Abstract

This paper is about encryption and decryption of images using a secret password provided by the user. The encryption machine takes the password and the source image as input and generates a key pattern image by using Secure Hash Algorithm (SHA) and a lock image by using Mcrypt algorithm. It provides additional security using Image scrambling. The decryption machine takes the lock image, key image and the password as input to generate the original image. It also checks if the input is valid and blocks the user when an invalid input is provided. In this paper the results are obtained by simulating the entire algorithm in PHP. You can check out the project by visiting www.imglockkey.com.

Refer
References

- Image encryption and decryption using blowfish algorithm by Irfan Landge, Burhanuddin Contractor, Aamna Patel and Rozina Choudhary.
- A New Algorithm of Encryption and Decryption of Images Using Chaotic Mapping by Musheer Ahmad and M. Shamsher Alam.

Index Terms

Computer Science

Security

Keywords

Mcript  SHA  MCRYPT_RIJNDAEL_256  SHA- 256  Lock-Key Algorithm  Image Scrambling
Design and Implementation of a Lock-Key Image Encryption and Decryption, based on a User Provided Password