** **

**HYBRID CLOUD APPROACH FOR COMPLETE DEDUPLICATION AND DIFFERENTIAL AUTHORIZATION**

**A PROJECT REPORT**

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***in partial fulfillment for the award of the degree***

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**BONAFIDE CERTIFICATE**

Certified that this project report **“HYBRID CLOUD APPROACH FOR COMPLETE DEDUPLICATION AND DIFFERENTIAL AUTHORIZATION”** is the bonafide work of “**MYTHILY.C (211411205057), PAVITHRA.D (211411205059), PRIYANKA.K (211411205069)”** who carried out the project work under my supervision.

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**DECLARATION**

I hereby declare that the project report entitled “**HYBRID CLOUD APPROACH FOR COMPLETE DEDUPLICATION AND DIFFERENTIAL AUTHORIZATION**” which is being submitted in partial fulfilment of the requirement of the course leading to the award of the ‘Bachelor of in Information Technology ’ in **Panimalar Engineering College, Affiliated to Anna University- Chennai** is the result of the project carried out by me under the guidance and supervision of **Dr. HELDA MERCY, M.E., Ph.D., Head of the Department of Information Technology**. We further declare that we or any other person has not previously submitted this project report to any other institution/university for any other degree / diploma or any other person.

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**ABSTRACT**

Cloud computing provides seemingly unlimited “virtualized” resources to users as services across the whole Internet. As cloud computing becomes prevalent, an increasing amount of data is being stored in the cloud and shared by users with specified privileges, which define the access rights of the stored data. One critical challenge of cloud storage services is the management of the ever-increasing volume of data. To make the data storage management scalable in cloud we introduce a new technique called complete de-duplication which does complete de-duplication with data integrity by providing a hybrid cloud approach and for data confidentiality a Authorized Duplicate Check. Authorized user is able to use his/her individual private keys to generate query for certain file and the privileges he/she owned with the help of private cloud, while the public cloud performs duplicate check directly and tells the user if there is any duplicate.

|  |  |  |
| --- | --- | --- |
|  | **TABLE OF CONTENT** |  |
| **CHAPTER** | **TITLE** | **PAGE NO.** |
|  | **ABSTRACT** | v |
|  | **LIST OF FIGURES** | Viii |
|  | **LIST OF ABBREVIATIONS** | ix |
| **1** | **INTRODUCTION** | 1 |
|  | 1.1 Introduction about the project | 1 |
|  | 1.2 Preliminaries | 2 |
|  | 1.3 Scope of the project | 3 |
|  | 1.4 Proposed system | 4 |
|  | 1.5 Feasibility study | 4 |
|  | 1.6 Organization of chapters | 6 |
| **2** | **LITERATUTE SURVEY** | 7 |
| **3** | **SYSTEM ANALYSIS AND DESIGN** | 12 |
|  | 3.1 Architecture Diagram | 12 |
|  | 3.2 Module description | 13 |
|  | 3.3 Use case Diagram | 14 |
|  | 3.4 Sequence Diagram | 15 |
|  | 3.5 Data Flow Diagram | 16 |
|  | 3.5.1 Data Flow Diagram level-0 | 18 |
|  | 3.5.2 Data Flow Diagram level-1 | 18 |
|  | 3.5.3 Data Flow Diagram level-2 | 19 |
| **4** | **IMPLIMENTATION** | 20 |
|  | 4.1 Secure deduplication system | 20 |
|  | 4.1.1 Token generation | 20 |
|  | 4.1.2 File upload | 20 |
|  | 4.1.3 File retrieving | 21 |
|  | 4.1.4 File sharing | 22 |
|  | 4.2 Sample coding | 23 |
|  | 4.3 Sample screen shots | 37 |
| **5** | **SOFTWARE TESTING** | 39 |
|  | 5.1 Types of test | 39 |
|  | 5.1.1 Unit testing | 39 |
|  | 5.1.2 Integration testing | 39 |
|  | 5.1.3 Functional testing | 39 |
|  | 5.1.4 System testing | 40 |
|  | 5.1.5 White box testing | 40 |
|  | 5.1.6 Black box testing | 40 |
|  | 5.2 Software environment | 43 |
|  | 5.3 Networking | 47 |
| **6** | **CONCLUSION** | 53 |
|  | **REFERENCES** | 54 |

|  |  |  |
| --- | --- | --- |
|  | **LIST OF FIGURES** |  |
| **FIGURE** | **CAPTION** | **PAGE NO.** |
| 3.1 | Architecture Diagram | 12 |
| 3.2 | Use case Diagram | 15 |
| 3.3 | Sequence Diagram | 16 |
| 3.4 | Dataflow Diagrams level-0 | 18 |
| 3.5 | Dataflow Diagrams level-1 | 18 |
| 3.6 | Dataflow Diagrams level-2 | 19 |
| 3.7 | Home page | 37 |
| 4.1 | Registration page | 37 |
| 4.2 | Login page | 37 |
| 4.3 | File upload page | 38 |
| 4.4 | File share page | 38 |
| 5.1 | Diagram of java programming language | 43 |
| 5.2 | Diagram of java virtual machine | 43 |
| 5.3 | Diagram of java API | 44 |
| 5.4 | Diagram of java 2SDK | 45 |
| 5.5 | Diagram of total address | 48 |

**LIST OF ABBREVATIONS**

S-CSP - Storage-Cloud Service Provider

PoW - Proof of Ownership

(*pkU, skU*) - User’s Public and Secret Key Pair

*kF* ***-*** Convergent encryption key for file *F*

*PU* ***-*** Privilege set of a user *U*

*PF* ***-*** Specified privilege set of a file *F*

*ϕ′F;p* ***-*** Token of file *F* with privilege *p*

SQL **­**- Structured Query Language

ODBC - Open Database Connectivity

UDP - User Datagram Protocol