**SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN:: BHIMAVARAM**

**(AUTONOMOUS)**

**DEPARTMENT OF CSE**

**Academic Year:: 2021-22 :: II Semester**

**B.Tech - PROJECT WORK:: ABSTRACT**

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| **Name of the Class / Section** | CSE-B | | |
| **Batch Number** | B04 | | |
| **Project Domain / Technology** | Cloud Computing | | |
| **Project Title** | Identity- based Data Outsourcing with Comprehensive Auditing | | |
| **Guide Name** | Mr. M. Narasimha Raju | | |
| **Students Registered** | **Registered Number** | **Student Name** | **Student**  **Signature** |
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| **Signature of**  **Internal Project Guide** | **Signature of**  **B.Tech Project – Coordinator** | **Signature of**  **Head of the Department** |

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| **Abstract of the Project ( In 200 words)** | | | |
| Cloud storage system provides facilitative file storage and sharing services for distributed clients. To address integrity, controllable outsourcing and origin auditing concerns on outsourced files, we propose an identity-based data outsourcing (IBDO)scheme equipped with desirable features advantageous over existing proposals in securing outsourced data. First, our IBDO scheme allows a user to authorize dedicated proxies to upload data to the cloud storage server on her behalf, e.g., a company may authorize some employees to upload files to the company’s cloud account in a controlled way. The proxies are identified and authorized with their recognizable identities, which eliminates complicated certificate management in usual secure distributed computing systems. Second, our IBDO scheme facilitates comprehensive auditing, i.e., our scheme not only permits regular integrity auditing as in existing schemes for securing outsourced data, but also allows to audit the information on data origin, type and consistence of outsourced files. Security analysis and experimental evaluation indicate that our IBDO scheme provides strong security with desirable efficiency. | | | |
| **Existing System (If any) – Features & Drawbacks:**   * Among existing proposals, provable data possession (PDP) is a promising approach in proof of storage (PoS). With PDP, the file-owner only needs to retain a small amount of parameters of outsourced files and a secret key. To check whether or not the outsourced files are kept intact, the file owner or an auditor can challenge the cloud server with low communication overheads and computation costs. If some part of the file has been altered or deleted, for example, due to random hardware failures, the cloud storage server would not be able to prove the data integrity to convince the clients.   **Disadvantages :**   * The users will lose physical control of their files after outsourced to a cloud storage server maintained by some cloud service provider (CSP). Thus, the file-owners may worry about whether their files have been tampered with, especially for those of importance. * We observe two critical issues not well addressed in existing proposals. First, most schemes lack a controlled way of delegatable outsourcing. | | | |
| **Proposed System – Features**  **List of objectives/features that are planned to implement:**   * Our scheme has the following distinguishing features. * **Identity-based outsourcing.** A user and his/her authorized proxies can securely outsource files to a remote cloud server which is not fully trustable, while any unauthorized ones cannot outsource files on behalf of the user. The cloud clients, including the file-owners, proxies and auditors, are recognized with their identities, which avoids the usage of complicated cryptographic certificates. This delegate mechanism allows our scheme to be efficiently deployed in a multi-user setting. * **Comprehensive auditing.** Our IBDO scheme achieves a strong auditing mechanism. The integrity of outsourced files can be efficiently verified by an auditor, even if the files might be outsourced by different clients. Also, the information about the origin, type and consistence of outsourced files can be publicly audited. The auditor can run the auditing protocol to provide convincing judicial witnesses without requiring disputing parties to be corporative. | | | |
| **Requirement Analysis** | | | |
| **(i)Functional Requirements**  Functional Requirements drive the application architecture of the system. Our Functional Requirements include   * Technical Details, * Manipulation * Providing service to the end user     **(ii) Non – Functional Requirements:**   1. Portability 2. Security 3. Reliability 4. Scalability 5. Performance 6. Flexibility | | | |
| **(iii)Software Requirements :**   * Programming Language : Java * IDE : NetBeans * Database : MySql   **(iv)Hardware Requirements:**   * Processor : Intel Core i3 and above * RAM : 4GB and Higher * Hard Disk : 500GB: Minimum | | | |
| Expected Date of completion | 11-04-2022 |
| Literature Survey | <https://www.ijcrt.org/papers/IJCRT1802914.pdf>  K. Yang and X. Jia, “Data storage auditing service in cloud computing: challenges, methods and opportunities,” World Wide Web,vol. 15, no. 4, pp. 409–428, 2012. |
| **Modules** | **Expected date of completion** |
| Data Owner | 08-03-2022 |
| Cloud Server | 18-03-2022 |
| Proxies | 30-03-2022 |
| Auditor | 04-04-2022 |
| Deploy the model | 19-04-2022 |