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Intuitive internal interaction website for enhanced university student connectivity

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Abstract

In the last few years, we have witnessed the rapid advancement of social media branding, and today's use of these platforms is stronger than ever, reaching audiences all over the world through multiplatform social media branding strategies. Businesses can use social media to enhance customer communication, boost sales, foster brand loyalty, and establish enduring relationships by increasing brand awareness and customer loyalty. This opens our eyes to a completely different way of looking at how businesses operate, as well as how we normally interact with them and other people. An overview of the literature on the development of social media and how brands started using it as a tool for engagement marketing is given in this article.

Keywords: Intuitive, internal, enhanced, connectivity, social media

Introduction

A. Background and significance of the study

Social networking sites facilitate communication between users and their personal networks, allowing them to exchange ideas, activities, events, and interests. Millions of people have registered on social networking sites like MySpace, Facebook, Orkut, and Google+, and many of them have made frequent use of these platforms. There are many social networking sites, each with its own set of technological affordances, that support a wide range of interests and practices. The degree to which websites integrate novel information and communication technologies, like blogging, photo and video sharing, and mobile connectivity, also differs.

B. Research problem and objectives

Social Network Sites: A Synopsis Social network sites are web-based applications that enable users to do the following tasks: (1) enumerate the other users they are connected to; (2) make a profile that is public or semi-public inside a closed system; and (3) examine and view their own connections as well as those of other users inside the system. While Social networking sites consist of accessible profiles that show a well-written list of friends who utilize the system, despite the fact that they have a wide range of technical features. Every social networking profile has a unique ID.

A person is required to complete forms with a series of questions after signing up for a social networking site. The answers to these inquiries, which typically contain information about age, location, interests, and a "about me" section, are used to create the profile. Most websites also encourage users to include a photo in their profile. Users can add multimedia content or alter the look and feel of their profiles to make them more unique on some websites. On others, like Facebook, users can enhance their profile by adding modules, or "Applications."

The project's goal is to provide users with a clear understanding of the concept of "Social Networking Sites" by offering dependable and effective online communication, which will enable users to easily afford it.

Designing an appealing and secure login page is imperative for accessing the following features:

User Account Creation: Develop a new user account system with enhanced user-friendliness and meticulous validation of user details.

Efficient People Search: Facilitate easy searching of individuals across the entire network.

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Friend Requests: Enable users to send friend requests to connect with others and manage incoming requests in a dedicated friend box.

Comprehensive Profile Creation: Allow users to create public profiles showcasing social, professional, and personal information, with the flexibility to edit anytime.

Instant Messaging: Implement a chat feature for real-time communication with online friends.

Media Sharing: Enable users to upload and share images seamlessly on the network.

YouTube Video Integration: Provide functionality to add, search, and share YouTube videos.

Private Messaging: Allow users to send private messages to their friends and respond directly to incoming messages.

Advertisement Posting: Integrate a feature for users to post advertisements for products or services.

Administration Page: Develop an administration page to monitor and manage user operations effectively.

Password Recovery: Implement a user-friendly password recovery process for ease of access.

The objectives of testing encompass the systematic execution of the program to identify and rectify any potential bugs. This ensures the seamless functionality and reliability of the platform.

A test case is deemed successful if it discovers an error that hasn't been discovered yet. System evaluation is a step in the implementation process that takes place before the system goes live and makes sure it accurately and effectively satisfies user needs. As was previously said, testing is crucial to a system's success. If all of the system's components are operating as intended, it is reasonable to assume that the goal will be achieved during system testing. Before the system is ready for the user acceptance test, it goes through several tests.

C. Research questions

The stage that follows implementation is system testing. This is done to ensure that the system functions accurately and effectively before going live. To make sure the system functions, testing is required. A comprehensive battery of tests, including security, usability, stress, volume, online response, and recovery tests, are administered to the candidate system. Several tests are run on the proposed system before it is ready for user acceptance testing. These are the testing procedures.

- **Unit Testing**

Focus is drawn to the smallest feasible software design unit through unit testing. This is referred to as module testing. Every module is tested independently. The test is conducted immediately before the phase of programming. This step involves the functionality of every module in relation to the expected output from the module is determined to be satisfactory.

- **Integration Testing**

It is possible to lose data over an interface. When subfunctions are combined, they may not link to major functions in the intended way, and one module may adversely affect another. Integration testing is a systematic procedure that builds the framework of the program and tests the interface to identify any issues. Building a program structure out of unit-tested modules is the aim. Every module is assembled and tested as a whole.

- **Validation**

The software is put together into a finished package once integration testing is complete. Validation testing's final set of software tests has begun following the discovery and correction of interface defects. There are many ways to define validation testing, but one straightforward definition is that it is effective when the user anticipates that the software will function as intended. Once the validation test is completed, one of the three scenarios might come true. A) The function or performance characteristics are approved and meet the specifications. B) A discrepancy between the specifications is found, and a list of deficiencies is made. C) The validation test was used to test the proposed system, and the results showed that it was operating satisfactorily.

- **Output Testing**

The output of the suggested system must be tested once validation testing is finished because a system is useless if it cannot generate the necessary output in the necessary format. It is observed that the output format exhibited on the screen is precise. The user's needs were taken into consideration when creating the format during the system design stage. The output is provided in the hard copy according to the user's specified requirements as well. As a result, output testing produced no system corrections.

- **User Acceptance Testing**

The acceptance of the system by its users is a major factor in its success. Throughout the development process, the system is continually tested for user acceptability by keeping in touch with potential users and making the necessary adjustments. This is carried out with the following in mind: A. Design B of the input screen. Design C is the output screen. Reports and additional formats for output. Security precautions: In order to use this system, authentication is required; without it, a user cannot continue. Thus, the application can only be used by authorized users. The system is vulnerable to outsiders if the authorized users divulge the authentication details.

2. Existing System

Testing is the process of running a system with the intention of finding errors. Testing enhances a system's integrity by revealing design faults and mistakes. Testing looks for areas where mistakes are likely to occur. This helps maintain an error-free system. By ensuring that the product complies with user requirements, testing also enhances its value. Finding errors and areas where errors are likely to occur is the primary goal of testing framework. Planning and thoroughness are essential for testing. Partially tested systems are just as dangerous as untested ones. Furthermore, a system with little or no testing comes at a high cost.

3. Proposed system

The last and most crucial stage is implementation. To

guarantee that the suggested system operates as intended, system testing and user training are required. After the system has been tested by the user, any necessary modifications are made. Using a variety of data types, the developed system is tested during the testing process. While testing, accuracy is the norm and mistakes are recorded. This social networking site aims to provide an improved platform for both advertising and socializing in one convenient location. This website facilitates the buying and selling of goods within a circle of reliable friends.

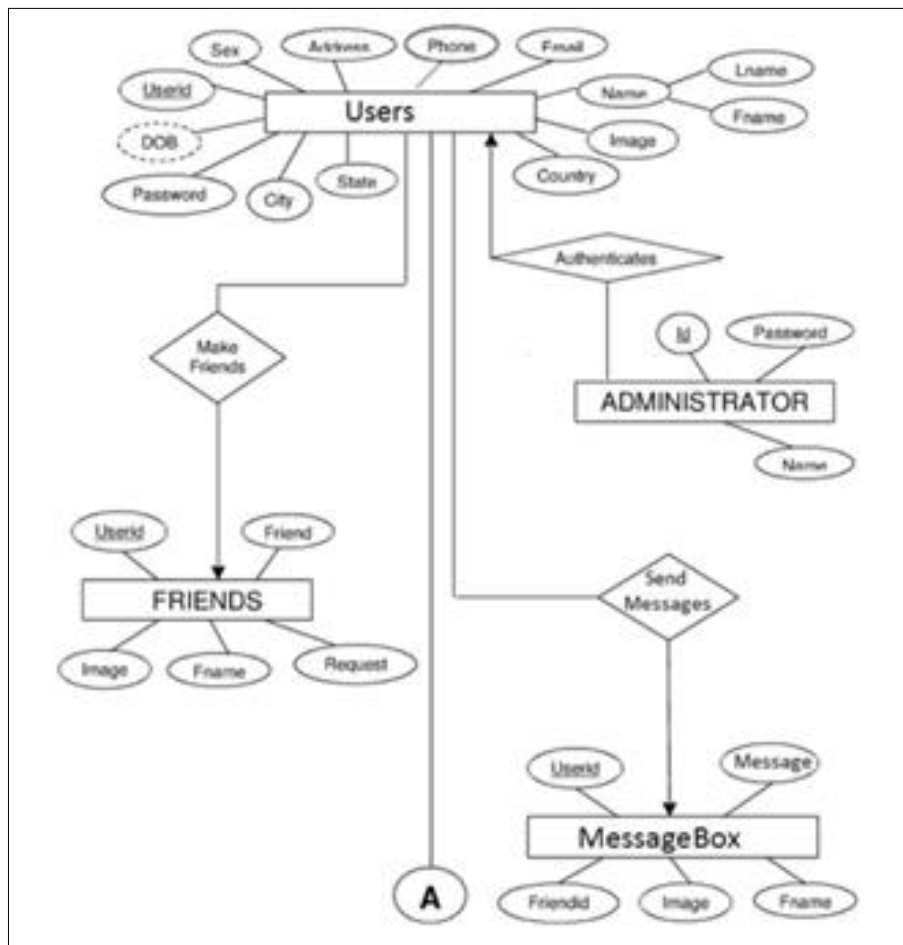
- **Social Media is addicting-** In games and tasks, the primary objective is to complete them with maximum efficiency and speed. Successful accomplishment triggers the release of feel-good hormones, such as dopamine, by the brain. This physiological response contributes to a sense of happiness and satisfaction, reinforcing the notion that swift and successful task completion is associated with positive emotional experiences. Uploading an image to Facebook or Instagram follows the same steps. as soon as everything appears on your screen, you'll start to see the likes and supportive comments as a reward. In addition, a great deal of experiences on social media have the power to alter someone's mood.
- **Fear of Missing Out.** FOMO has become a common theme, leading many people to constantly check their social media accounts. It could be harmful to your mental

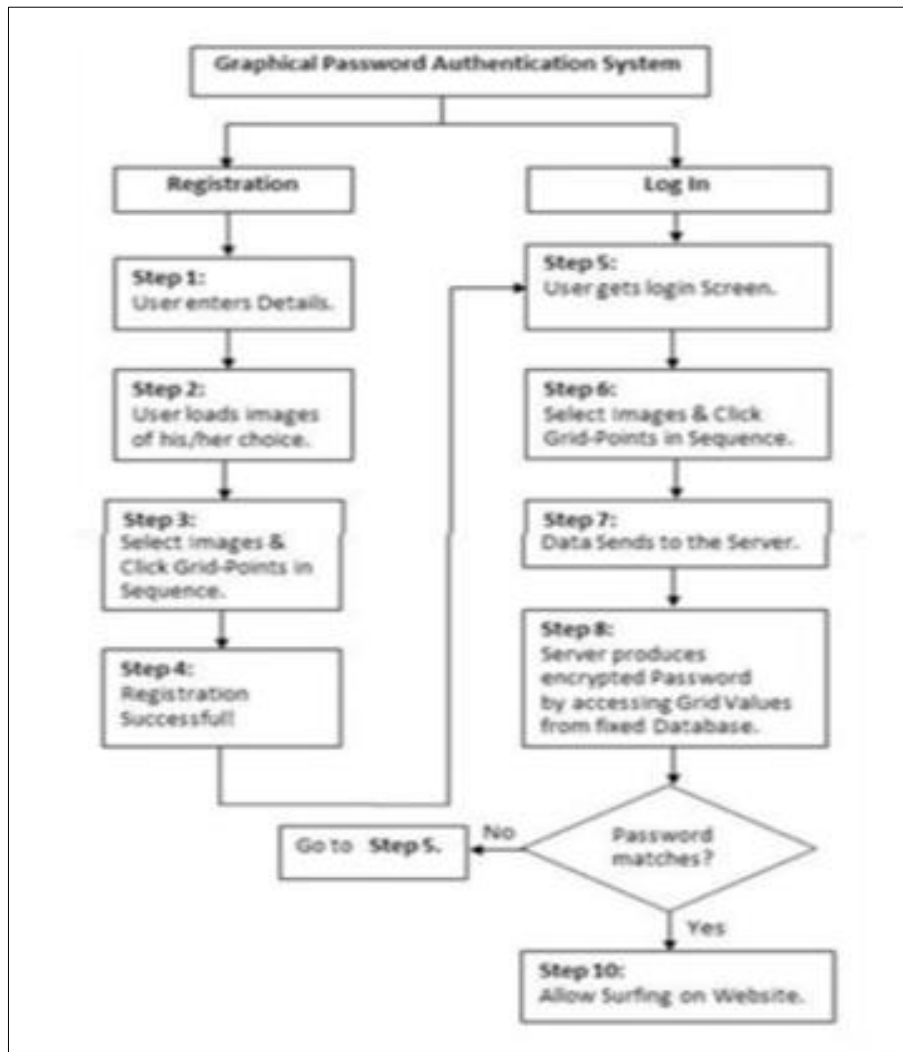
health to live in constant fear that you will miss something if you are not online.

- **Self-image issues.** Users of social media platforms can evaluate their appearance and receive acceptance for it by comparing it to that of others. Issues related to one's body image can often be linked to individuals who excessively engage in taking and posting selfies, commonly referred to as "selfieholics," and those who spend considerable time scrolling through and posting on social media. It is accurate to note that a significant proportion of college women who use Facebook frequently may harbor a belief that their attractiveness is closely tied to their self-worth. However, it's essential to recognize that social media serves as a tool that amplifies these concerns rather than being the primary cause of such perceptions. It inspires other people to behave similarly as well.

Workflow

The code to send an automated message is being written and put into a Python file. The HTML file will have a link in the file. There's a time window within which the message will be sent. Assuming the bot logs into a website, as soon as he hits the submit button, a message will be sent to the user via his Whats App number via the web, informing them that their credentials are being accessed and the website is being logged into. The user can then secure his website.





A. Methodology and research design

System testing comes next after implementation. This is done to make sure that, prior to going live, the system operates correctly and efficiently. To make sure the system functions, testing is required. A comprehensive battery of tests, including security, usability, stress, volume, online response, and recovery tests, are administered to the candidate system. Several tests are run on the suggested system prior to user acceptance testing being prepared. These are the steps involved in testing.

• **Unit Testing**

Focus is drawn to the smallest feasible software design unit through unit testing. This is referred to as module testing. Every module is tested independently. The testing phase precedes the programming phase by one step. This step determines whether each module's functionality in relation to the module's anticipated output is sufficient.

• **Integration Testing**

It is possible to lose data over an interface. When subfunctions are combined, they may not link to major functions in the intended way, and one module may adversely affect another. Integration testing is a systematic procedure that builds the framework of the program and tests the interface to identify any issues. Building a program structure out of unit-tested modules is the aim. Every module is assembled and tested as a whole.

• **Validation**

The software is put together into a finished package once integration testing is complete. Validation testing's final set of software tests has begun following the discovery and correction of interface defects. Validation testing can be defined in a variety of ways, but one simple definition is when the program performs as the user anticipates. After the validation test is complete, one of the three scenarios could happen. A) The performance characteristics or function are accepted and satisfy the requirements. B) A discrepancy between the specifications is found, and a list of deficiencies is made. C) The validation test was used to test the proposed system, and the results showed that it was operating satisfactorily.

• **Output Testing**

The output testing of the comes next after the validation testing. Recommended system, since a system wouldn't be helpful even if it wasn't able to generate the necessary output in the necessary format. It appears that the output format that is seen on the screen is accurate. The format was developed during the system design phase. keeping the user's requirements in mind. Additionally, the output is supplied in hard copy in accordance with the user's specified requirements. Consequently, no system corrections were found during output testing.

• **User Acceptance Testing**

The acceptance of the system by its users is a major factor in

its success. By staying in touch with potential users and making the required adjustments, the system is continuously tested for user acceptability throughout the development process. This is done keeping in mind the following: A. The input screen design B. The output screen design C. Report and other output formats. Security measures Authentication is a prerequisite for using this system; without it, no user can proceed. Thus, the application can only be used by authorized users. The system is vulnerable to outsiders if the authorized users divulge the authentication details.

4. Experimental setup

Administrative controls

1. verification of users' identities following registration.
2. emails to users requesting approval or disapproval with the appropriate explanations for a registered user.
3. updating account information at the users' request.
4. responding to inquiries from users.
5. notification of proposals to the final users.
6. The user makes payment to the system.
7. bringing up the safety precautions for the system's security.
8. removing a user or account at their request from the system's databases. Synopsis of the Process.

To start, enter your user information after signing up and authenticating. E-mail address already in existence on any website. E. g. XYZ@yahoo.com.

- Sign up on the internet.
- Output:
- Email address of the user with password and pin (special character).
- Website authentication. 2. Designing:
- Inputs:
- Display Structure
- Theme
- Functioning:
- User-Website Interface. A sneak peek at the resources that are available. Data flow: functioning. Action taken in response to user input. Project Released Online 4 Maintenance:
- Implement Security Issues
- Risk Assessment
- Error and Fault Detection
- Consistently Modifying and Updating the Project
- Functioning:
- Allows project to sustained and effectively render services as expected
- Output:
- Constantly monitoring and enhancing the project quality

Data Flow Diagram

A graphical depiction of the "flow" of data through an information system is called a data flow diagram (DFD). Another tool for visualizing data processing is a data flow diagram. It is customary for a designer to start with a context-level DFD that illustrates how the system interacts with external entities. The system being modeled is then "exploded" to reveal more details in this context-level DFD.

A DFD shows how data moves through a system. Problem analysis frequently makes use of data flow diagrams. According to this perspective, a system is a function that converts input into the intended output. A DFD illustrates

how data moves through the various system processes or transformations.

Dataflow diagrams can be used to give the user a visual representation of how the data they enter ultimately affects the system's structure, from order placement to dispatch and restocking. They can also be used to determine how any system is developed. The relevant register, kept up to date by the relevant authorities and stored in a database.

5. Methodology

The implementation stage is called system testing. This is done to ensure that the system functions accurately and effectively before going live. The system's success depends on testing. A range of tests are performed on the candidate system, including usability, security, stress, volume, on-line response, and recovery tests. Before the suggested system is prepared for user acceptance testing, a number of tests are run. The Testing Steps are:

• Unit Testing

Unit testing concentrates attention on the smallest possible software design unit. We call this module testing. Each module is put through a separate test. The test is run right during the programming phase. Every module is found to be functioning satisfactorily in this step with respect to the anticipated output from the module.

• Integration Testing

Over an interface, data loss is possible. One module may negatively impact another, and when subfunctions are combined, they might not link to major functions in the way that is intended. Integration testing is a methodical process that builds the program's structure while testing the interface to find bugs related to it. Building a program structure out of unit-tested modules is the goal. Each module is put together and tested collectively.

• Validation

After integration testing is finished, the software is assembled into a complete package. After identifying and fixing interface flaws, the last round of software tests for validation testing has started. There are many ways to define validation testing, but one straightforward definition is that it is successful when the software performs as the customer expects it to. One of the three scenarios could exist following the validation test. A The performance characteristics or function meet the specifications and are approved. B A discrepancy between the specifications is found, and a list of deficiencies is made. C The validation test was used to test the proposed system, and the results showed that it was operating satisfactorily.

• Output Testing

Upon completion of the validation testing, the subsequent procedure entails conducting output testing on the proposed system. This is necessary because without generating the necessary output in a predetermined format, the system would be rendered useless. Fortunately, the output format displayed on the screen is deemed appropriate, as it was designed during the system's development phase to cater to the user's requirements. Additionally, the printed output also complies with the user's specified criteria. Consequently, no adjustments were required for the system as a result of the output testing.

- **User Acceptance Testing**

User acceptance of a system is the key factor for the success of any system.

The system under consideration is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes whenever required.

6. Result and Output

A. Description of a graphical password authentication system using an intuitive approach

The benefits and drawbacks of using an online social networking site are very similar to those of using one in person. The most challenging issue is defining a virtual machine that can peacefully coexist with the intended target systems. Nevertheless, the effort required to create and maintain an Online Social Networking website is typically far less than that required for a real-life system. This strategy makes sense in certain ways for encouraging online communication. A common structured programming technique that, in theory at least, lowers software maintenance costs is the identification of clean interfaces. Perhaps the only point of contention is the specific structure that was chosen (i.e. e. social media). Generally speaking, the online social networking strategy should be taken into account if the organizational site is expected to outlast its hardware. This is a result of the expensive redevelopment. It's now simple and convenient for users to stay in touch with their colleagues when a social networking site like this is accessible through a website. It provides future users with additional opportunities to improve IT technologies. Website updates based on user needs; online games and other applications; various forms of advertising, such as discounts and auctions; etc. • User information privacy among other network users.

B. Evaluation of the system performance

The usability, security, and user satisfaction of the suggested graphical password authentication system with an intuitive approach will all be taken into consideration when assessing its performance.

Usability

The system's usability will be assessed by looking at how simple it is to use and how well it works to let users log in and access their accounts. A combination of qualitative and quantitative metrics, including the Single Ease Question (SEQ) and the System Usability Scale (SUS), will be used to evaluate this. These metrics will shed light on how users perceive the system's usability and efficacy.

Security

Based on how well the system defends against assaults like guessing, phishing, and shoulder-surfing, security will be assessed. A combination of quantitative and qualitative methods will be used in the security evaluation, such as testing the strength of passwords the system generates and simulating an attack on the system to find vulnerabilities.

User satisfaction

Based on users' overall experience and satisfaction with the system, user satisfaction will be assessed. In order to get user feedback on their experience with the system, a combination of qualitative and quantitative measures, including surveys and interviews, will be used to assess this. In summary, the

assessment of the system's functionality will offer valuable information about the efficiency and intuitiveness of the graphical password authentication system. The evaluation's findings will help the researchers spot any possible problems with the system and make the required changes to enhance its functionality. The researchers can guarantee that the suggested authentication system is safe, efficient, and user-friendly by carrying out a thorough assessment of the system, which is essential for its successful adoption in a variety of contexts.

C. Comparison with other graphical password authentication systems

There are various graphical password authentication system types available, and each has pros and cons of its own. Below is a comparison between the suggested graphical password authentication system and other graphical password authentication systems that use an intuitive approach.

Cued-recall graphical password authentication

Users of cued-recall graphical password authentication systems must choose images from a selection that is shown to them when setting up their accounts. The user is then shown the images during login, and in order to access their account, they have to choose the right images in the right order. Similar to the cued-recall approach, the intuitive approach to graphical password authentication varies in that the user chooses the images based on their own experiences rather than having them presented to them at random.

Draw-a-secret graphical password authentication

During account setup, users of graphical password authentication systems called Draw-a-secret are required to draw a series of shapes or lines that correspond to their account. The user is then shown the series of lines or shapes during login, and in order to access their account, they have to redraw the sequence. Unlike draw-a-secret, the intuitive method of graphical password authentication makes use of images instead of lines or shapes.

Advantages of the intuitive approach

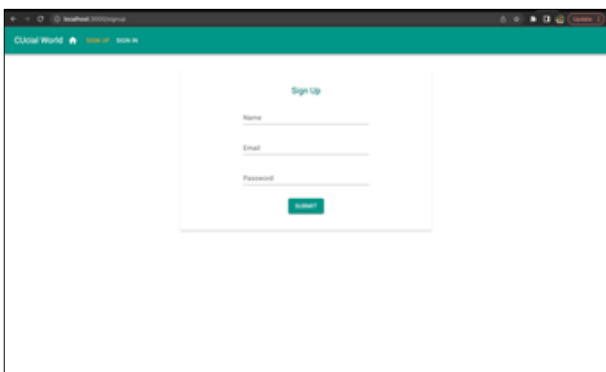
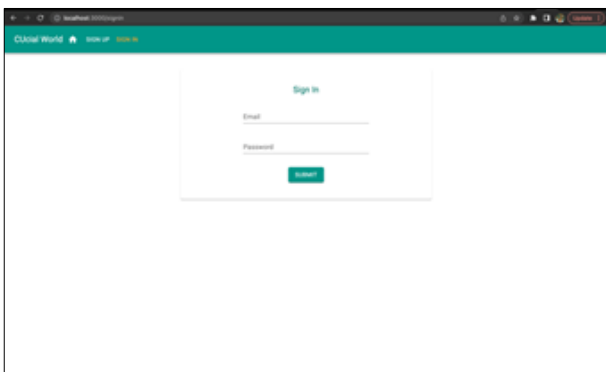
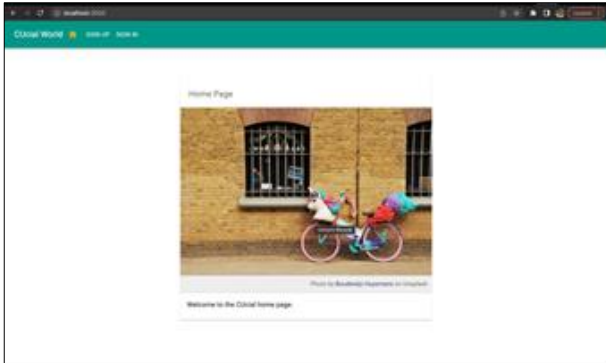
The intuitive approach to graphical password authentication has several advantages over other graphical password authentication systems. Firstly, the use of pass-images that are selected based on personal experiences makes it easier for users to remember their passwords, reducing the need for password resets and increasing security. Secondly, the use of pass-images that are not related to personal information or common words makes it more difficult for attackers to guess or crack passwords, increasing security. Lastly, the intuitive approach provides users with a more personalized and enjoyable experience than other graphical password authentication systems, which may improve user adoption and satisfaction.

Disadvantages of the intuitive approach

The primary drawback of the intuitive approach to graphical password authentication is that, in comparison to other graphical password authentication systems, it might be more challenging to implement and customize for various users and contexts. Concerns regarding users' privacy and security may also arise from the use of personal images if they select images that are readily connected to them or contain personal information. When compared to alternative graphical

password authentication systems, the intuitive approach to graphical password authentication offers a number of benefits and drawbacks. To assess the intuitive approach's usefulness and effectiveness across a range of scenarios and user demographics, more investigation is required.

D. Output



7. References

1. Katona J. A review of human-computer interaction and virtual reality research fields in cognitive Info Communications. *Applied Sciences*. 2021;11(6):2646.
2. Quam DL. Gesture recognition with a DataGlove. *IEEE Conference on Aerospace and Electronics*. 1990;2:755-760.
3. Liou D-H, Lee D, Hsieh C-C. A real-time hand gesture recognition system using motion history image. In *Proceedings of the 2010 2nd International Conference on Signal Processing Systems, IEEE, Dalian, China, July 2010*.
4. Mridha SJ, Awal MA. A Hand Gesture Recognition System using OpenCV and Python. <https://ieeexplore.ieee.org/document/8770883>
5. Singh RR, Keshari AK. "Hand Gesture Recognition for Virtual Mouse Control."

6. Gaikwad PG, Nemade PD. "Gesture Recognition for Virtual Mouse Control." <https://ieeexplore.ieee.org/document/8247341>
7. Arora SK, Jain RK. "Real Time Hand Gesture Recognition for Virtual Mouse Control using Python and OpenCV." <https://www.ijariit.com/manuscripts/v2i2/V2I2-1575.pdf>
8. Dudhane SU. Cursor control system using hand gesture recognition. *IJARCCCE*. 2013;2(5).
9. Vinay KP. Cursor control using hand gestures. *International Journal of Critical Accounting*. 2016;0975-8887.
10. Biddle R, Chiasson S, Van Oorschot PC. Graphical passwords: Learning from the first twelve years. *ACM Computing Surveys (CSUR)*. 2012;44(4):19.
11. Chiasson S, Biddle R, van Oorschot PC. A second look at the usability of click-based graphical passwords. In *Proceedings of the 28th international conference on human factors in computing systems*. 2010;1945-1954.
12. De Angeli A, Coventry L, Johnson G, Renaud K. Is a picture really worth a thousand words? Exploring the feasibility of graphical authentication systems. *International Journal of Human-Computer Studies*. 2005;63(1-2):128-152.
13. Jermyn I, Mayer A, Monrose F, Reiter MK, Rubin AD. The design and analysis of graphical passwords. In *Proceedings of the 8th USENIX Security Symposium*. 1999;1-14.
14. Kuo CC, Sahin C. A review of graphical password approaches. *Journal of Network and Computer Applications*. 2017;82:21-44.
15. Li X, Li S, Li X, Li Z, Li Y, Li K. An intuitive and secure graphical password scheme based on users' habits. *Journal of Ambient Intelligence and Humanized Computing*. 2019;10(5):1749-1759.
16. Park S, Lee S, Kim S, Lee D. A graphical password authentication system using personal pass-images based on users' personal experiences. *Future Generation Computer Systems*. 2017;68:468-481.
17. Rezaazadeh A, Mohd Noah SA, Basri H. An improved graphical password authentication scheme based on human recognition memory. *Journal of Ambient Intelligence and Humanized Computing*. 2015;6(3):379-392.
18. Sood SK, Sarje AK. An effective and secure graphical password authentication system using an intuitive approach. *Journal of Ambient Intelligence and Humanized Computing*. 2018;9(2):271-283.
19. Zviran M, Haga WJ. The use of biometric authentication systems: Insights from the field. *Journal of the Association for Information Science and Technology*. 2017;68(1):218-227.
20. Stallings W, Brown L. *Computer Security: Principles and Practices*. Pearson Education. 2008.
21. Wiedenbeck S, Waters J, Birget JC, Brodskiy A, Memon N. Passpoints: design and longitudinal evaluation of a graphical password system. *International Journal of Human-Computer Studies*. 2005;63:102-127.
22. Morris R, Thompson K. Password security: a case history. *Communications of the ACM*. 1979;22:594-597.
23. Klein DV. Foiling the Cracker: A Survey of, and Improvements to, Password Security. In *Proceedings of the 2nd USENIX UNIX Security Workshop*. 1990.

24. Spafford EH. Observing reusable password choices. In Proceedings of the 3rd Security Symposium. Usenix. 1992;299-312.
25. Porter SN. A password extension for improved human factors. Computers & Security. 1982;1(1):54-56.
26. Suo X, Zhu Y, Owen GS. Graphical passwords: A survey. In Proceedings of Annual Computer Security Applications Conference. 2005;463-472.
27. De Angeli A, Coventry L, Johnson G, Renaud K. Is a picture really worth a thousand words? Exploring the feasibility of graphical authentication systems. International Journal of Human-Computer Studies. 2005;63:128-152.
28. Real User Corporation. The science behind passfaces, June 2004.
29. Blonder GE. Graphical password. U.S. Patent 5559961, Lucent Technologies, Inc. (Murray Hill, NJ). August 1995.