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3-Level Password Authentication System

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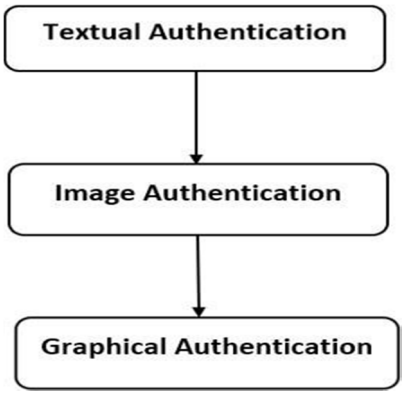
Abstract: ***The project is an authentication system that allows users to access the system only if they have entered the correct password. The project includes three levels of user identification. while some took them to their limits. In short, almost all passwords available today can be cracked to some degree. Therefore, this project aims to achieve maximum security in user authentication. Includes three logins with three different password systems. Password difficulty increases with each level..***

I. INTRODUCTION

The project includes three levels of user identification. It includes three logins with three different password schemes. Password complexity increases with each level. The project includes three levels of text passwords, ie. passwords, image-based passwords and graphic passwords. The work is based on the methodology of authentication and validation of user authentication. The proposed system verifies a legitimate user as it claims to be. The security system has three levels that must be passed before a successful login. Authentication is the proper validation of a user and the management of rights to access any information system resources. It is now undeniable that user authentication is the most critical element of the information security industry. Authentication is one of the most important security services provided by systems with different authentication methods or algorithms. To protect the system, authentication must be arranged so that only authorized persons have the right to securely use or process the system and related information. Verification processes can vary from simple password-based verification systems, which are too expensive, to computationally intensive verification systems. One commonly used approach is a general authentication procedure, where the user only needs a username and password, on the other hand, the use of an authentication and authorization system, where each customer has the right to access information and applications that are suitable only for his work. A password is a password or a phrase that gives users access to computer resources such as programs, files, messages, printers, Internet, etc. Passwords are more than just a key. They ensure our privacy and keep our sensitive information safe.

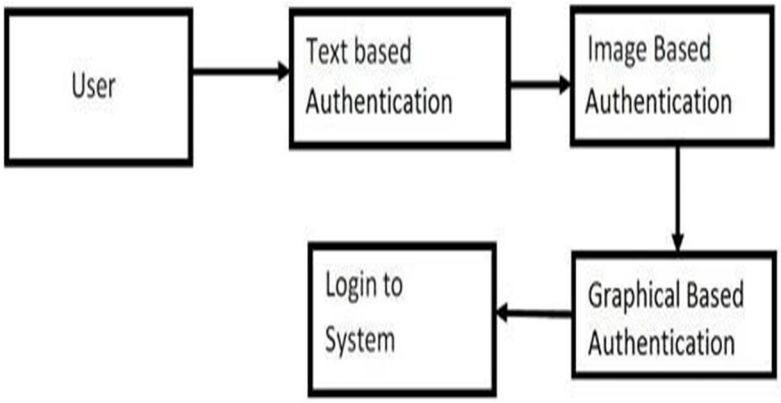
II. FLOW OF SYSTEM



III. DATA FLOW DIAGRAM

Data flow diagrams, also known as DFDs, are used to graphically describe the flow of data in a business information system. DFD describes the processes involved in a system to move data from input to file storage and generate reports. A data flow diagram is a graphical tool used to describe and analyze the flow of data through a system. These are the main tools and foundations from which other components are developed. The transformation of data from input to output through processing can be described logically and independently of the physical components associated with the system. These are called logical data flow diagrams.

A complete system description actually consists of 0 data flow diagrams. The idea of process details explodes to the next level. This is done until further explosion is required and is described in sufficient detail for the analyst to understand the process. A DFD is also known as a "bubble diagram" and its purpose is to clarify the system requirements and identify the key changes that will make the design.of the software system.



IV. METHODOLOGY

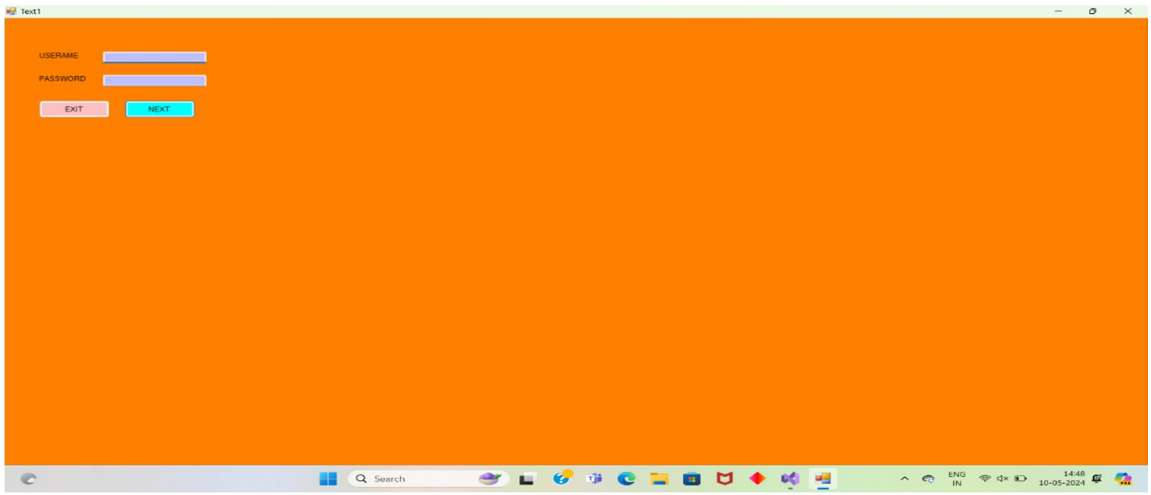
Authentication plays an important role in protecting resources from unauthorized access. Many sealing measures consist of simple and expensive password-based authentication systems and computationally intensive biometric sealing systems. Passwords are more than just a key. A password serves several purposes. our identity is a secret key that only we should know. They ensure our privacy and protect our sensitive information. They also require a disclaimer and prevent us from retroactively denying the validity of transactions authenticated with our passwords

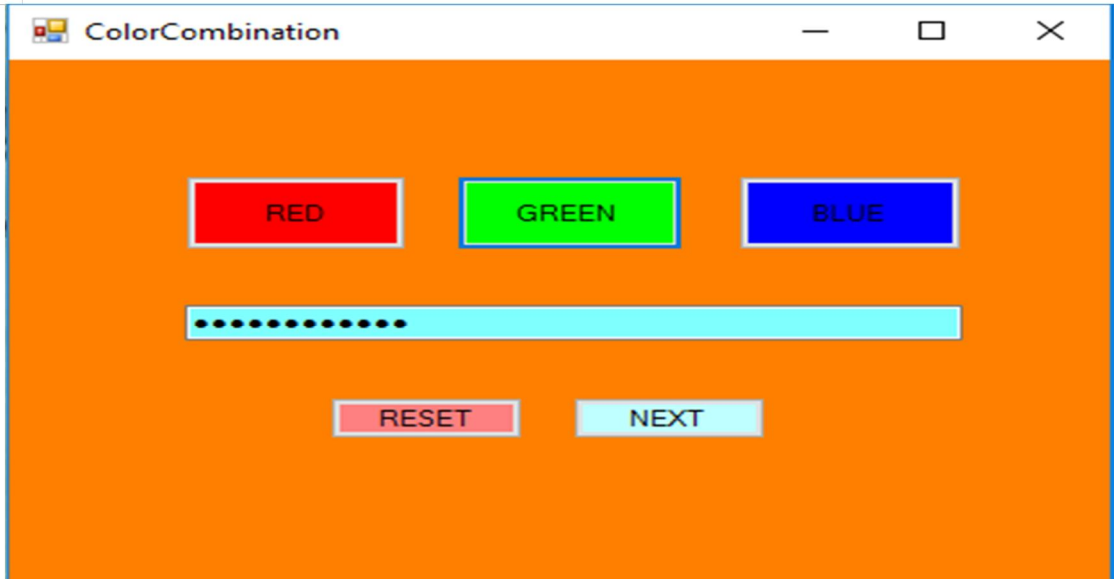
1) Text Authentication: The first step is clear text authentication where the user must log in by providing a username and password. The password can be any combination of letters, numbers and symbols with a minimum of 11 characters. If the user forgets the password or the password is incorrect, the user can select an option called Email, where the user has to confirm his user ID with the email ID after verification. This entire three-level password authentication procedure can be reset by the user.

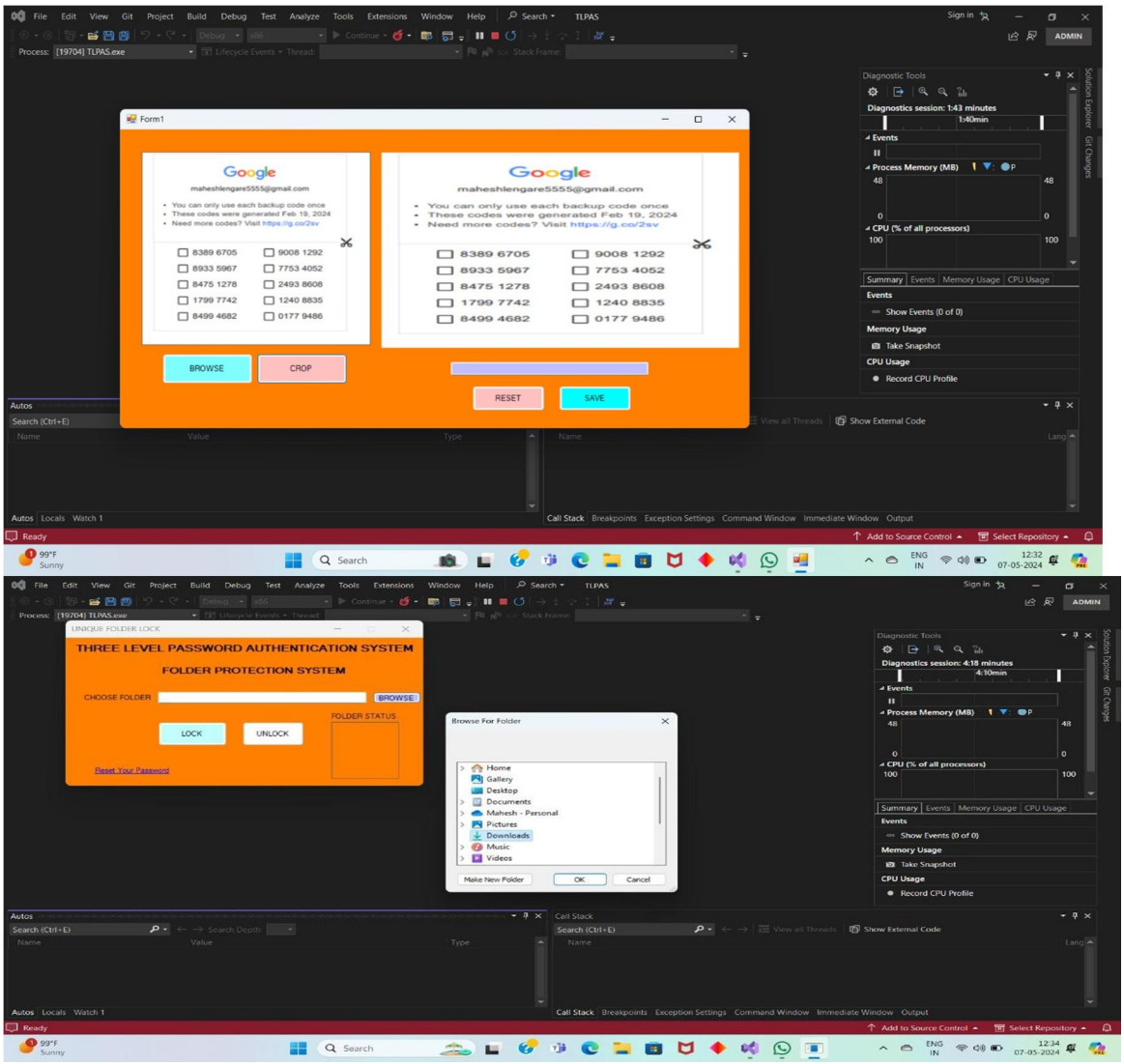
2) Image authentication: this authentication system uses a combination of color selection, where the user must choose a combination and remember the combination during login, by default, if the user forgets this color combination and did not remember, the user can restore it by email. when he needs to reset this three-level password authentication.

3) Graphic authentication: At this level, the user can upload any image of himself or his image, and when logging in to the last level, the image is cut into small images. The user must arrange all combinations of images by selecting each image. image or can drag and drop it, after setup the user can finally log into the system

V. RESULT




ColorCombination
RED
GREEN
BLUE
RESET
NEXT


Form1
BROWSE
CROP
RESET
SAVE
THREE LEVEL PASSWORD AUTHENTICATION SYSTEM
FOLDER PROTECTION SYSTEM
CHOOSE FOLDER
BROWSE
FOLDER STATUS
LOCK
UNLOCK
Reset Your Password
Browse For Folder
Make New Folder
OK
Cancel

VI. CONCLUSION

The three-level security approach applied for a framework makes it exceptionally secure alongside being easier to understand. It has been set up to increase security, prevent password cracking and identify theft, and also focuses on a better user-friendly interface. The goal is to provide the importance of user authentication and how it can be used to protect users during the login process. Authentication is the proper validation and rights management of the user for accessing the resources of any information system and is the most critical element in the field of Information Security. Yet, no single mechanism is efficient and effective to provide adequate security for computing resources such as programs, files, messages, printers, the internet, etc. On that note, the paper proposes a 3 - level authentication technique that employs textual passwords, colorbased,imagebased, hereby combining the benefit of the three techniques/methods to enhance the security of computer resources. The three-level authentication system had been applied to the above system which makes it highly secure along with more user friendly.

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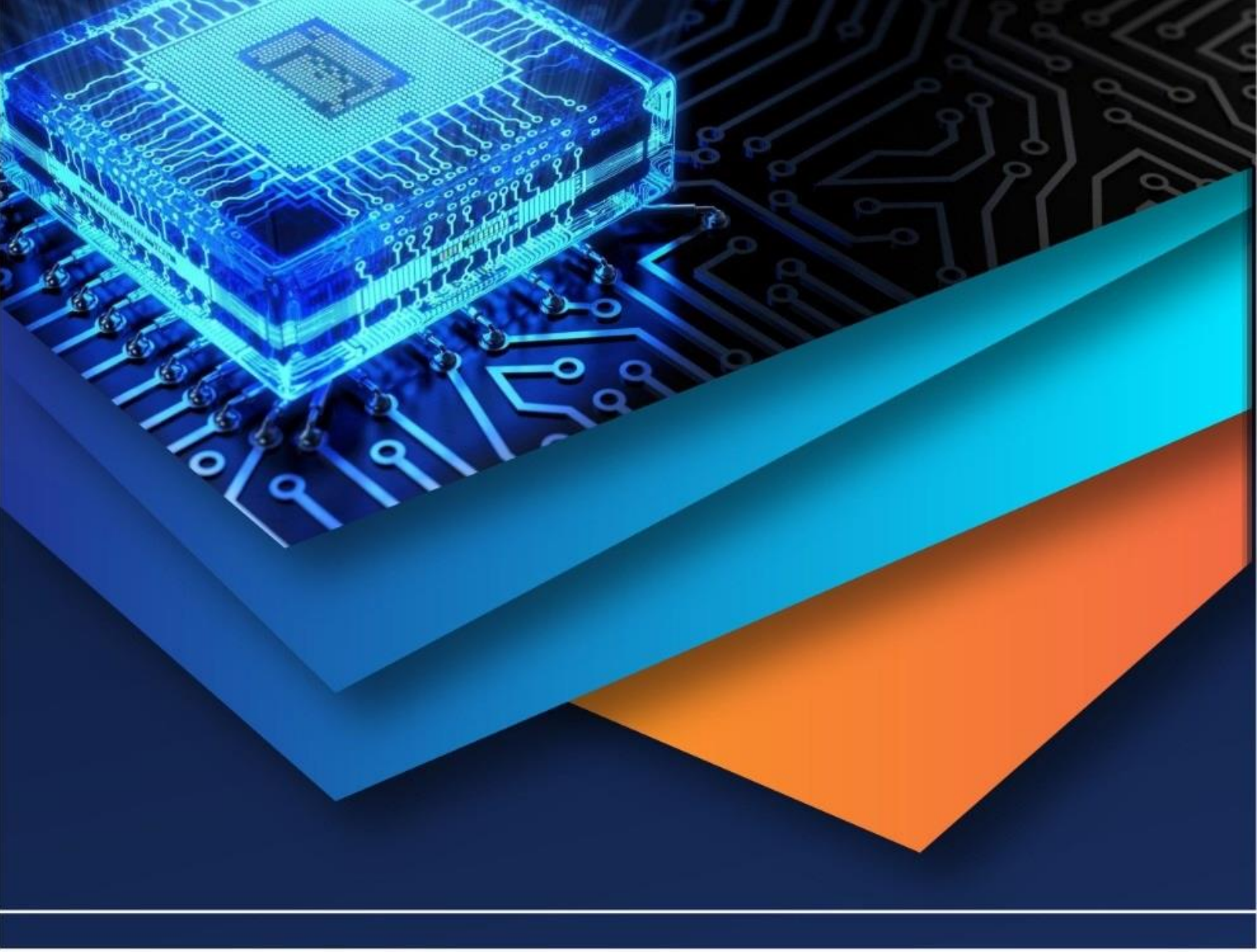
[5] http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6076505&queryText%3DMulti+Level+Password
[6] https://ieeexplore.ieee.org/document/5522747



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