**Secure Data Dedeplication is technique to avoid redundant files in the cloud**

The main propose of my project is to check the duplicate data in the cloud whenever uploaded by the user or data provider and the 1st arrange to formally address the matter of authorized information deduplication. In my project each user is issued set of credentials in the setup of the system. Every file is protected with the convergent encryption key and private keys to realize the authorized deduplication with differential privileges. So use this dedeplication system to increase the storage capacity and find the files very easily. Completely different from ancient deduplication systems, the differential privileges of users area unit any thought of in duplicate check besides the information itself. We tend to conjointly gift many new deduplication constructions supporting licensed duplicate sign up a hybrid cloud design.

**REQUIREMENTS:**

**SOFTWARE REQUIREMENTS**:

* Operating system : Windows XP/7.
* Coding Language : JAVA/J2E.
* IDE : Net beans 7.4/above
* Database : MYSQL5.0/ above

**HARDWARE REQUIREMENTS:**

* Hard Disk : 40 GB.
* Floppy Drive : 1.44 Mb.
* Monitor : 15 VGA Color.
* Mouse : Logitech.
* Ram : 512 Mb.

We have mentioned the purpose of these requirements and tests below

R1: Our project shall display username and password for access web site services.

T1: When user enter the valid user name and password. Then it will be navigated to the other page which is access token page of the user. Enter valid access token to navigate to the home page.

R2: User shall get access token, user rights and activation of user account from the private cloud

T2: Based on Description tester will able to do this test.

R3: User can upload, download and update the files based on the user rights.

T3: Based on description tester will able to do this test.

R4: Our project rejects the duplicate file.

T4: whenever user wants to upload the file into cloud then check the duplication if found file is already exist in the cloud then user uploaded file is rejected and display the message duplicate file is found.

R5: user shell sends the file permission requests.

T5: whenever user does not have a file access or upload permissions then user send the file permission request to the private cloud.

R6: private cloud manager manage the users permissions and generate access tokens.

T6: based on the description tester will able to do this test.

R7: admin check the number of uploads, downloads and updates.

T7: Based on the description tester will able to do this test.

R8: This project shall use Java Servlets, JSP (java server pages), CSS (cascading style sheet) and html

T8: Java Servlets, JSP (java server pages), CSS (cascading style sheet) and html are easily configured in Net beans or any other IDE. In my project java servlets used to extend related JSP and html pages. For example user needs to enter the valid details like user name and password. If the details are correct, then only it navigates to other pages like user access token page. In this way we can test servlets in my project. It provides consistent high usable environment.

For example, html (hypertext mark-up language) components such as buttons, submit, text fields, radio buttons, list boxes and Checkbox could be used in the same program with standard html tags.

R9: In this project shall use JSP

T9: Java Server Pages (JSP) is a technology that helps software developers create dynamically generated web pages based on HTML, XML, or other document types. This JSP are used to display the response of the server side dynamically.

For example in our project java server pages is used to combine different jsp pages, those are login pages and details of different Users pages like user details, private cloud details. These are used to combine java code and html pages in web applications. User needs to give correct tags and needs to provide exact code, then it turns to be executed and we can see the details.

R10: In this project shall use HTML

T10: Hypertext mark- up language (HTML). This html is used to create the static web pages. In this html we have the some tags such as input, text fields, labels, radio buttons, buttons, hyperlinks, list boxes and checkbox etc...

For example in our project needs to use correct html tags and cascading style sheets. Then only we can see the static webpage’s. In this manner tester will check the each and every page. In that case tester gets the output correctly.

R11: In this project shall use java/j2EE

T12: In our project java is used to create dynamic web pages step by step. Tester needs to check the each and every instances and classes. If those are correctly given by the developer at that time only tester can test the server pages.

Java is a high-level programming language originally developed by Sun Microsystems and released in 1995. Java runs on different platforms, such as Windows, Mac OS, and the various versions of UNIX. There are many of applications and websites that will not work unless you have Java installed, and more are created every day. Java is fast, secure, portable and reliable. The J2EE (Java Enter price Edition) Application Programming Model is the standard programming model used to facilitate the development of multi-tier, thin client applications. This is used to develop the web application frame works such as servlets.

R13: This project shall uses web Applications and Servlets

T13: In our project, java servlets are used to develop the web application. A Java servlet is a Java program that inherits the capabilities of a server. Although servlets can respond to any type of requests like post, get, delete and put. They most commonly implement applications hosted on Web servers. Java Servlets are extended from javax.servlet.

R14: Graphical User Interface shall be used in this project

T14: In our project, HTML, JSP and CSS are used to develop the user interface. In this user interface we are using the foundation CSS. This CSS are used to develop the user interface very efficiently. The options available are displayed in a menu format, like website. Clicking on mouse html pages changed.

R15: MySQL shall be used in this project

T15: In our project, MySQL5.0 version data base is used. This data base is used to store and retrieve related information. It prevents unauthorized access and provides efficient solutions for failure recovery.

R16: NetBeans7.4 shall be used in this project

T16: We can test Netbeans7.4 by build our project. We should be write exact code for servlets, HTML and JSP and configure and deploy into the server then only user can login or register the details. Servlets, Html, JSP and CSS are configured easily in Netbeans7.4. NetBeans provide glassfish server for deploying code. It provides consistent high usable environment.

R17: Features included in Future system

T17: In our project files are stored in cloud. These files are much secured because every file is encrypted and this encrypted data is stored in the cloud. User able to upload file in a cloud then our deduplication system check the files status in cloud then only the file upload complete otherwise display message like file is already exists. Every user can have file permission to access the files. If user does not have file upload permissions then user cannot upload the file into cloud. Then that time user sends the file upload permission request to the private cloud. If private cloud manager accept his request then user can upload the file otherwise he cannot upload the file. Every user registration done after needs to wait for private cloud activation, access token and file permission without these information users cannot access the cloud services.

R18: Login user name and password has to be entered correctly

T18: The landing page will be home page, user click on the user login option to navigate the user login page and it prompts the user to enter username and password. If the user entered user name and password are valid then it redirects the user to the access token page. Then user enters the valid access token to redirects to home page.

R19: In this project shall use Hard disk

T19: Hard disk is used to store the information. In this project, all information is stored in hard disk and java software’s also installed in this hard disk. The Hard disk minimum required size is 40GB

R20: In this project shall use Ram

T20: RAM is an acronym for random access memory, a type of computer memory that can be accessed randomly; that is, and any byte of memory can be accessed without touching the preceding bytes. RAM is the most common type of memory found in computers and other devices. This main purpose of this project speed of execution of our system. Minimum required Ram is 512MB

**Test cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test case No** | **Description** | **Expected value** | **Actual value** | **Result** |
| 1 | Using servlets to develop the code | No Error | No Error | No Error |
| 2 | Check JSP dynamic web pages | Successfully Created | Successfully Created | Successfully Created |
| 3 | Check HTML web pages | Successfully Created | Successfully Created | Successfully Created |
| 4 | Check GUI | Working perfectly | Working perfectly | Working perfectly |
| 5 | Check MySQL5.0 work bench | Working perfectly | Working perfectly | Working perfectly |
| 6 | Check NetBeans7.4 IDE configuration | Working perfectly | Working perfectly | Working perfectly |
| 7 | Check RAM capacity | Working perfectly | Working perfectly | Working perfectly |
| 8 | Check Hard Disk Capacity | Working perfectly | Working perfectly | Working perfectly |
| 9 | Check glashfish3.0 server | Working perfectly | Working perfectly | Working perfectly |

**Schedule:**