**SYSTEM REQUIREMENT**:

This Chapter describes about the requirements. It specifies the hardware and software requirements that are required in order to run the application properly. The Software Requirement Specification (SRS) is explained in detail, which includes overview of this dissertation as well as the functional and non-functional requirement of this dissertation.

**SRS**

|  |  |
| --- | --- |
| **Functional** | Control the file access at Storageserver, Encrypts file, Generates Keys for Uploading Files, Encrypting the keys, User request, Data confidientiality violator, privacy preservation, shared authority of content, universal composability, Automatic malicious user Revocation. |
| **Non- Functional** | Data Owner never monitors the Storage activities |
| **External interface** | LAN , WAN, Routers |
| **Performance** | Finding File Hacker Information, view Remote user, File Sharing efficiency fairness between Storage Server and Remote User, Revocation of the File Hackers in the cloud, shared authority of content, view the confidentiality violator. |
| **Attributes** | File Management, Storage computing, authentication protocol, privacy preservation, shared authority, universal composability. |

Table: 3.1 Summaries of SRS

**Functional Requirements**

Functional Requirement defines a function of a software system and how the system must behave when presented with specific inputs or conditions. These may include calculations, data manipulation and processing and other specific functionality. In this system following are the functional requirements:-

* The data owner should register by providing user name, password, email and group, after registering owner has to Login by using valid user name and password.
* The Data owner browses and uploads their data to the Storageserver.
* The Data Owner will create Remote users by specifying username.
* The Storage server is responsible for data storage and file authorization for an end user.
* The End User Registers and Logins with their details.
* The End user has to use correct key to access the files and file names. If anyone is wrong then he is detected as attacker.
* The Attributes are File Management, privacy preservation, shared authority, universal composability.

**Non – Functional Requirements**

Non – Functional requirements, as the name suggests, are those requirements that are not directly concerned with the specific functions delivered by the system. They may relate to emergent system properties such as reliability response time and store occupancy. Alternatively, they may define constraints on the system such as the capability of the Input Output devices and the data representations used in system interfaces. Many non-functional requirements relate to the system as whole rather than to individual system features. This means they are often critical than the individual functional requirements. The following non-functional requirements are worthy of attention.

**The key non-functional requirements are:**

* Security: The system should allow a secured communication between Cs and
* Data Owner, User and File Owner
* Energy Efficiency: The Energy consumed by the Users to receive the File information from the Storage server
* Reliability: The system should be reliable and must not degrade the performance of the existing system and should not lead to the hanging of the system.