**Use Case Diagram**

Login, Authorize User, Authorize Owner,

View Owner Files,

Verify File,

Delete File.

Register and Login,

View Owner Files, View Attackers,

**Data Owner**

Upload, View Uploaded Files,

View Data De duplication Files,asdfa

**Cloud Server**

View Transactions,

View File Rank Chart,asdfa

View Time Delay Results,

View Throughput Results.

**Register and Login,**

**User**

**Request FILE Key and MLE Key,**

**Search File,**

Authorize user

Download File

**Key Server**

**Login, View Secret Key Request and Permit,**

**View MLE Key Request and Permit.**