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IMAGE BASED VEHICLE LOCKING AND STARTING SYSTEM

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ABSTRACT

The intelligent system for image based on vehicle locking is It's own requirement in the current society. The intelligent system what we are trying to build consists of ARM 7 controller as the main core along with this, the other supporting modules which is used are GLCD, touch screen for the instant display of the axis information. The development of the embedded software provides a good platform for the better working of the hardware.

This scheme is proposed for smart mobile devices (like smart phones) which are more handy and convenient to use than traditional desktop computer systems. Authentication is one the most important security primitive. Password authentication is most widely used authentication mechanism. Users generally use characters as passwords image based passwords are difficult to remember and if they are easy to remember then they are vulnerable to various kinds of attacks and are predictable.

Image based password authentication system by using touch screen sensor based graphical LCD interfacing provides an image based security system. which can be installed in various sectors like industrial, educational institute, banking and medical.

Keyword: Image Based Password, Touch Screen, Graphical LCD.

I. INTRODUCTION

The paper aims in developing a system which is very helpful for illiterates in secure accessing, who are not able to remember passwords. Image based password authentication for illiterates with touch screen interfacing provides an image based security system, which can be installed in poultry forms, houses and all kinds of domestic and industrial applications.

The main aim of this paper is to provide a security system for illiterates. Here the password need not be a string of characters it can use few images this may be easy for the illiterates to remember. This device makes use of a touch screen sensor which makes the things still easier. This paper gives us the exposure about how to efficiently make use of the touch screen technology to interface with the appliances in our practical life. It can also be operated very easily with the hand so can be used even by very old people and also by the illiterates.

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A classical example of two factor authentication is the use of credit or debit card and a PIN at the ATM machine. Here we use knowledge factor (PIN) and ownership factor (credit or debit card). In this paper, we describe two level authentication system using knowledge factors. First level is character based i.e username and password and second level is image based.

II RELATED WORK

The main Objective of of 3-Level Security system isa unique and an esoteric study of using images as password and implementation of an extremely secured system, employing 3 levels of security

1) Level 1

Security at level 1 has been imposed by simple text based password

2) Level 2

Security at this level has been imposed by using image based authentication(IBA) which helps to eliminate shoulder attack, tempest attack and brute force attack. User has to select three images from the respective grid.

III PROPOSED SYSTEM

In the proposed system we use images along with the password to overcome the problem which arises because of sharing and selection of weak passwords. Hence the system aims to achieve following:

1. Authentication should not be based on precise recall of password.
2. Make it difficult to share or write passwords.
3. Provide good user experience.

IV CURRENT SYSTEM

Username password is one of the most widely used authentication system for long. In this system, end user provides username and password at the login screen and system verifies the same. Outcome of the system can be binary either true or false, authenticated or not authenticated, success or failure. Alternative to username and password based authentication system is biometric system and smart card based system. Biometric system provides better security but requires an additional hardware which increases the cost. This also raises the question about every day usability and affordability. Also some biometric systems like iris scan are intrusive in nature to capture authentication data.

Other alternative is a smart card based system. However smart card can be easily lost or stolen. Therefore many smart cards based systems use knowledge based authentication systems to prevent impersonation through loss of card or theft of card.

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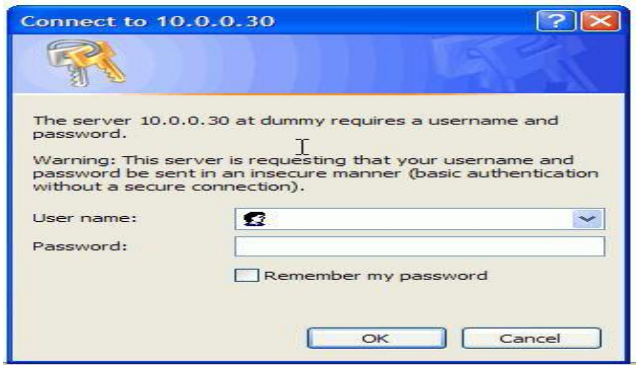

V IMAGE BASED SYSTEM

In this system smart card is provided by the user and by using the graphical LCD and touchscreen image input is given to the vehicle.Images are easy torecollect. it's exhausting to guess photos

user needs to provide the username password and pass images. Pass images need not be in the same sequence as selected during registration phase. Pass images are randomly distributed on the login rounds. Every round may have all, some or none of the pass images. At least one round need not have pass images to counter intersection attack .

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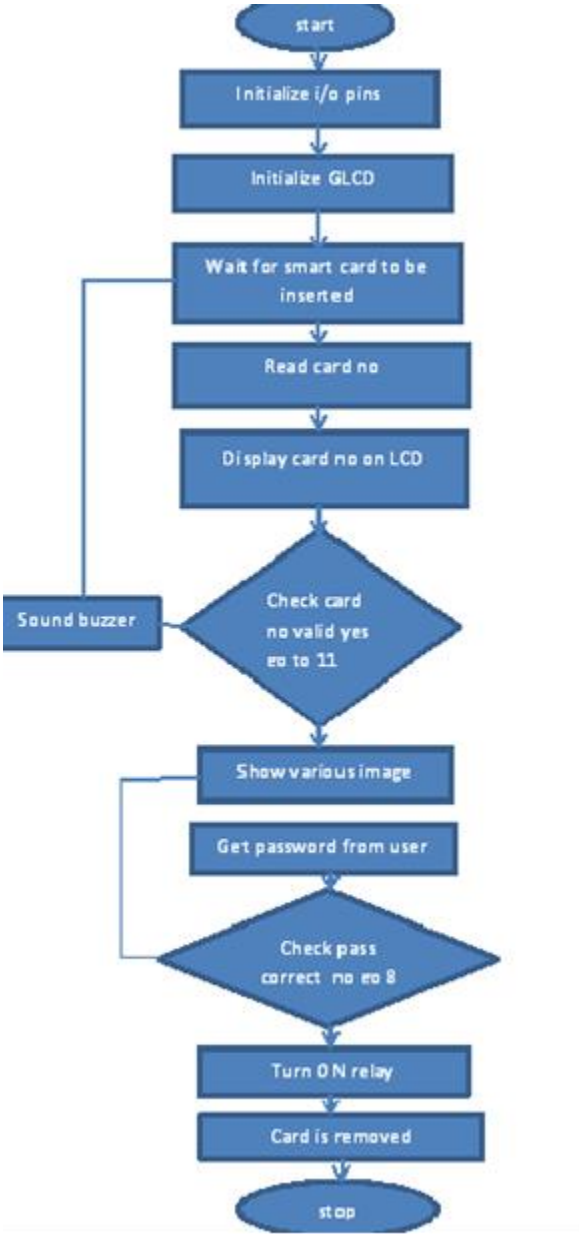
5.1 Flow Chart



5.2 Advantage of the system

1.Prevents automated attack by the bots

2.Adds one more layer of security to the existing system and hence makes the system more secure.

3.Log in by sharing of password is prevented as user needs to provide the password as well as pass images to log in. Sharing of pass images is difficult.

4.Prevents brute force attack. After three unsuccessful attempts user account gets locked. This can be unlocked by the administrators.

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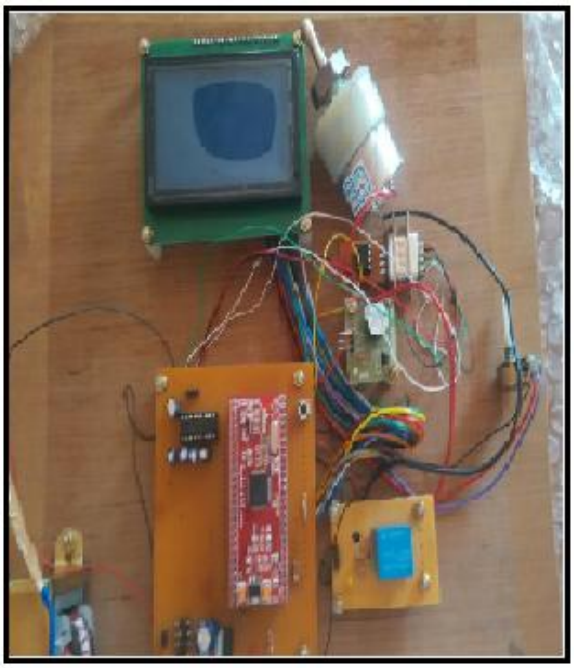
VI HARDWARE DESIGN



VII CONCLUSION

The paper "Image based password authentication for illiterates with touch screen sensor**"** was designed such to provide a security system based on images and touch screen module. This system provides user-friendly environment for the users with a kind of image interaction this may be easy for the illiterates to remember.

VIII ACKNOWLEDGEMENT

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REFERENCE

[1] Sarita khalunjkar and Sarita malunjkar Jayaraman, "Three way security for image based authentication"

[2] M.Kiran, E.Purushotam and B.Dilikumar "Image based approach authentication using multilevel security system"

[3] V.Shridhar "Image based password authentication for illiterates with touchscreen"

[4] Prafulla P. Chaudhari, Savita B. Hajare, Poonam S. Bhusare""Image based password authentication