**DATA LEAKAGE DETECTION**

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| Brief idea of the project  (8-line) | The project is basically used to detect data leakages happening to different confidential data by the trusted clients who have access to that data .It gives undeniable proof of a clients treachery .It consists of the concept of fake object which is unique to a particular client .The fake object is only known by the Server. The server uses this fake object to identify the the guilty client. Also, different other features such as probability calculation and watermarking are provided. Encryption is done at every stage. It can be used at industry level application and also while handling sensitive data |
| Photo of project/screen shots/applications where it can be used | **Client side:-**     * This is the Home interface of the client side.   **Login window(Client side):-**     * The Login window is used to authenticate the client. * It takes three Parameters as input:-  1. User Name 2. Password 3. User Id   **Data Creation :-**     * Click on “Open Window” button to open the Data Editor. * Type data in the data Editor window.   **Data Encryption:-**     * Data is encrypted at the client side by clicking on the “Enc” button. * The Encryption key is decided by the client. * This is shown in the image below.     **Data Decryption:-**     * To decrypt the data the same key is used by client. * This is shown in the image below.     **Storing a File:-**     * Any file created can be stored by clicking in “save” button. * While storing client has to give a filename and the file extension. * Examples of extensions are .snmp and .lgk   **Storage-Manager**   * Click on the “File Storage” button to access the storage manager. * The storage manager consists of all the files stored at the client.   **Communication Channel:-**    It is used to establish connection to the server.   * It requires the following input:-  1. Communication Port 2. Valid key 3. IP of the Client machine   **Accessing Server Files:-**     * Click on the “server files” icon to access server files.   **History:-**     * It is used to access the file access history.   **Display Watermark:-**     * We have to click on “New search” icon. * It displays the water marks added to the files.   **Client to Client Communication:-**    **Server Side:-**  C:\Users\Manoj\Downloads\Screen Snap\Screen Snap\Untitled13.png  Fig. No of Client Connected  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled1.png  Fig. Add Client  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled2.png  Fig. Client Records  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled4.png  Fig. Add Watermark & Fake Object  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled6.png  Fig. Encrypted Data  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled7.png  Fig. Probability of Clients  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled8.png  Fig. Find Fake object  D:\Manoj\Manoj DATA\Study\BE\Fourth Year\Project II\Documentation\Image\Screen Snap\Untitled9.png  Fig. Find Watermarks  **APPLICATION**  Data Leakage Detection useful in various places. As shown below :-   * Organization: In organization they can protect their file using this software. Various organizations include in this from small company organizations to big research companies. * Hospital: In hospital to secure their research paper, patient data etc. * Educational Institute: To protect the various important paper like result and other important file |