**IMPLEMENTATION**

**MODULES:**

* Users Registration Phase
* QR Code Generation
* Malicious User Revocation
* User Apply For Revocation
* Cloud Server

**MODULES DESCSRIPTION:**

**Users Registration Phase**

In the first module, we develop the Users registration module, where the users who need to access the cloud server needs to get registered and then only able to login and access or upload their cloud files. The user registration is done by collecting the details of user name, password and other basic details.

**QR Code Generation**

Once after the user registration is done, the user will login with the user name and password. But even after the username and password is given, the user cannot able to access the cloud, as the other layer of security should be checked, which is QR Code. In this module, QR code is generated in backend and stored. User need to verify the QR Code using QR code extractor to validate the authorized user and then only can able to login or access the cloud. Any user cannot able to bypass this security feature.

**Malicious User Revocation**

In this module, we develop the system to identify the malicious user and also provide the option of user revocation. We develop the system with certain threshold where the user tries to bypass the QR code with wrong QR Code or fake QR code, then the malicious user is identified and blocked by the admin/cloud server. In practice, the importance of an efficient revocation mechanism is self-evident. It has positive meaning both in preventing malicious users and improving the efficiency of cloud server.

**User Apply For Revocation**

In the earlier module, during the session, if servers find that a user is visiting illegally, the server reports and it will verify the authenticity. If the situation is true, he/she immediately blocked. Otherwise, cloud server will punish the service to a certain degree of downgrade. If this process is done wrong, then the user can able to request, so the user revocation process can also be done in this module. The user sends the revocation request with identity through the secure channel. After receiving the message, server checks the identity and gives the access with new QR code.

**Cloud Server**

In this module, we develop the Cloud server module, where we design the system to upload the files in a free cloud server named DriveHQ. Is an entity with powerful computation and storage resources. CS stores a massive amount of encrypted data, and receives the semantic queries to look for the required documents on behalf of the data user. The cloud finds the relevant documents, and sends them back to the data user. The cloud server is an intermediate service provider that performs the retrieval process.