Implementation

* **Data Owner**

In this module, the data provider uploads their encrypted data in the Cloud server. For the security purpose the data owner encrypts the data file and then store in the server. The Data owner can have capable of manipulating the encrypted data file and performs the following operations Register and Login, Upload, View Uploaded Files, Verify File, Delete File.

* **Cloud Server**

The **Cloud** server manages which is to provide data storage service for the Data Owners. Data owners encrypt their data files and store them in the Server for sharing with data consumers. To access the shared data files, data consumers download encrypted data files of their interest from the Server and then Server will decrypt them. The server will generate the aggregate key if the end user requests for file authorization to access and performs the following operations such as Login, Authorize User, Authorize Owner, View Owner Files, View Attackers, View Data De duplication Files, View Transactions, View File Rank Chart, View Time Delay Results, View Throughput Results.

* **User**

In this module, the user can only access the data file with the secret key. The user can search the file for a specified keyword. The data which matches for a particular keyword will be indexed in the cloud server and then response to the end user and performing the following operations Register and Login, Request FILE Key and MLE Key, Search File, Download File.

* **Key Server – responsible to View Secret Key Request and Permit, View MLE Key Request and Permit.**