MINI PROJECT

On

ENCRYPTION AND DECRYPTON OF IMAGE

(CSE VI Semester MINI PRJOECT)

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ACKNOWLEDGMENT

I would like to express our gratitude to The Almighty, the most Beneficent and the most Merciful, for Successful completion of Project.

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TABLE OF CONTENTS

1. Inroduction

1.1 Definition

Encryption is a process which uses a finite set of instruction called an algorithm to convert original message, known as plaintext, into cipher text, its encrypted form. Cryptographic algorithms normally require a set of characters called a key to encrypt or decrypt data. With the help of key and the algorithm we can encrypt or Decrypt the plaintext into cipher text and then cipher text back into plaintext..

Nowadays, information security is becoming more important in data storage and transmission. Images are widely used in different-different processes. Therefore, the security of image data from unauthorized uses is important. Image encryption plays a important role in the field of information hiding. Image encryption method prepared information unreadable. Therefore, no hacker or eavesdropper, including server administrators and others, have access to original message or any other type of transmitted information through public networks such as internet.

We are very excited by the vast future possibilities that our project has to offer. Possible improvements include getting back the decrypted image in color. We are also looking forward to encrypt videos by extracting each frame and encrypting the images simultaneously. We know that all the videos have sound. So we are planning to encrypt frames and sound simultaneously. Finally after achieving all of the above, we are planning to create an app which will do all of the above. With two people having the app, one will become the sender and other the receiver at a time, based on the requirements of either of the two. This is future of our project we are looking at and looking forward to implementing all of the above successfully.

2.System Requirements

2.1

- OS: Win Xp 32
- Processor: Intel Pentium III / AMD Athlon MP
- System Memory: 256 MB RAM
- Storage: 75 MB Hard drive space
- DirectX 9 Compatible Graphics Card

3.Main Functionality

3.1 Encryption and Decryption Process

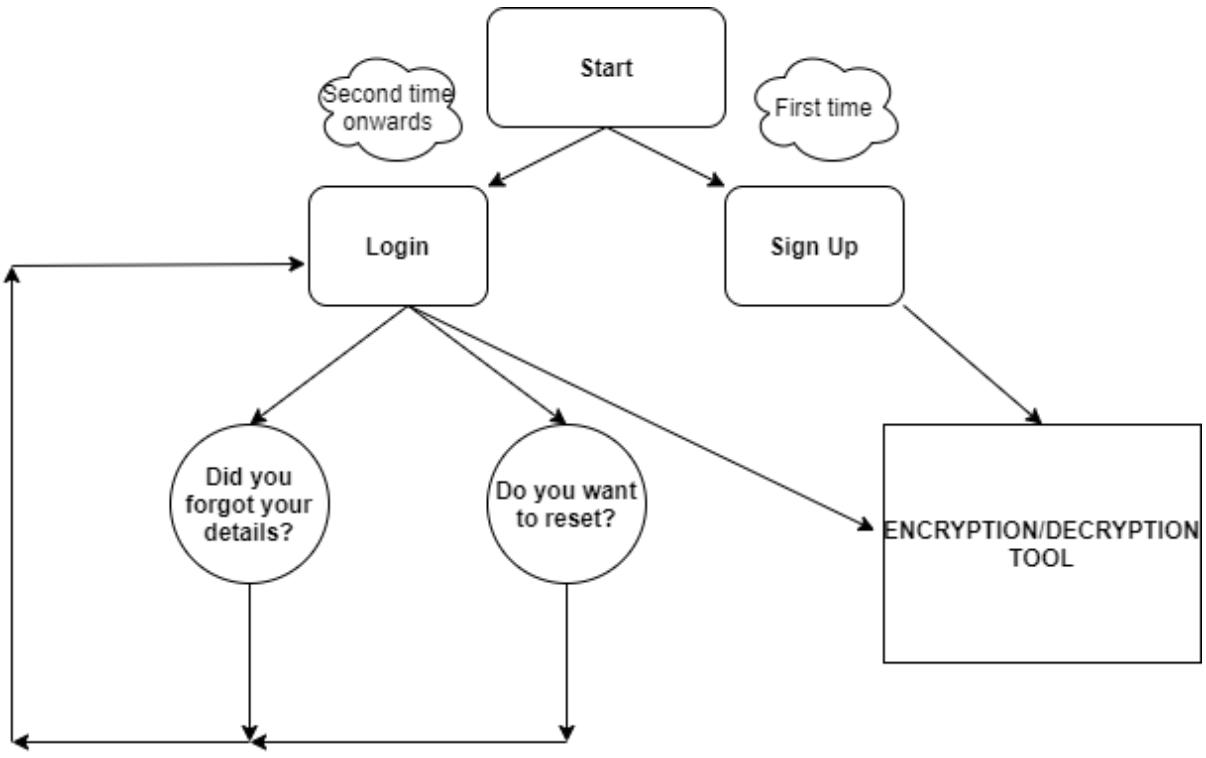
ENCRYPTION PROCESS

Consider any message. This message will be divided into three separate messages and we will store these in three separate files. Then one by one all the three files will be encrypted using AES, DES and RC4. We will be using key to encrypt all the three messages in three separate files. It is necessary to secure the key. The key information contains the bifurcation of the data in three different parts. So, we will store the key using LSB image steganography process. We will be sending the key along with the image to the user. So, in this way the key will be secured using image steganography technique and the message will be secured using the encryption techniques AES, DES and RC4.

DECRYPTION PROCESS

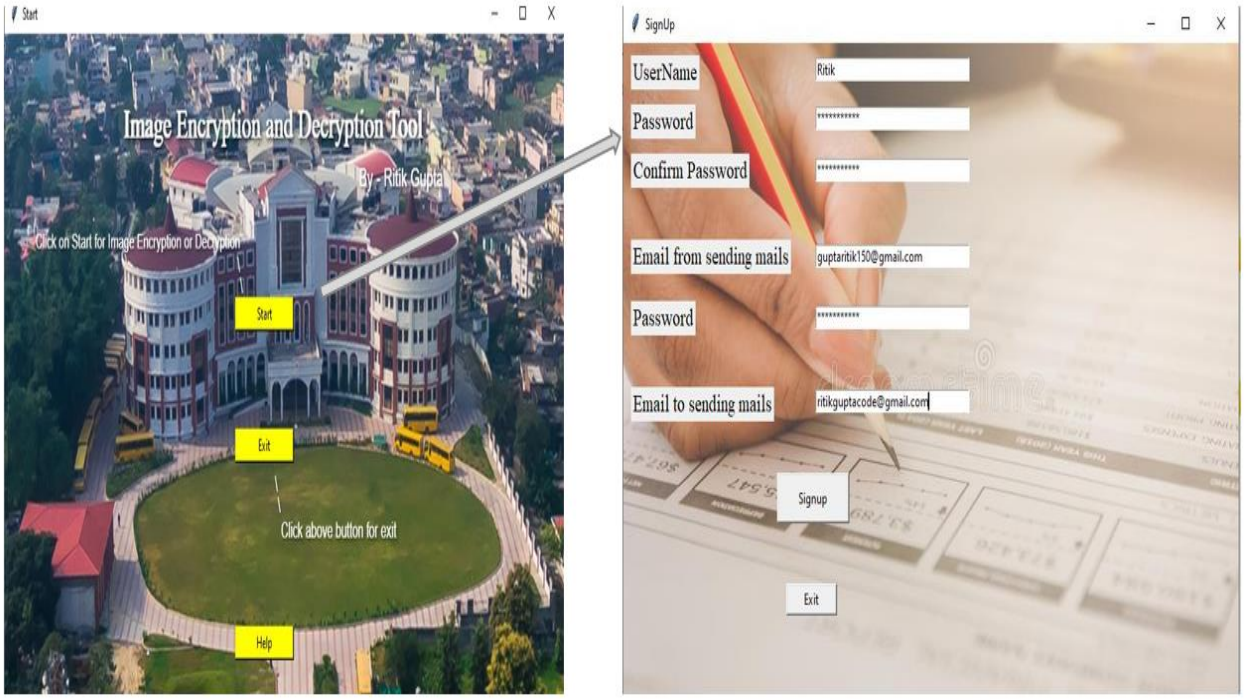
As soon as the user receives the key will be embedded in the image using image steganography LSB. The data encryption key, are inserted into the cover image using LSB technique to decrypt the data. Using this key, the user will decrypt the three files for file decryption purpose reverse process of encryption is applied.

3.2 Flowchart

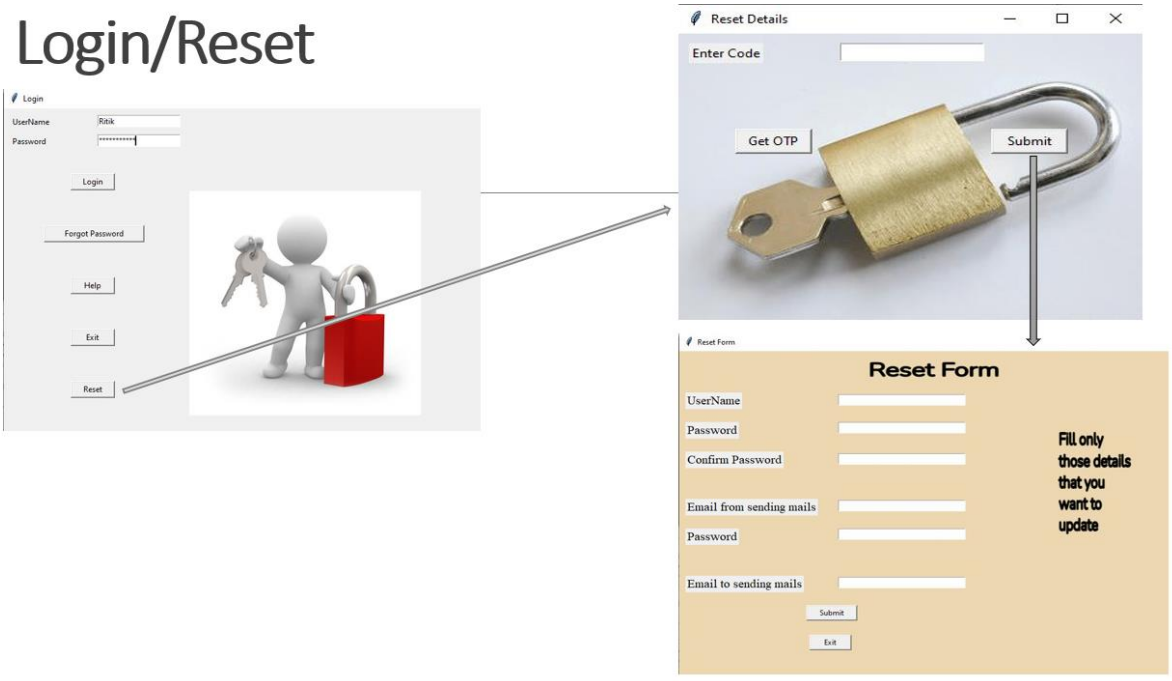


4.Snapshots of Project

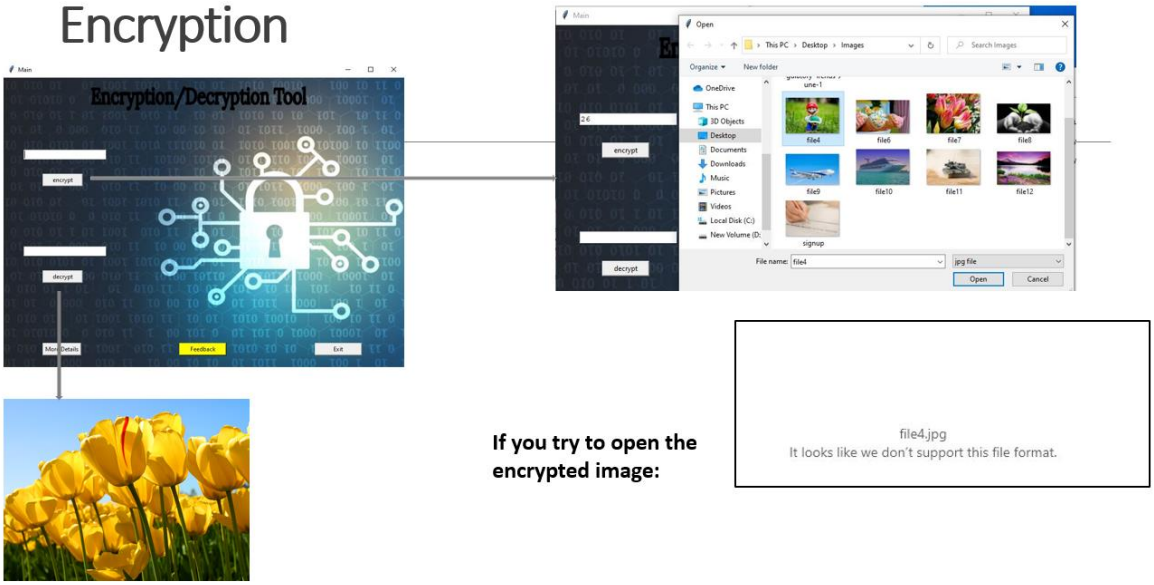
4.1 Front View



4.2 Login/Reset

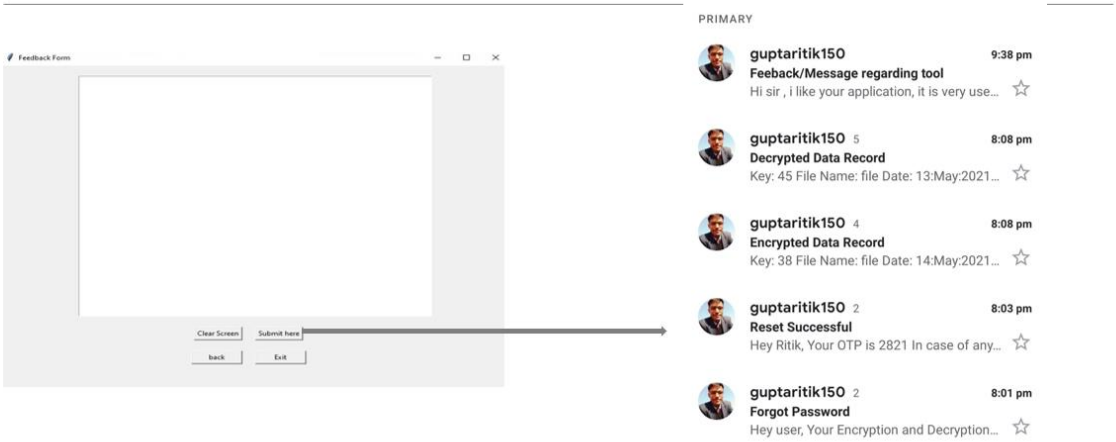


4.3 Encryption



4.4 Record/Database

4.5 Feedback Form



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