# **Original Article**



# Social Network Privacy and Security Features Designed Using HTML and PHP Web Programming

# Asst. Lec. Angham K. Hussein

Al-Turath University Collage, Computer Techniques Engineering Department, Iraq, Baghdad

Corresponding Author: Asst. Lec. Angham K. Hussein; Angkhalid23@gmail.com

Received 07 November 2021;

Accepted 25 December 2021;

Published 01 January 2022

## Abstract

Chat networks have become a part of human life, from sharing information such as texts, pictures and messages, many have begun 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 HTML and PHP web programming languages with security features added to it to keep user privacy, and apache http server are used to test it.

Keywords: Social network, Security, Privacy, HTTP, PHP, Apache server.

# **1.1 Introduction**

Online web sites used for exchanging information, chatting and other online collaborative tools have emerged as immensely popular places for people to post and share information. Viber, whatsup Facebook, est., all have the capability the exchange information at the same time, not surprisingly, information sharing causes real threats to user privacy. For example, in chat-networking sites, documented threats include identity theft, digital stalking, and personalized spam. In This paper build online site using html web programming language where individuals can create user accounts and link to, each other, and which allow high interactions such as joining communities or groups of interest, or participating in discussion meet. This site often includes services which allow users to build online profiles and share their opinions about items, such as tagging articles and postings, commenting on photos, and rating movies, books, or music <sup>[1,2]</sup>.

### **1.2** The information sharing when use chat networks The kinds of information that you may be sharing on network includes:

- Profile. Most chat networks allow users to create detailed online profiles and connect with other users in some way. This may include users sharing information with other users, such as familial information, interests, educational background and employment.
- 2. Status. Most chat networks also allow users to post status updates in order to communicate with other users quickly. However, there may be privacy settings to restrict access to status updates, these networks are frequently designed to broadcast information quickly and publicly.
- 3. Location. Many chat networks are designed to broadcast your real-time location, either as public information or as an update viewable to authorized contacts. This might allow users to "check in" to a local event or business, or share one's location with contacts within their network.

4. Shared content. Many chat networks encourage users to share content, such as music, photographs, videos and links to other webpages.

All of this sharing reveals information about you, including contextual information you may not even be aware about. By sharing this information online, you may be providing enough information to allow advertisers to track you or hackers to take advantage of your online identity. Therefore it is important to be aware of the information that you are providing and to be conscious of the choices you can make to protect your privacy <sup>[3]</sup>.

# 2. Programming Languages Used in develop chat web site

**2.1** Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included causes for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997<sup>[4]</sup>.

**2.2** Hypertext Preprocessor (or simply PHP) is a general-purpose programming language originally designed for web development. Rasmus Lerdorf originally created it in 1994; The PHP Group now

produces the PHP reference implementation. PHP originally stood for Personal Home Page, but it now stands for the recursive initialize PHP: Hypertext Preprocessor. PHP code may be executed with a command line interface (CLI), embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks <sup>[5]</sup>.

## 2.3 PHP 7

During 2014 and 2015, a new major PHP version was developed, which was numbered PHP 7. The numbering of this version involved some debate. While the PHP 6 Unicode experiment had never been released, several articles and book titles referenced the PHP 6 name, which might have caused confusion if a new release were to reuse the name. After a vote, the name PHP 7 was chosen. The foundation of PHP is a PHP branch that was originally dubbed PHP next generation (phpng). It was authored by Dmitry Stogov, Xinchen Hui and Nikita Popov, and aimed to optimize PHP performance by refactoring the Zend Engine while retaining near-complete language compatibility. As of 14 July 2014, Word Press-based benchmarks, which served as the main benchmark suite for the phpng project, showed an almost 100% increase in performance. Changes from phpng are also expected to make it easier to improve performance in the future, as more compact data structures and other changes are seen as better suited for a successful migration to a just-in-time (JIT) compiler. Because of the significant changes, the reworked Zend Engine is called Zend Engine 3, succeeding Zend Engine 2 used in PHP 5 [5,7].

#### 2.4 Local Host Server

- The Apache HTTP Server, usually called Apache is free and open-source cross-platform web server software, released under the terms of Apache License 2.0. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation.
- The vast majority of Apache HTTP Server instances run on a Linux distribution, but current versions also run-on Windows and a wide variety of Unix-like systems. Past versions also ran on OpenVMS, NetWare, OS/2 and other operating systems.

Originally based on the NCSA HTTPd server, development of Apache began in early 1995 after work on the NCSA code stalled. Apache played a key role in the initial growth of the World Wide Web, quickly overtaking NCSA HTTPd as the dominant HTTP server, and has remained most popular since April 1996. In 2009, it became the first web server software to serve more than 100 million websites As of August 2018, it was estimated to serve 39% of all active websites and 35% of the top million websites <sup>[6]</sup>.

### 2.5 MY SQL data base

MySQL is written in C and C++. Its SQL parser is written in yacc, but it uses a home-brewed lexical analyzer. MySQL works on many system platforms, including AIX, BSDi, FreeBSD, HP-UX, come Station, i5/OS, IRIX, Linux, macOS, Microsoft Windows, NetBSD, Novell NetWare, OpenBSD, Open Solaris, OS/2 Warp, QNX, Oracle Solaris, Symbian, SunOS, SCO Open Server, SCO UnixWare, Sanos and Tru64. A port of MySQL to OpenVMS also exists.

The MySQL server software itself and the client libraries use dual-licensing distribution. They are offered under GPL version 2, or a proprietary license Support can be obtained from the official manual. Free support additionally is available in different IRC channels and forums. Oracle offers paid support via its MySQL Enterprise products. They differ in the scope of services and in price. Additionally, a number of third party organisations exist to provide support and services, including MariaDB and Percona. MySQL has received positive reviews, and reviewers noticed it "performs extremely well in the average case" and that the "developer interfaces are there, and the documentation (not to mention feedback in the real world via Web sites and the like) is very, very good". It has also been tested to be a "fast, stable and true multi-user, multithreaded sql database server"<sup>[8,9]</sup>.

### 3. Design and Run Project

1- Index Page: as in fig.1 the login control panel for users with web access are programmed using html used for allow user to login the chat web site designed, the user enter his own password this password are stored in the program data base designed using MY SQL.

🥩 🏽 🗆 🕼	☆ ☺ …	$\frac{\text{localhost/ChatPhp}}{10} \bigcirc \bigcirc$
	Please Login	
	Username:	
	Password:	
	Clogin No account? Sign up	

Fig.1 user login control panel

**2:** Add user Page: after registering in the web site and have an account, the user can easily log to his account as shown in fig.2 and

retrieve the data is stored inside the database only the user with correct password can login there for the information are protected.

= 🥩 🏽 🖬 \	☆ ☺ …	localhost/ChatPhp/signup.php □ 0 ☆ 5 ←
	L Sign Up	
	Name:	
	Username:	
	Password:	

Fig.2 User Account

3. List of chat Room: This page contains a list chat room that can be used by the user to log in to chat as shown in fig. 3:

how entries			Search:	
Chat Room Name	Password	Date Created	Action	
10		May 17, 2021 - 09:21 AM	Join I ZEdt I 🖹 Delete	
Free Entrance :)		Sep 11, 2017 - 01:20 PM	Join I / Edt I 🖹 Delete	
My First Chat Room	leeann	Sep 11, 2017 - 01:20 PM	Jain I 🖊 Edt I 🖹 Delete	
howing 1 to 3 of 3 entries			Pre	vious 1 Next

Fig.3 List of chat Room

4- Live Chat: When entering the chat room, the chat screen appears as in fig.4.

e Chat System	🚔 adn
Chat Room: Free Entrance :)	Members: ① Add Member Delete Room ← Back
Welcome to Chatroom Note: Avoid using foul language and hale speech to avoid barning of account	
Type message	💻 Send

Fig.4 Live chat

5-User list page: show all users in database can edit or delete by admin as shown in fig.5:

hav	- enties				Search:
Name	Ucername	Password	Photo	Access	Action
Admin	admin	212327297x67x6x743894x6x4x8011x3	2	Admin	🖌 Edit 🔋 🔮 Delota
)ulym	julyn	b/70c201981+17085309423556598e01	2	User	Z Extra B Davida
loe	les .	7e0d778a5d96c248cd94001bce72b2	2	User	Z Edit 🖉 Delete

### Fig.5 User list page

6-Page add new chat room: can admin create new chat room as in fig.6:

Simple Chat System III Chat Rooms	2 Users			_		1	admin
I List of Chat Rooms		Add New Chat Room		×		+ 4	
	Chat Room Name:						
Show entries	Password:				Search	<b>)</b> ;	
Chat Room Name				-	Delete		
10 Free Entrance :)		Sep 11, 2017 - 01:20 PM	X Cancel	C Add			
10 My First Chat Room	leeann	Sep 11, 2017 - 01:20 PM			I Delete		
			Jor	n II – Edit	II E Delete		
Showing 1 to 3 of 3 entries						Previous 1	Next

Fig.6 Add new chat room

# Conclusions

We conclude that it is possible to create a web system to create chat rooms that benefit in all areas, whether 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.

## Reference

- [1] Lerdorf, Rasmus, "PHP on Hormones history of PHP presentation by Rasmus Lerdorf given at the MySQL Conference in Santa Clara, California". The Conversations Network. Retrieved 2009-12-11.
- [2] Paul S. Wang, Sanda Katila," an introduction to web design and programming", Brookes\Cole, Thompson learning, pacific Grove, Ca, USA, October 2003.
- [3] Sahil Showket," web development using php",2018
- [4] Luka Welling, Laura Thomson "Php and Mysql Web Development ", fifth edition, Addison –Wesley, copyright 2017 by Pearson Education, Inc, ISBN: 978-0-321-83389-1.

- [5] Apache software foundation, "Apache Http Server Documentation version 2.4", march 21.2018.
- [6] Abdullah Al Zubaer, Sujit Kumar Mondal, Nazrul Islam "design and development a website using Html, Css, Php and Mysql", journal of information technology and sciences, volume 6, issue 3, September-December, 2020.e-issn:2581-849x.
- [7] Flanagan, David," JavaScript The definitive guide (6 ed.). p. 1. JavaScript is part of the triad of technologies that all Web developers must learn: HTML to specify the content of web pages, CSS to specify the presentation of web pages, and JavaScript to specify the behavior of web pages.
- [8] "HTML 4.0W3C Recommendation Conformance: requirements and recommendations". World Wide Web Consortium. December 18, 1997. Retrieved July 6, 2015.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated

otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/.

© The Author(s) 2022