

Secure Login using Image Processing

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ABSTRACT

Secure login using image processing is the easier, safer way to unlock your digital world. It's a web application you can use on all your devices to remove the hassle of passwords. Get started by logging into the web app using unique factors such as your image as a password or a device you own. From there, the app works quietly in the background to make your current passwords stronger, remembers them and instantly logs you in – so you don't have to take care of your password. The secure login app offers customizable security so you can log in with the factor for fast access, or combine multiple factors together for added security – you decide.

Keywords: QR-Code, VCS, Data Hiding, Auto Fill, Auto Login.

I. INTRODUCTION

This research paper is about the system designed to ensure that you can use a complex master password. This password provides access to all of your other passwords like Facebook, Email etc. Hence protect access to your website login. It can also ensure you configure more than one authentication method.

To secure the password, system store the password into the QR code and generate two shears [1]. In which one shear is store into the database and data embedding is apply on second shear to provide more security from unauthorized user. Which help the user from phishing scams. Phishing [4], means is the attempt to gain sensitive information of a user such as usernames, passwords, and credit card details, by impersonating as a credible entity in internet logins.

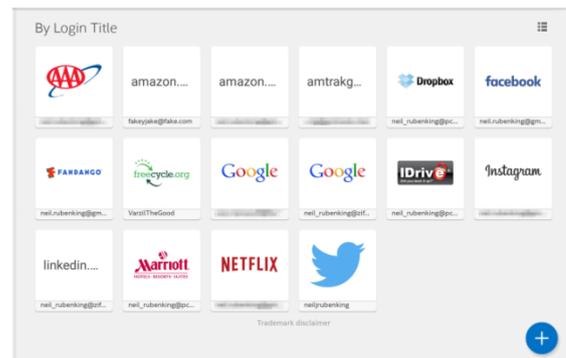


Figure 1: Different Login

This web application is designed to save your time, simplify your life and keep your private information [1], safe. This app's innovative features distinguish it from other password managers.

Speaking of handy features, one of our favourites is being able to instantly log into our sites whenever we need to, even on mobile devices. There aren't many things that are more annoying than typing passwords over and over just to encounter the "invalid password" message time and time again. We know the drill; you enter your password, an error message appears, you check that caps lock is off, re-enter your password - this time, typing each letter individually to make sure

to hit all the correct letters - just to go back to square one.

With this app, you can add a new Login, edit an existing login and instantly sign into your sites all within the browsers.

II. SYSTEM DESIGN

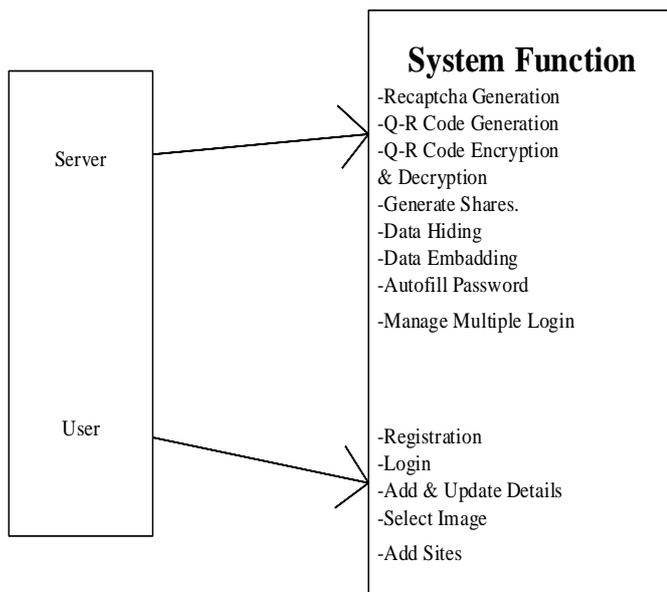


Figure 2: Function of System

A. Server: Server can take care of the back end procedures in which it store the password into the QR code [1], Server also generate shears of it in which shear1 will be store in database and data embedding is apply on shear 2. Server can also auto fill password and take care of multiple logins.

B. User: User can login and register in the system with the help of E-mail id and image. He can also add sites in it. User will select image for password generation. User can update details.

C. Description: The main aim of the system is to provide three-level of security with the help of QR code generation, generating two shears of it by applying VCS algorithm and the by applying data embedding on it.

The system will auto fill up the password and also manages the multiple login and sites. User can also add and remove its sites as per his requirements.

III. System Algorithm

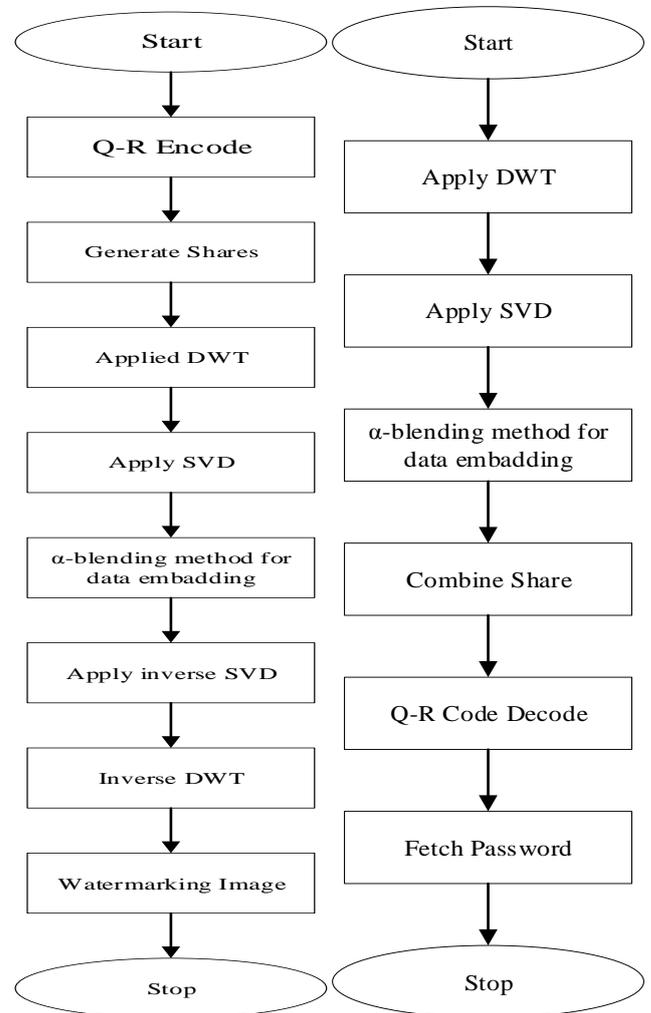


Figure 3: Flow Chart of Encoding and Decoding

Encoding is technique user's password is hide inside the QR-code by applying VCS[2], two shears are generated in which one shear store in database and on second shear water marking is apply on it with help of DWT and SVD algorithm.

Decoding is process of decryption user select image as a password. In which we apply SVD [5], and DWT algorithm after that we combine two shear generate QR code from it. By decoding the QR code text password is fetch and fill up into the site.

QR code is those typically utilized two-dimensional (2D) barcode as of late for those preferences from claiming bigger QR content and slip revision capability. QR code could holds that's only the tip of the iceberg content, for Example, those text, web link, and telephone number, which could a chance to be effectively decoded toward An QR onlooker furthermore that's the reason QR code gets to be well known and serves a number benefits of the business requisitions by means of those QR followers and versatile apparatuses. Security of QR substance is fundamental issue will impart a QR code for the mystery substance.

The appearance of QR code can be improved by generating shares of it's so an information data as text form will converted into the 2n-shares combination. This research proposed a method where the appearance of QR code is composed of shares patterns selected by users. In this research study about the text Information hiding in QR code, VCS techniques for QR to shares conversation. Text to QR conversation, after from QR code [2], shares for that study different techniques of VCS. The text to share is not an easy task because 2-level privacy should be decidable by private decoding applications only and can be applied to any text data.

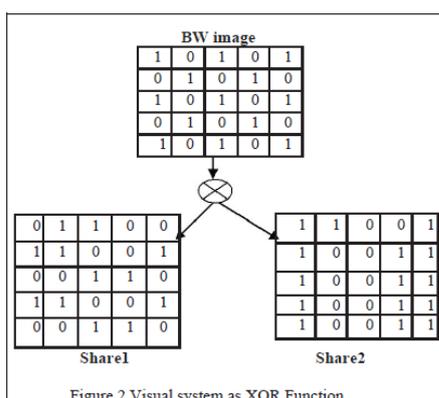


Figure 4: Visual Cryptography

An effective method for securely transmitting files, documents and images are found in the field of Visual Cryptography[1], (VC). Visual cryptography method is a cryptographic technique which allows visual

information (e.g. printed text, handwritten notes, and images etc.) to be encrypted in such a way that the decryption can be performed by the human visual system (HVS), without the aid of computers. This study focuses on securing a file or document through CAPTCHA images using image processing.

IV. RESULTS

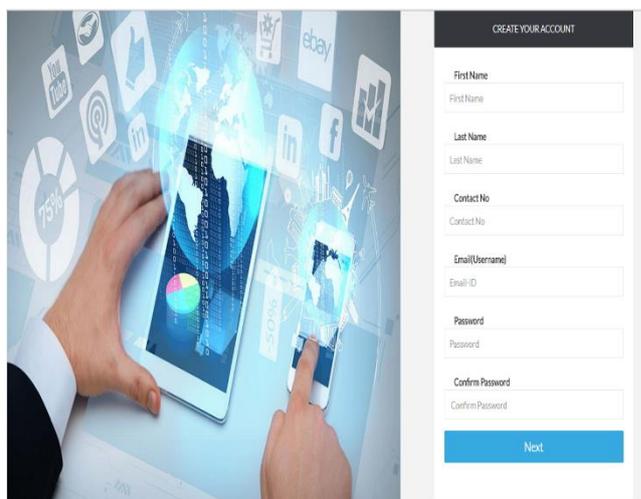


Figure 5: Registration

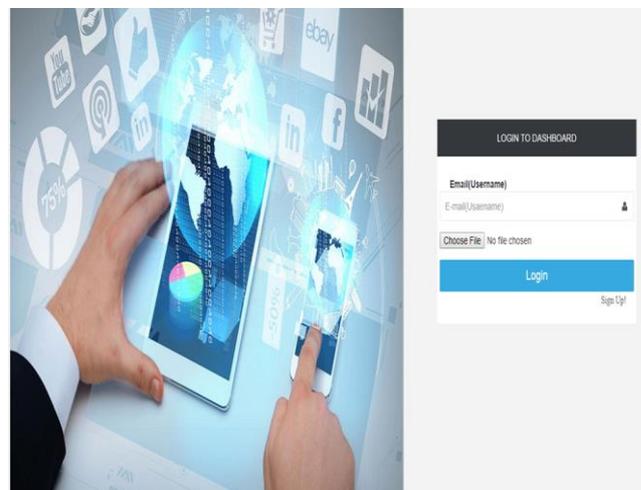


Figure 6: Login Panel

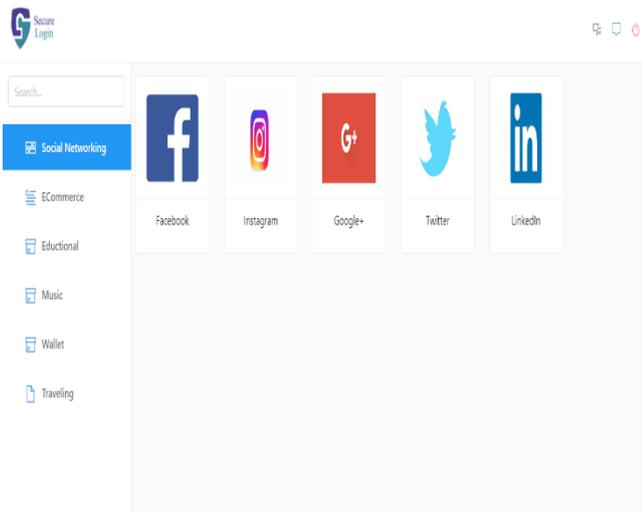


Figure 7: User Panel

V. CONCLUSION

We have come to a conclusion that the proposed system have managing your accounts with security. In all the accounts on internet, security begins with the authentication process. We propose an algorithm to secure the user's information .Our system will provide efficient as well as privacy. In final we had a factor like if user wants to protect his/her all the account then they have to buy premium membership for that also.

VI. REFERENCES

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