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### **RESEARCH ARTICLE**



# Defence against Online Password Guessing Attacks by using Persuasive Click Points

Suchandra Chowdhury<sup>1</sup>, Ishani Thaker<sup>2</sup>, Tarun Danwal<sup>3</sup>, Kapil Kothari<sup>4</sup>

<sup>1</sup> Department of Computer Engineering Savitribai Phule Pune University, India

<sup>2</sup> Department of Computer Engineering Savitribai Phule Pune University, India

<sup>3</sup> Department of Computer Engineering Savitribai Phule Pune University, India

<sup>4</sup> Department of Computer Engineering Savitribai Phule Pune University, India

<sup>1</sup> suchandra.dypiet@gmail.com, <sup>2</sup> ishani.thaker@yahoo.in, <sup>3</sup> tarun\_1488@yahoo.co.in, <sup>4</sup> kapilkothari23@gmail.com

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#### **Abstract:**

*Standard human-computer-interaction approaches is not directly relevant. Security that are usable has exclusive usability challenges for the need of security. Users choosing enhanced password is the significant usability objective for authentication of the system. Most of the client generate easily memorable passwords that can be easy to hack by hackers. Password can be though for user also which are assigned by tough systems. User has to remember his whole password. So researchers replace this methods by other method in which password are made through images. Pictures are easy to remember than textual password. There are many types of graphical password schemes or graphical password software is available in the software market. Our project work combine persuasive cued click points and protocol of password guessing attacks. Project aims to make it tough for hackers to attack password. Users can choose random passwords and also passwords that are complex. This technique can remove many popular security threads.*

**Keywords-** *Graphical Password, Security, Persuasive Cued Clicks, Pattern Detection, Authentication*

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## **I. INTRODUCTION**

Countless number of attacks has been easily imposed due to primitive techniques. Therefore primitive methods are not very useful. As a result graphical password became famous and is more secure these days. We are also facing a great deal of hype for graphical method of password creation. We will build up the classification of authentication techniques now. We initiate with textual password method which is the most common and simple method of authentication. In spite of the vulnerabilities, users tend to select easy and short password. Users will always want to have short password because it is easy to remember. But the user is aware of the fact attackers could guess those password easily. Masquerading is the method where intruders hack the password. These passwords are wrecked ruthlessly by interlopers by a number of simple means. Examples are masquerading, Eaves dropping, dictionary attacks, shoulder surfing attacks, social engineering attacks. Highly developed techniques have been anticipated by means of graphical methods of passwords creation to protect valuable information.

Graphical methods of password creation shave a predestined illustration of image. In this image, the series and the tap area chosen are taken to mean as the graphical password. Graphical methods of passwords creation became popular since then. The enviable feature connected in the company of graphical methods of password creation is that it is easy for humans to memorize graphical than text. Hence graphical method is the best substitute that has been proposed so far. Reduction of the guessing attacks and heartening users to select more random and complicated passwords to guess is the most important objective of this work.

## II. LITERATURE SURVEY

Online hacking and password breaching is becoming more popular now a days. Passwords can be easily hack by hackers now days by various methods of attacks. They are capable to hack into any important and secret data. The graphical password method is introduced which is more advanced and secure. This idea was proposed by Mr. Greg Blonder. According to theory selecting pattern and the small particular area from the given images which is a graphical password. After that many password schemes have been designed and are being used. Now coming to the fact that humans are more comfortable in remembering graphical images rather than texts and graphical passwords are more secure when it comes to guessing attacks. It can take many years for guessing passwords. Project's objective is to reduce guessing attacks by guide the users to select more odd and unpremeditated images to make it impossible for any password guessing attack.

## III. RELATED WORK

Dhamija and Perrig proposed a graphical verification scheme. In this system the user will select one of the images from a set of given pictures produced by a program than the user will be required to recognize the selected images in order to be login. Here system fault is that the server needs to store the details of the portfolio images of each user. Also, the process of choosing a set of pictures from the picture database can be dull and time consuming for the user.

### Persuasive Cued Click- Points:

To address the issue of PCCP was proposed. As with CCP, a password consists of five click points. During password creation, small view port area that is randomly positioned on the image is darkening. Users must select a click- point from the view port. If they are not capable to select a point in the current viewport, they can press the Shuffle button. The viewport guides users to select more random passwords that are less probable to include hotspots. A user can still shuffle until the view port moves to the specific location, but it is a time consuming and more dull process.

### System Features

#### 1. Sign Up

This feature allows all users including servicemen or product vendors can register their details along with credentials.

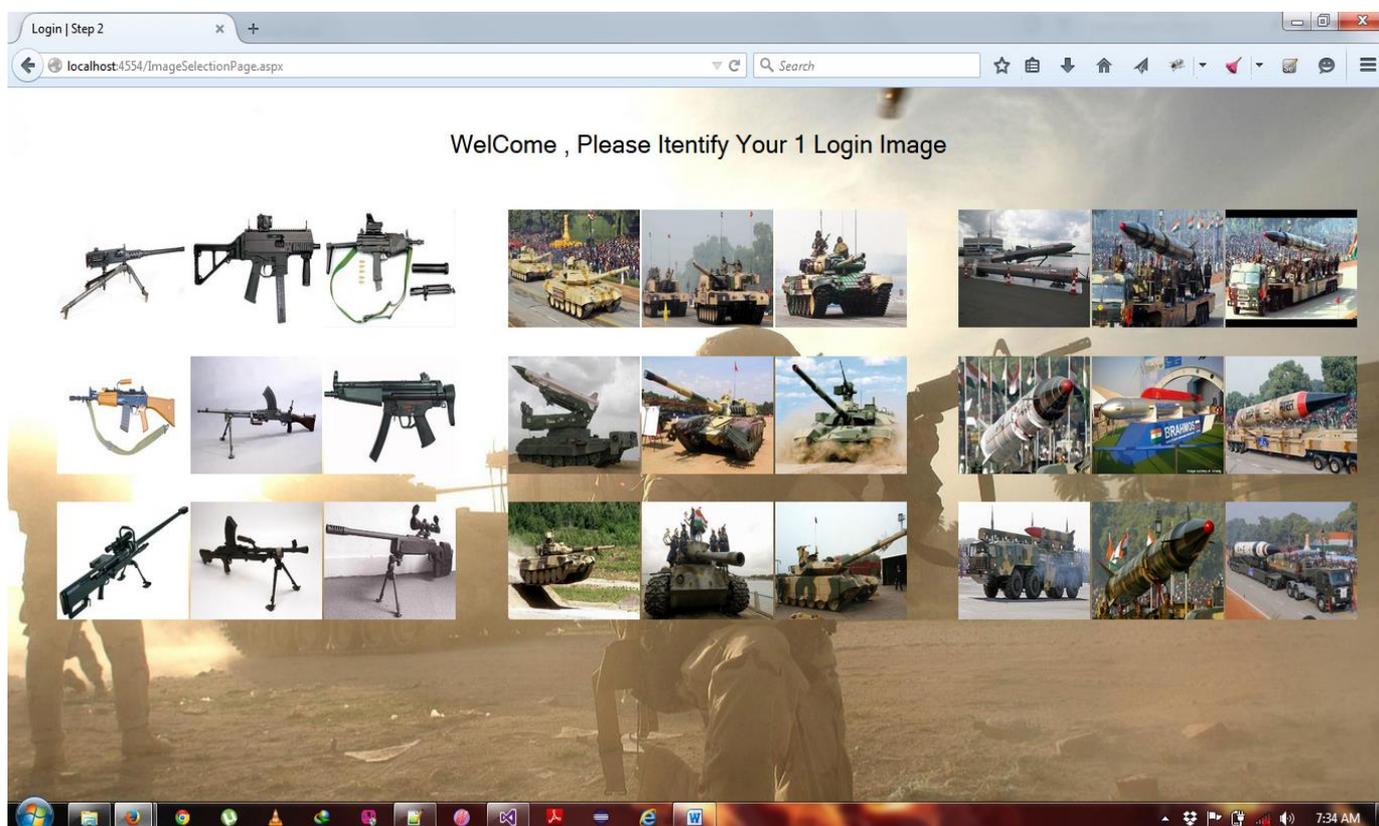
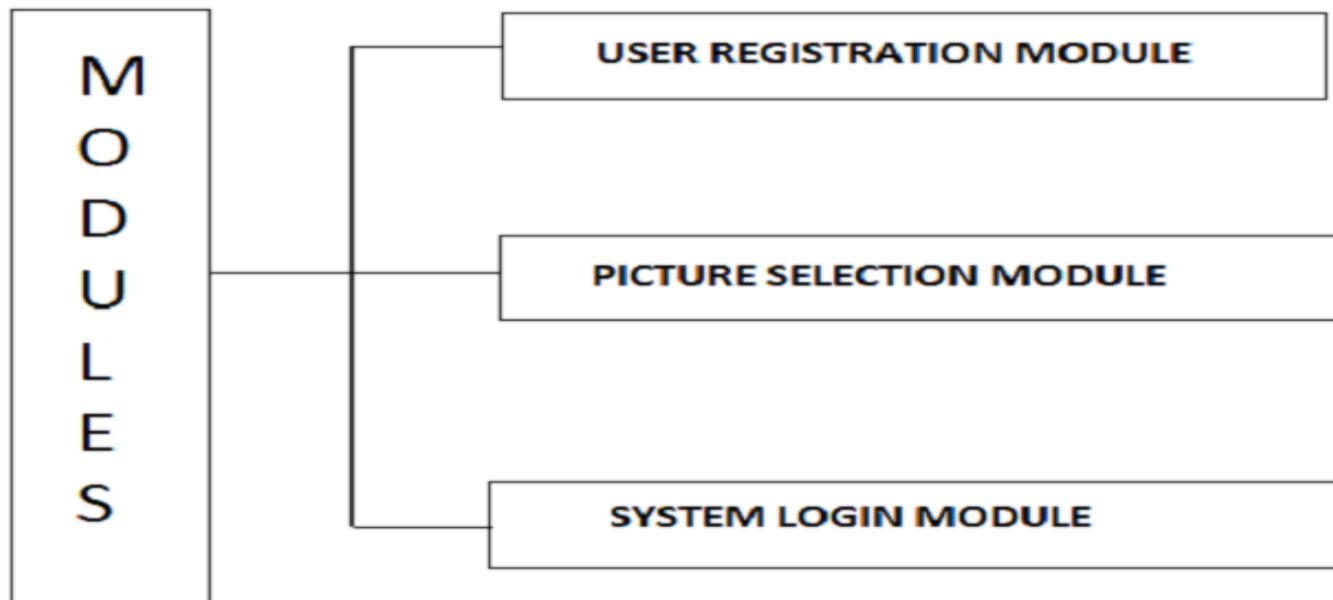
#### 2. Login

This feature allows all types of users a secure authentication mechanism in order to get access to the system.

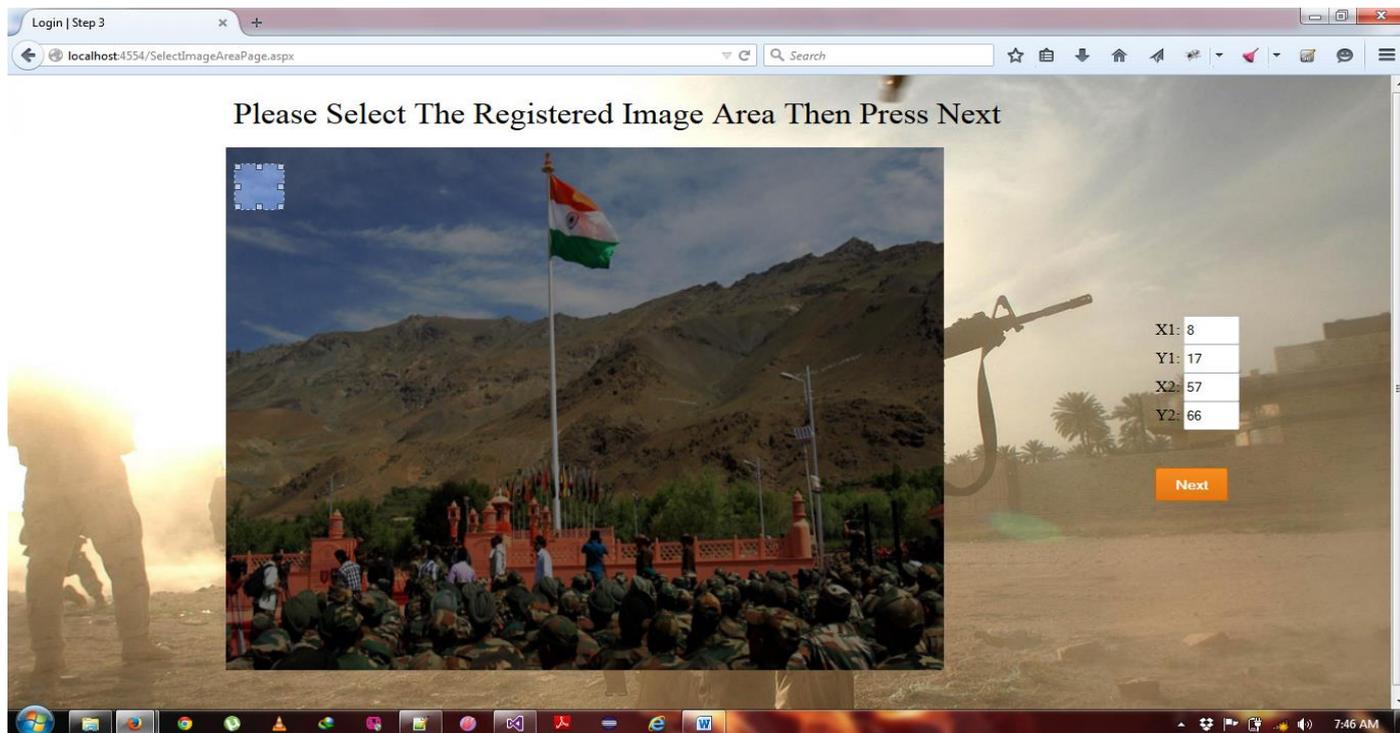
#### 3. PCP password creations:

- Layer 1:- 1st password is set on image through clicking event check attribute height, width, and size and image name.
- Layer 2:- 2nd password is set on image through cropping image with X and Y axis checking.
- Layer 3:- 3rd password is set on select point around images like if we select three point it will be triangle around image. If four it will be a cube (this will check points and shape and also X and Y axis).

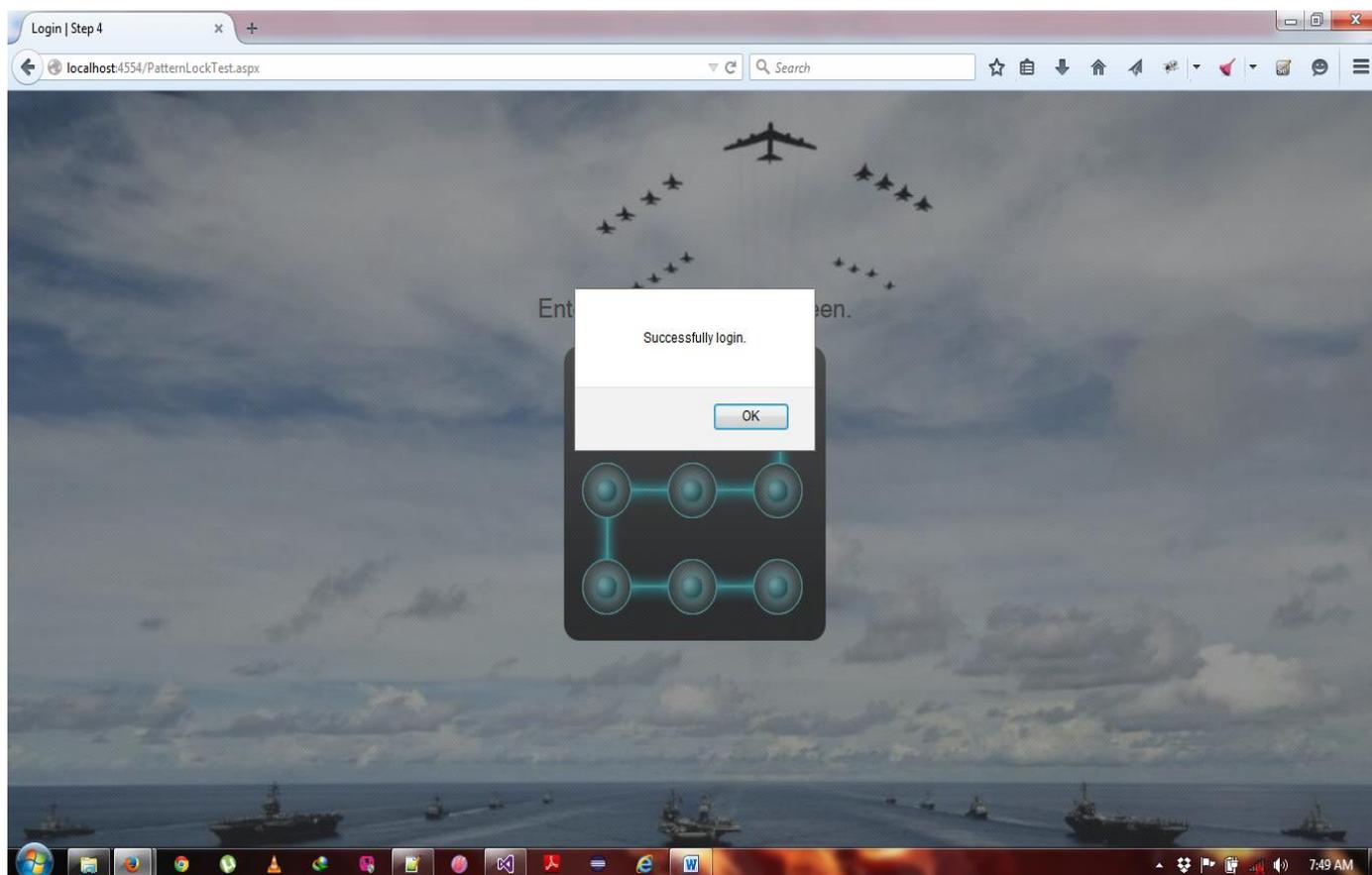
#### IV. SYSTEM MODULE



Login| Identification of 1 login image



### Login| Image area selection



### Login | Step 4 | Screen pattern lock

## **V. CONCLUSION**

Persuasive cued click point plays a vital role for password protection, the graphical passwords are more protected and are better than the alphanumeric passwords. One most important factor with the graphical passwords is they are very easy to memorize for the user and more protected as well. Online password guessing attacks are more common these days and so the use of more protected password system is needed which brings us to graphical passwords.

In ATT- based login protocols, there is security-usability trade –off with respect to the number of free failed login attempts however in PGRP

## **ACKNOWLEDGEMENT**

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