SHOULDER SURFING PREVENTION SYSTEM AND AUTHENTICATION TECHNIQUES

Abstract:

Due to rise in internet users and online dependencies, the risk of sensitive data being leaked is increasing day by day. For example, online transactions, online shopping, online registrations, online education, work from home, excessive use of social media etc. Security and privacy are playing vital role in any online application and to access or share any Information, the user requires a password. Therefore, to maintain password security and privacy, user uses different types of authentication technique one of them is a textual password. Main concept of all this is to maintain Confidentiality, Integrity and Availability.

Shoulder surfing is an attack which is used to obtain confidential information such as personal identification numbers, passwords and login credentials by looking over the victim's shoulder. The objective of our project is to prevent others from direct observation of our confidential details. The correctly entered password appears to be random and can only be derived with the knowledge of the full set of password objects or by uploading a secret image file as an authentication factor.

Project Information:

Resources Used:

1. Front End
   HTML
   CSS
   Bootstrap

2. Back End
   JavaScript
   Node js
   MySQL
   PHP

Sqlite3

Functionality of Image based authentication technique

1. Install Xampp Control Panel

2. Start Apache and MySQL server to run files on a local web server on your computer and connect to the database.

3. Open the web browser and connect to "localhost:8080".

Video

https://www.awesomescreenshot.com/video/4167846?key=1b214adac56a0701a a132ea920a11f8d

Functionality of Graphical authentication

1. Download all the following packages :

   · npm init -y

   · npm i express

   · npm i jquery

   · npm i ejs

   · npm i sqlite3

2. Use command node app.js to run your authentication system

3. Connect to localhost:3000 in your browser

Project Link:

https://drive.google.com/drive/folders/10Nf0VM17h3bnRNXF2KBgZhB3Nc_MrHjk?usp=sharing

Video

https://drive.google.com/file/d/1snTSuYSNVKxKc-D34evPnQMKJ9sbVlbG/view?usp=sharing