1. ABSTRACT

Data safety and security is one of the most talked about issue in today's world. There has always been concerns about the data vulnerability and unauthorized alteration of the data. Hence "File security system" is the program that will help the user to protect the data they want to secure form being accessed by the unauthorized people. This will help people to encrypt and decrypt the file securely in a fast and reliable way.

2. INTRODUCTION

The title of my project is "File Security System". The proposed File Security System is an application that provides the users the flexibility of passing the information implementing the encryption standards and store the information in a form that is unreadable. Encryption of data plays an important role protect the data from the unauthorized people and to avoid modification and misuse of the sensitive data. It alters the originality of the data into some encrypted form so that it cannot be altered and tampered by unauthorized access.

3. DETAILED SYSTEM DESCRIPTION

This program should be able to encrypt the given file by the user and encrypt it in a secure way. This application system should have a reversal process as of which should be in a position to decrypt the data to its original format upon the proper request by the user. Before performing the Encryption and Decryption, the application should confirm the standards of authentication and authorization of the user.

This is a very simple ASCII encryption based program, at first the text file to be encrypted is selected which creates two files named cipher.ser and key.ser This program converts the Characters in the file into ASCII values during

encryption which is unreadable to the unauthorized party. To decrypt the file user needs to select two files created during encryption and it will create decrypted file in user selected location. During decryption, the key file is required to decipher the encrypted file from ASCII to normal text. The key file contains the method used to cipher the characters in text file into ASCII value. Since this system creates the key file which is only with the receiver and the sender the data or the file will be secure. Even if the third party has the encrypted file they will not be able to access it without the key.

Encrypter
-key: int[] -str: String -data: String -cipherPath: String -decipheredpath: String -original1: String -cipher: int[] -c: int[] -d: int[] -plain1: int[] -plain2: int[] -ascii: int[] -plain: int[] -arrow: char[] -original: char[]
+encryptionLogic(ascii: int[]): void +cipheredText(c: int[],d: int[]): void +decryptionLogic(cipher: int[],key: int[]): void +decryptedWriter(plain: int[]): char[] +asciiarray(arrow: char[]): void +initial(data: String): void +inputData(): String

4. REQUIREMENTS:

4.1 Software Requirements:

Operating System: Windows XP and Above
Front-end: Java JDK, Eclipse

4.2 Hardware Requirements:

Processor: Minimum Pentium IV Processor with 1.9 GHz Clock Speed
RAM: 512 MB RAM or more

Hard Disk: Minimum 20 GB HDD Mouse: 3 Button scroll/ Wireless mouse Key Board: 101 Standard keys

4.3 Problem Addressed by this system

The main objective of this program is to encrypt the data in a very simple way. It is user friendly and doesn't require complex method to ensure data safety. This system is applicable and easy to use because this system creates the key file which is only with the receiver and the sender the data or the file will be secure. Even if the third party has the encrypted file they will not be able to access it without the key. Also, the user can put the file in the desired location making the data more secure and safe.

5. LITERATURE REVIEW

Various research methodology including review and analysis of past information came up with many innovative ideas for development of this system. Beside these, research via internet, communication media, and journals made me realize that safety of the data is one the major problem occurring today. So, keeping this in mind I decided to work on this project file encryption system. In this system, the user that wants to encrypt the file will first be authenticated and then the file or the data they want to encrypt will be uploaded to the system and will be given an encryption key. After that the file will be secure and only the authorized person who has the

decryption key will be able to view or unlock the secured data.

6. USER MANUAL

This application has a friendly GUI. It has a self-learning mode for the end user and easy to use. It provides all the functional standards of proper navigation to the end user using menu based navigation, helping the users to have a smooth flow while using the application of encrypting and decrypting the file.

When the program runs, it asks the user whether they want to encrypt or decrypt the file. The user follows the given instructions/path as desired, and the user only has to select the file they want to secure, and in reversal process they only need to select the file and the key location to decipher the data. So, this program is really easy to use and fast and reliable as well.

7. CONCLUSION

The main purpose of this system is to ensure the security of the data from the unwanted intervention and attack through a user-friendly way. The data given to the system by the user is converted to an encrypted file. And only those with the decryption key will be able to unlock the file to its original form protecting it from the unauthorized party.

Since every program has its limitations, this one is also no exception. Some of the limitations of this program are as follows:

- This program enables user to encrypt the doc file but while decrypting the file the formats like fonts, color will be automatically removed.
- This program doesn’t allow the user to encrypt the images or pictures.

8. REFERENCES:

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