

3 Level Security System

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Abstract— Increasing security has always been an issue since Internet and Web Development came into existence. Text based passwords is not enough to counter such problems, which is also an anachronistic approach now. Therefore, this demands the need for something more secure along with being more user friendly. 3 Level Security System is an easy-to-use user friendly software. It allows you to utilize all the security feature in this software. The project work starts with registering the details of the user. It simply opens a page with the "mirrored" view of the software, and the user can proceed different types of security from page to page. 3 Level Security System Using Image Based Authentication can also update all existing data. Thereby the details included are fully protected and the intruders doesn't get a chance to exploit the software or its details.

I.INTRODUCTION

The main aim of this 3 level security system is to ensure more security through its three levels—Firstly-through Text Password, Secondly-through Image based Password, and Thirdly-through One-Time Automated Password. 3 level security system is a security system that provides full security for those users who have been registered in this system. This system can be used as a gateway of security to any type of sites, as well as it can also be used as a security system for desktop applications too. The registered users can also update the data they used while registration. Hence this security system provides more security than compared to other security systems.

3 level security system is an application that is mainly intended for providing security for any type of applications,sites,etc. In this system, users can register first in this system and after the registration process, the users can login to the system using the same details they provided during the registration. As this system has 3 levels of security, any intruder will not be able to hack the details of the users.

II.SYSTEM ARCHITECTURE

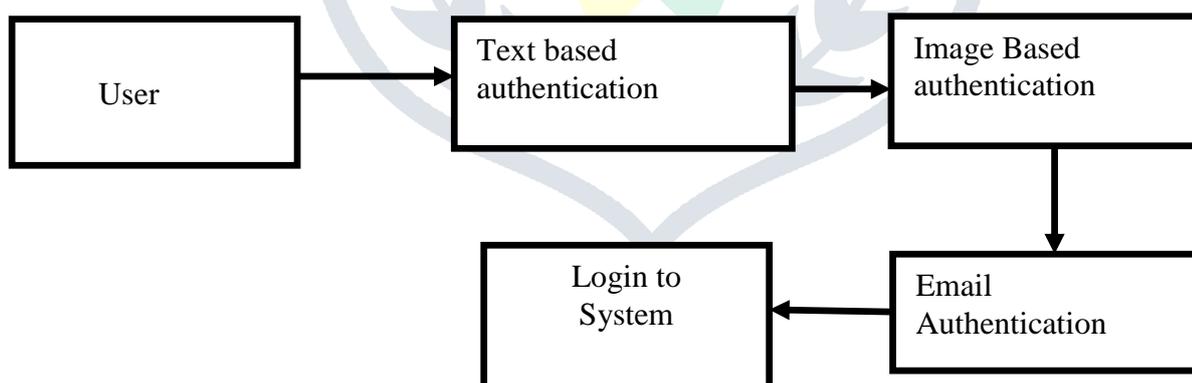


Figure 1.System Architecture

Figure 1 represents the System Architecture required to implement this work. In this Security System, User enters by registering in the system. While registering into the system they have to go through the following levels -

➤ First, the user has to fill their details and along with that they can choose a text based username and a password which will be used while logging into the system as the first step.

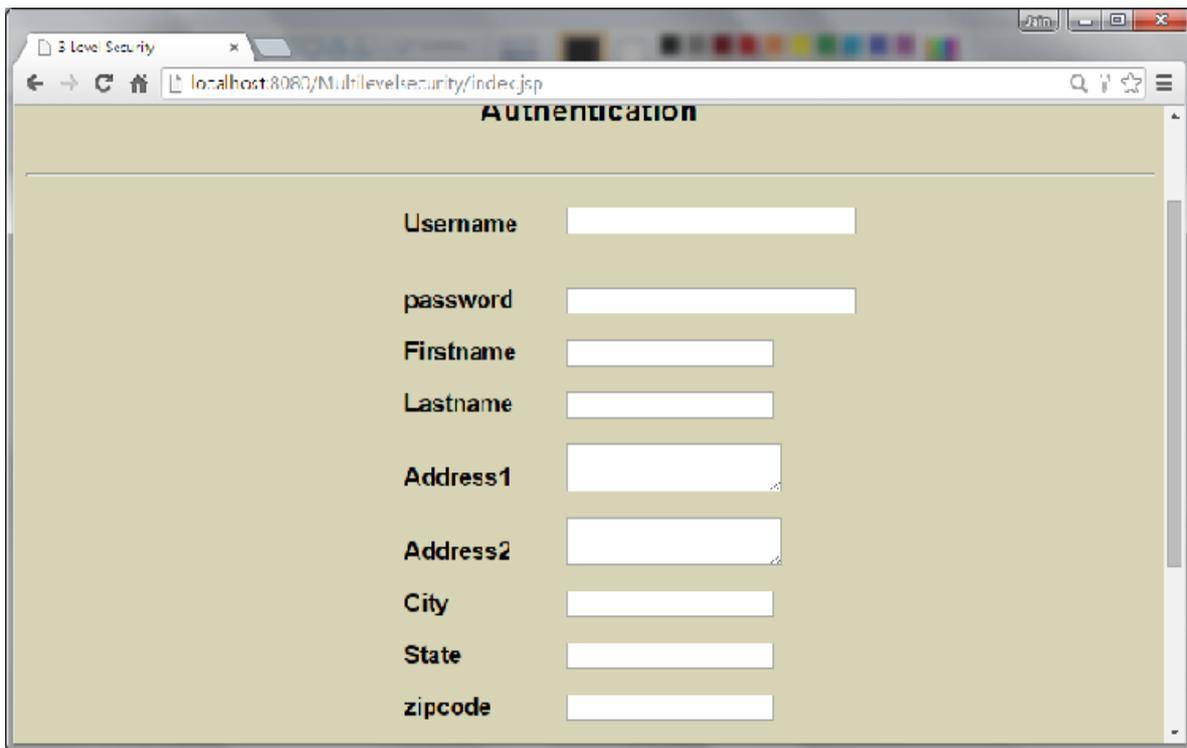


Figure 2.Registration

- Second, the user should choose 3 images from 3 grids which will used as the second step of logging in.

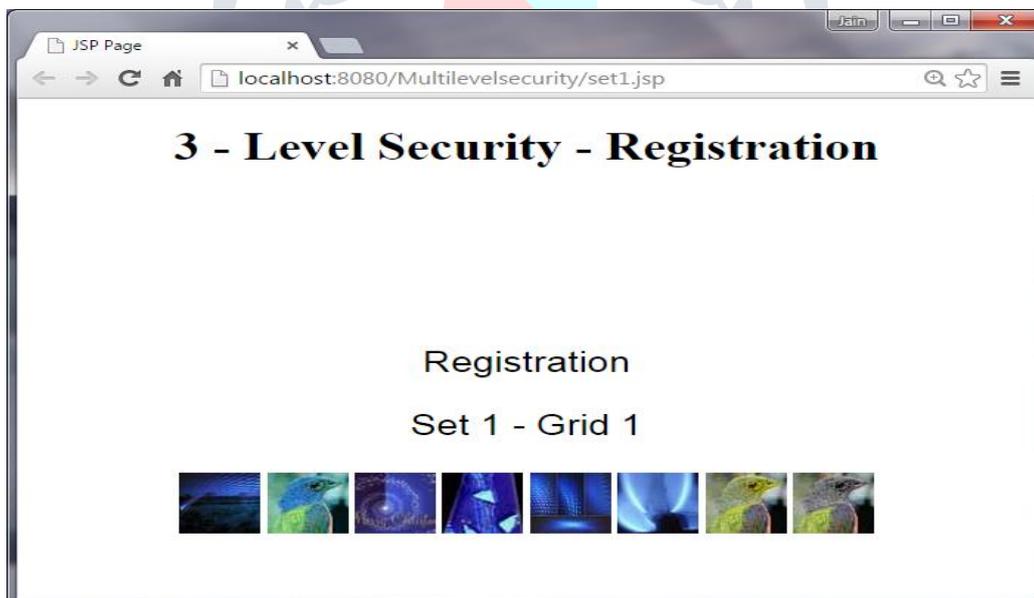


Figure 3.Image Selection

The registration gets completed there.
 While logging into the system the user has to through 3 levels -

- First, they have to enter the username and password they have given while registering in the system.

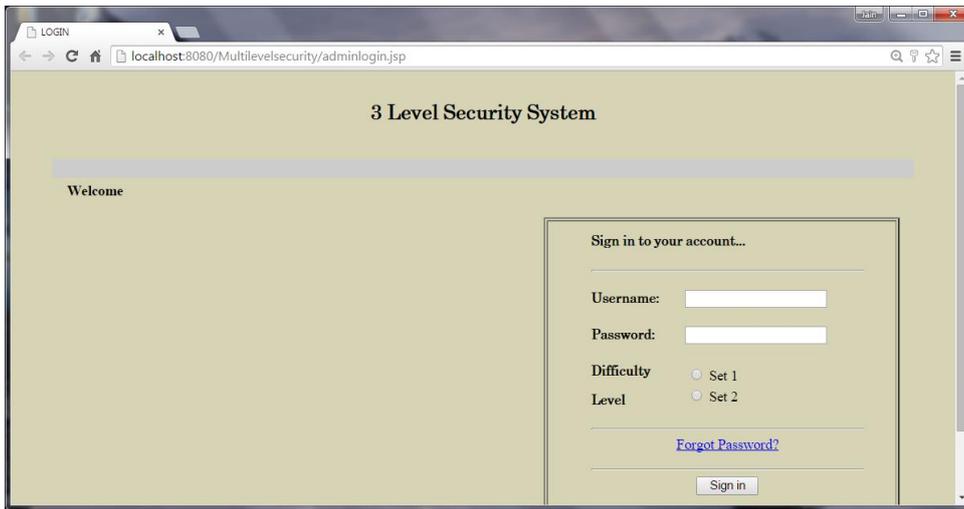


Figure 4. Text Based Authentication

- Secondly, they have to choose the same 3 images from 3 grids that they had already chosen while registering.



Figure 5. Image Based Authentication

- Thirdly, an OTP will be send to the email id they had given while registering on successful completion of the first 2 levels, the user has to enter that OTP in the system, if the OTP correct the user successfully logins to the system



Figure 6. OTP Checking

III.CONCLUSION

This is a software provides better security as there are 3 security levels used together as well as features like, use of GSM to send OTP(One Time Password) on mobile phone via text message instead of sending it on user's email-id ensures the best security. The software provides a very efficient and secure system . The project is mainly intended for providing security for any type of applications,sites,etc. This System is designed for the use of people who want to secure their data more efficiently, so that no one can hack it.

In conclusion, the project was more successful that could have been hoped for at the start. There were several unknown elements at the start of the project which meant that it had a certain element of risk. However, these potential problems were successfully overcome.

IV.FUTURE SCOPE

The three level security approach applied for a system makes it highly secure along with being more user friendly. This system will definitely help thwarting Shoulder attack, Tempest attack and brute-force attack at the client side.3-Level Security system is definitely is a time consuming approach, as the user has to traverse through the three levels of security, and will need to refer to his email-id for the one-time automated generated password. Therefore, this system cannot be a suitable solution for general security purposes, where time complexity will be an issue. But will definitely be a boon in areas where high security is the main issue, and time complexity is secondary, as an example we can take the case of a firm where this system will be accessible only to some higher designation holding people, who need to store and maintain their crucial and confidential data secure. In near future not only we will add more features but also make our system customizable.

The world is being mechanized and all the offices and institutions are being computerised. So the use and need for this software will not decline. Also man always like to see all works getting more secure and this project does that.

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