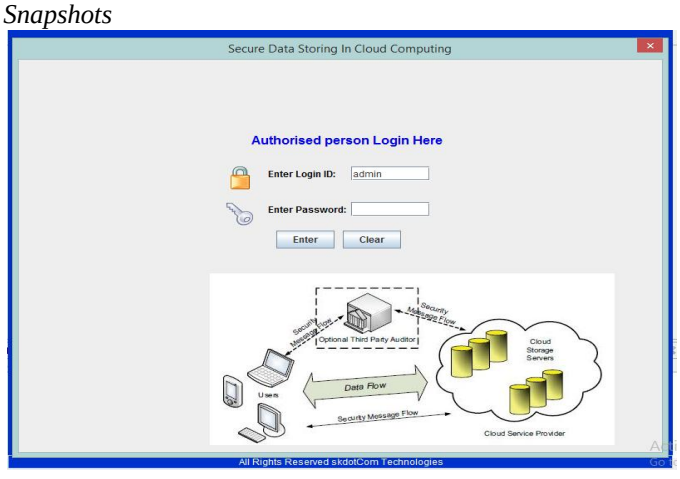
Use case diagram for admin



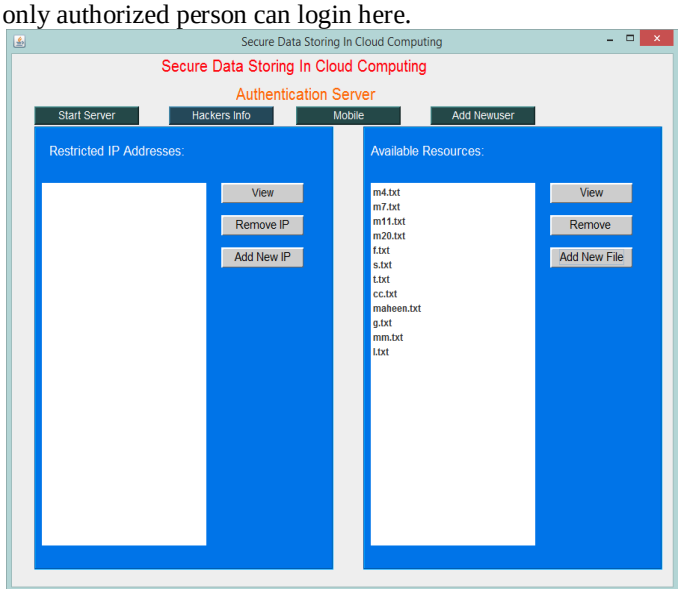
Use case diagram for user



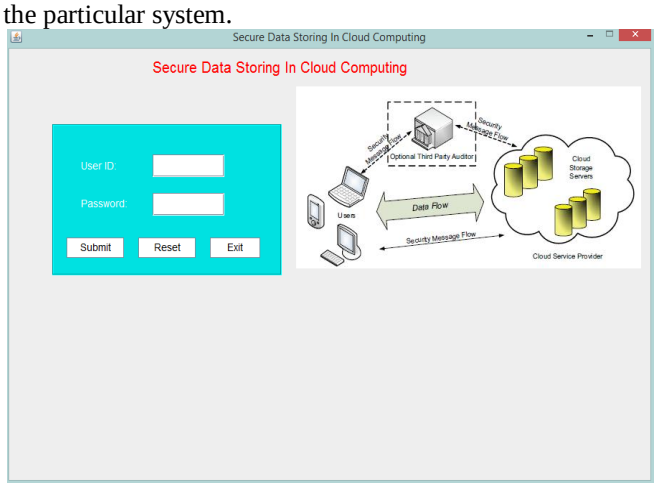
Snapshots



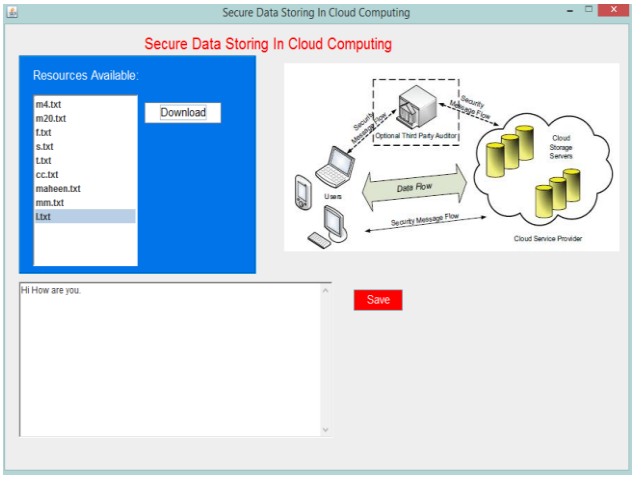
The above page shows the admin login page. In this page only authorized person can login here.



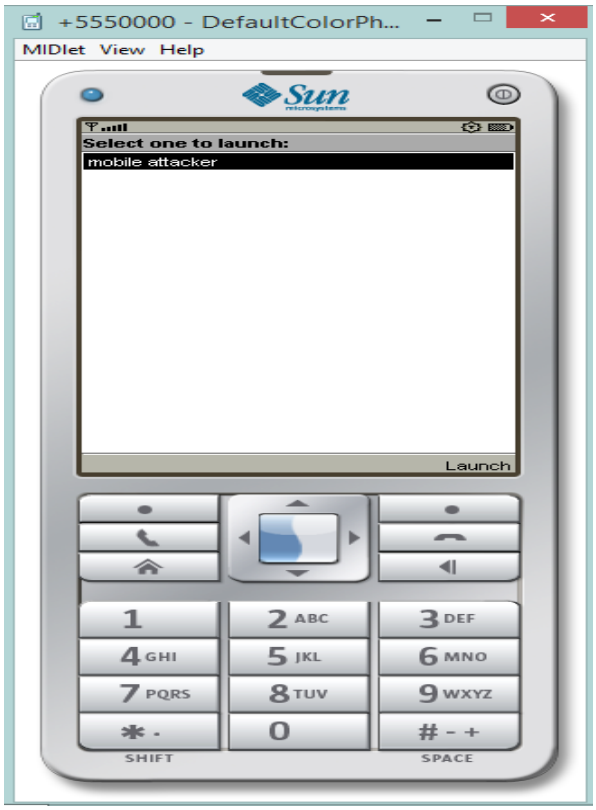
In the above page the admin can view, remove and add files and he can also view, remove IP and Add new IP address of the particular system.



In the above page the user can login only if he is authorized.



In the above page the authorized user can view and download text files.



In the above page when unauthorized person download the file admin get alert message through mobile.

IV. CONCLUSION

In this paper, we investigated the problem of data security in cloud data storage, which is essentially a distributed storage system. To ensure the correctness of users' data in cloud data storage, we proposed an effective and flexible distributed scheme with explicit dynamic data support, including block update, delete, and append. We rely on erasure-correcting code in the file distribution preparation to provide redundancy parity vectors and guarantee the data dependability.

REFERENCES

[1] "Software Engineering", by Ian Somerville, Sixth Edition, Pearson Education Ltd 2007.
[2] "Web Programming", by 'Chris Bates' Wiley Dreamtech India, 2nd Edition.
[3] Database Management Systems by Navathe, Gruman, Galen (2008-04-07). "What cloud computing really means". InfoWorld. Retrieved 2009-06-02.
[4] Mills, Elinor (2009-01-27). "Cloud computing security forecast: Clear skies". CNET News. Retrieved 2010-08-22.
[5] Chhibber. A (2013). "SECURITY ANALYSIS OF CLOUD COMPUTING" (PDF).International Journal of Advanced Research in Engineering and Applied Sciences 2 (3): 2278–6252. Retrieved 27 February 2015.

