Chat network study and design using HTML and PHP web programming

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ABSTRACT

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Keywords:

Apache server Hyper text markup language Personal home page Privacy Security Social network Chat rooms becoming a part of human life, from sharing and exchanging information such as texts, pictures and messages. Many begin to share the latest news and images related to news in the media field as well as chat messaging in the Internet and targeting customers in business, jokes, music and video in the entertainment field. In this paper a chat web site are designed using hyper text markup language (HTML) and personal home page (PHP) web programming languages with security and authentication features added to it to keep user privacy and personal information unattached, and Apache http server are used to test it.

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1. INTRODUCTION

Individuals have discovered that online web sites for chatting, exchanging information, along with other online collaborative approaches become extremely significant places for sharing and posting information. Facebook, Viber, WhatsApp, and other social media platforms are all capable of sharing share information; it is no surprise that information sharing poses a serious threat to the privacy of users. Digital stalking, identity theft, and personalized spams are all reported risks on chat-networking sites. In 2009 A. Beach, M. Gartrell and R. Han present several privacy and security problems, along with design and implementation of solutions for these issues. There work allows location-based services to query local mobile devices for users' social network information, without knowing user identity or compromising users' privacy and security [1]. In 2010 Cutillo, Leucio Antonio, Mark Manulis, and Thorsten Strufe study the impacts of this paradigm change on socioeconomic and technical aspects of collaboration and interaction is comparable to that caused by the deployment of world wide web (WWW) in the 1990s [2]. In 2018, the impacts of this paradigm change on socioeconomic and technical aspects of collaboration and interaction is comparable to that caused by the deployment of world wide web in the 1990s [2]. In 2018, comprehensive enhanced secure Instant messaging (IM) scheme proposed, which based on the elliptic curve cryptosystem and the advanced encryption standard algorithm [3].

This study presented a design for an online site with the use of HTML, in which people have the ability for creating user accounts and linking to one other, as well as engage in high-level interactions like joining groups or communities' interest, or participating in discussions. The site frequently includes features for allowing the users to create online profiles as well as sharing their thoughts on various topics, like tagging articles and postings, commenting on photographs, and rating films, music, or books [4]-[11].

2. RESEARCH METHOD

- You may share the following types of information on your network:
- Profile: users can construct thorough online profiles and communicate with other users on the majority of chat networks. Users could share information like interests, familial information, employment and educational history with other users.
- Status: for connecting rapidly with other users, the users allowed by the majority of chat networks to
 publish status updates. Those networks typically meant to broadcast information publicly and rapidly, so
 there might be privacy options for restricting access to the status updates.
- Location: various chat networks are set up for broadcasting the current position, either as public information or as an update that can only see by authorized contacts. This could enable users to "check in" to a company or local event, as well as sharing their location with their network of contacts.
- Shared content: users of various chat networks are encouraged to contribute content like photos, music, movies, and connections to other websites. All of such sharing indicates information about the person, such as contextual data about which you might be unaware. In addition, you can be supplying thorough information for advertisers to monitor you or hackers taking advantage of the person's online identity when this information shared online. As a result, it is critical to be aware of the information you are sharing and aware of the options available for protecting the privacy [12]-[15].

2.1. Hypertext markup language (HTML)

This is the most widely used markup language for developing applications and webpages. It constitutes a triad of major approaches for the WWW, together JavaScript and CSS. HTML documents received by Web browsers from a web server or locally stored files and convert those into multi-media webpages. Originally, the HTML included causes for document's appearance and semantically described web page's structure. The elements of HTML represent the components making up the HTML pages. Objects and images, like interactive forms, may embedded in rendered page with the use of the HTML methods. HTML allows creating organized documents through the indication of the structural semantics for the text elements, such as the paragraphs, headers, links, quotations, lists, as well as different other elements. HTML allows the scripting languages such as the JavaScript to insert programs that influence the content and behavior of webpages. CSS determines the layout and appearance of content. Since 1997, the world wide web consortium (W3C), which manages CSS and HTML CSS standards, has advocated for usage of CSS over explicit presentational HTML [16]-[18].

2.2. Hypertext preprocessor (or simply PHP)

This general-purpose programming language created with the intention of used for web development. Currently, the PHP group creates the PHP reference implementation, which designed by Rasmus Lerdorf in the year 1994. PHP used to stand for Personal Home Page, yet today it refers to recursive initialization. PHP stands for "Hypertext Preprocessor." PHP code could be run via a command line interface (CLI), incorporated in HTML code, or combined with a variety of web content management systems, web frameworks and web template systems [19], [20].

2.3. PHP 7

Throughout the years 2014 and 2015, a novel and important version of PHP, PHP 7, created. There was significant controversy about the numbering of this edition, whereas the PHP 6 unicode experiment never reported, the PHP 6 name referenced in various book titles and articles, which could have resulted in confusion in the case when a future release utilized the same name. The name PHP 7 decided after a poll. PHP founded on a PHP branch known as PHP next generation (phpng) at the time. Xinchen Hui, Dmitry Stogov, and Nikita Popov wrote it with the goal of improving PHP efficiency by reworking the Zend Engine and maintaining near-complete language compatibility. WordPress-based benchmarks, which functioned as the phpng project's major benchmark suite, indicated a nearly 100% increase in the performance as of July 14, 2014. More compact data structures as well as other modifications considered more suitable for effective migration to a just-in-time (JIT) compiler; therefore, changes from phpng are likely to make it simpler to increase efficiency in future. The revised Zend engine is now known as Zend engine 3, replacing the Zend engine 2 that was utilized in PHP 5 [21], [22].

2.4. Local host server

The Apache HTTP Server commonly referred to as Apache, considered as a cross-platform web server, which is open-source and free software, released under the Apache License 2.0. Under auspices of Apache Software Foundation, Apache has maintained and created via an open community of developers.

Although Linux used by almost all of the Apache HTTP Server instances, recent versions also run on Windows and a number of Unix-like systems. NetWare, OpenVMS, OS/2, and other OS also supported in previous versions. Following work on National code services association (NCSA) code stagnated, developing Apache had begun in early 1995, depending on NCSA HTTPd server. Apache was essential in the early development of the WWW, swiftly displacing NCSA HTTPd as the most significant HTTP server and remaining so since 1996. It was the first web server software used for serving over 100 million websites in the year 2009. It projected that it served 39% of all of the active web sites and 35% of top millions web sites as of August 2018 [22].

2.5. MY SQL database

MySQL has written in the C++ and C programming languages. Although its SQL parser developed in yacc, it employs a custom lexical analyzer. MySQL runs on BSDi, AIX, HP-UX, FreeBSD, IRIX, i5/OS, macOS, Linux, NetBSD, Microsoft Windows, OpenBSD, OS/2 Warp, OpenSolaris, Sanos, Novell NetWare, Oracle Solaris, QNX, SunOS, Symbian, SCO UnixWare, SCO OpenServer, and Tru64. MySQL has also ported to OpenVMS. Dual licensing utilized in client libraries and MySQL server software. They are available under a proprietary license or GPL V2. The official manual can provide assistance. In addition, free support offered in a variety of IRC forums and channels. Oracle's MySQL Enterprise packages provide premium support. They are different in terms of service price and scope. A variety of third-party organizations, such as Percona and MariaDB, are also available for providing services and support. Reviewers knew that MySQL performs efficiently in average scenario, and that developer interfaces are available, and documentations it is extremely a good proven as well to be a "real multi-user, multi-threaded SQL database server that's to be a quick, stable, and actually multi-user, multi-threaded SQL data-base server [17], [23]-[26].

3. RESULTS AND DISCUSSION

In this chat room may windows will appear to the user. The first one is user control panel for user name and password login information. The second is user account data required to store in the database. Other windows are for different chatting information like of chatting people and chat room information.

- Index page: as shown in Figure 1 the login control panel for users with web access are programmed using html web programming language. This control panel is consist of two parts. The first part is user name and the second is password. It is used for allow user to login the chat web site designed. The user enter the user name he need to be known to people chat with them and also will be appear on web his own password this password is stored in the program data base designed using MySQL.
- Add user page: after registering in the web site and have an account, the user can easily log to his account as shown in Figure 2. It will easy to retrieve the data is stored inside the database only the user with correct password can login there for the information protected against any type of attack like intruders.

🔒 Please Login	L Sign Up
Username:	Name:
Password:	Username:
Login No account? Sign up	Password:
	± Sign Up Back to Login

Figure 1. User login control panel

Figure 2. U	ser accoun
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List of chat room: this page contains a list of all people chatting and exchanging information with. Knowing the date of session is possible from the date of chatting session. It consist of many options like add for adding more people, edit for editing chat list and delete to delete chatting information that no more required. The user to log in to chat as shown in Figure 3, use chat room that can edited or deleted by admin of chat room as illustrated in:

Show v entries			Search:
Chat Room Name	Password	Date Created	Action
T0		May 17, 2021 - 09:21 AM	F Join II / Edit II 🏦 Delete
Free Entrance :)		Sep 11, 2017 - 01:20 PM	💭 Join 🛛 🖉 Edit 🛛 🖬 💼 Delete
My First Chat Room	leeann	Sep 11, 2017 - 01:20 PM	Ellein II / Edit II 1 Delete

Figure 3. List of chat room

- Live chat: When entering the chat room, the chat screen appears as in Figure 4. In this window; the user will be capable to create chatting groups. Admin has many falsities as if adding people by clicking adding member's tool. Deleting all information is possible by clicking delete.

Simple	e Chat System	Chat Rooms 🔒 Use	rs					🔒 admin
	Chat Room: Free	Entrance :)			Members: 🗿	Add Member	Delete Room	+ Back
	Welcome to Chatroom	and hale speech to avoid banning of	account					

Figure 4. Live chat

- Page add new chat room: can admin create new chat room as in Figure 5. The new created chat room will have many capabilities like adding people, delete and edit chatting people. Add new chat room window has chat room name tool in which user can give a name to his chatting group. A password also added in password box:

				localhost/ChatP	+ ×	D 0 0 5	()
Simple Chat System Chat Rooms	Chat Room Name Password:	Add New Chat Room	V Court	×	Bearch	Add	
10 Free Entrance ()		Sep 11, 2017-01:20 PM	A Canto		Delete		
Showing 1 to 3 of 3 sentise	leearun	Sep 11, 2017 - 01:20 PM	-	1 × 1	E Ouese Pro	rices 🚺 Heat	

Figure 5. Add new chat room

4. CONCLUSION

Exchanging information is the goal of this site. We conclude that it is possible to create a web system to create chat rooms that benefit in all areas. Many types of user like students gather for scientific interest or other cultural communication, and conclude that people can communicate with each other through online messaging via the internet. Developing this system in the future will adding the features of video and voice communication between people, as well as the feature of searching for people through chat rooms.

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