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Personal Website Design Based on PHP

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[Abstract] In twenty-first Century, the Internet has entered a rapid development stage, the site has spread to various industries, the status of web development in the Internet cannot be overlooked. With the release of HTML5, in the design and maintenance of website platform will greatly reduce the difficulty and cost, in the era of mobile Internet will also occupy a larger proportion. Personal website has been desired by many people as a platform for emerging myself, no longer dependent micro-blog, blog and other large platform. Now, website building technology constantly improve, open source, domain name and reduction of the server cost, makes the possible Ent of having own personalized site. This design uses the open source HTML, CSS, JAVASCRIPT, PHP, MYSQL and WampServer to create a personal web site at the front end and the back end, create a personalized individual dynamic website.

[Key words] Personal Website; PHP; WampServer; MYSQL

1 Introduction

1.1 Background

With the continuous popularity of the Internet, the rapid growth of the world's Internet users and the improvement of the quality of the Internet, Internet users are no longer satisfied with simple browsing web pages, access to information, but more hope to participate in the network trend. In recent ten years, a variety of types of netizens have appeared to participate in the form of network interaction, such as BBS, Blog, Facebook and so on. The Internet is coming out with new ideas every day. In the process of browsing web pages every day, users are not only interested in the content of web pages, but also interested in the design and background operation of web pages. Therefore, personal websites are becoming more and more popular. With the development of Internet knowledge and related software, it has become possible for individual netizens to learn and design web pages.

1.2 Meaning of Design

Personal website is no longer a strange word. Users are no longer satisfied with using platforms or products developed by others, and no longer use the same application template. Are more passionate about what you can own DIY exclusive content, and on the Internet, do a website is a good way to open the Internet made it possible to people set up their own site, the opens the good technology, information sharing and open, the user of the Internet culture, building a website is not the patent of individuals.

1.3 Design Tools

The choice of the right tool is an important step in web design. And many times, the tools are diverse. After we have understood as many of their characteristics as possible, we use the webpage to select and use the tools in a targeted manner.

Table 1 Web Design Tool Selection Information Sheet

Tools of Design	
Computer language	PHP 、 Html 、 CSS 、 JavaScript
Running environment	window10
Software	Notepad++ 、 WampServer、 Eclipse
Database management software	phpMyAdmin
Browser	Google Chrome
Image processing software	Photoshop CS

2. Web design analysis

2.1 Overview the background technologies

PHP is a universal open source scripting language. The syntax absorbs the characteristics of C and Java, is conducive to learning, is widely used, and is mainly applicable to the field of Web development. PHP's unique syntax mixes C, Java, and PHP's own syntax. It can execute dynamic web pages very quickly. Compared with other programming languages, PHP uses PHP to embed programs in HTML for execution, and the execution efficiency is high; PHP can also execute compiled code. Compilation can achieve encryption and optimize code operation, making the code run faster. [1]

PHP has open source code, free of charge, simple editing, strong practicality, suitable for beginners, strong cross-platform, and efficient. Although PHP currently does not have enough object-oriented support, with the continuous update of PHP versions, great improvements have been made in object-oriented.

MySQL is a relational database management system developed by the Swedish company MySQL AB and currently managed by Oracle. MySQL is the most popular relational database management system. In web applications, MySQL is one of the best RDBMS (Relational Database

Management System) application software. MySQL is a relational database management system. Instead of putting all the data in a large warehouse, the relational database stores data in different tables, which increases speed and flexibility. The SQL language used by MySQL is the most commonly used standardized language for accessing databases.

2.2 Design Notes

This design is to achieve a shared blog webpage. When highlighting self-style and characteristics, the use of PHP language development, combined with the MYSQL database to complete the front-end display platform and background management platform of the website. Achieve front-end registration and login, blog browsing and posting deletion, related searches, and complete back-end registration information management, blog management, etc.

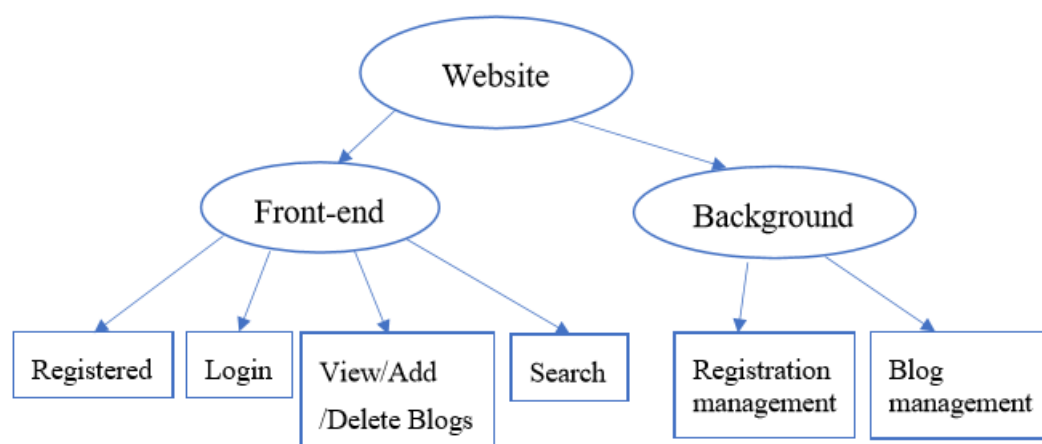


Figure 1 Website Design Schematic

2.3 Web function structure diagram

Web interface structure is divided into header, navigation, greeting, picture text, blog, search, links, bottom. At the same time, according to the requirements of the implementation of the front-end functions, the basic framework of the database will be built in accordance with the needs. The schematic diagram of the website structure using CSS layout is as follows:

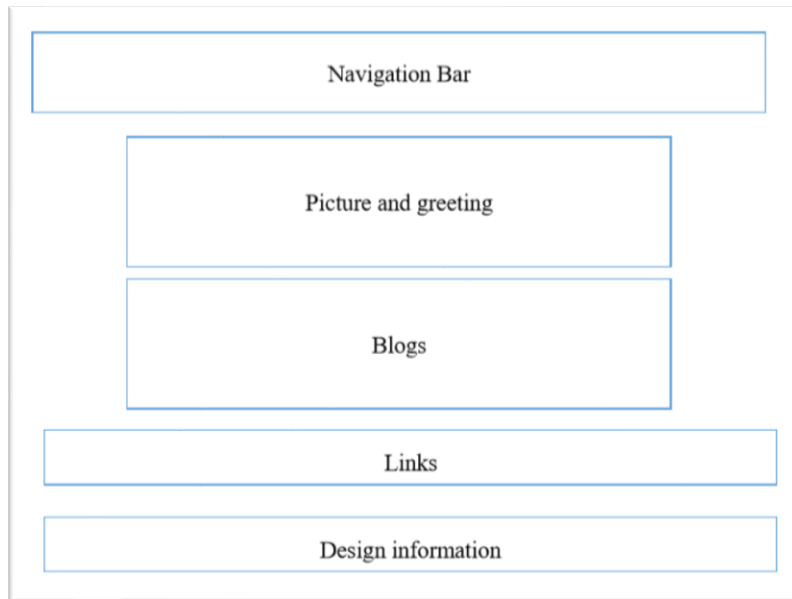


Figure 2 Website front desk

2.4 Database

Database link file ... / website.sql, host is local localhost, user name is root, password is empty, database name is website. Create 3 tables to store information, “admin” to store administrator information, “blog” to store blog information, and “userinformation” to store basic information of registered members. [2]

Table 2 Website function realization table

Viewer	What can we do
public	new register
	view blogs(public)
	search
member	log in
	view blogs(public+private)
	update blogs(public+private)
	delete blogs(public+private)

	update own user information
	search
admin	log in
	view blogs(public+private)
	update blogs(public+private)
	delete blogs(public+private)
	view user information list
	freeze member account
	search

According to the above table, it also corresponds to the framework of the back-end database. To create a database table, enter the phpMyAdmin management interface, create a database website, perform SQL statement operations, and create a database table. Among them, pay attention to the choice of the master key, whether to allow the content of the form to be empty, and whether to select the attributes such as A_I automatic numbering.

2.5 Usability Analysis

Website operation requires the purchase of a server so that visitors can browse the this website on Internet. In the development and testing phase, a local server is basically used, and it will not be used until the test is online. I use Wampserver as the server for this development. It is a kind of web server software, and it has the advantages of simplicity, speed, and stable performance.

The PHP language is used for website background development, and the website also needs to establish static pages as the front part. For personal websites, visitors value the visual effects more, the comfort brought by the page and the convenience and simplicity of operation. The popular Html、CSS、 JavaScript framework is used to complete the front-end part of the website. Photoshop, Flash and other software are used to make or beautify

the website pictures and animations.

Therefore, the usability of the personal website designed this time is strong, and we can proceed with the following analysis. [3]

2.6 Accessibility Analysis

This time the website design clearly adopted the structure of the front-end interface and back-end database. The website is built on the local server W to facilitate testing and debugging during the design phase. The front-end source code and back-end database data are stored locally, so that the web page is easy to modify before going online, and the information storage is also secure.

Use case analysis is the process from the use case model to the analysis model, and is the bridge between requirements and design. Use case analysis assigns the system's behavior to the analysis class, and lets the analysis class interact to complete the system's behavior. That is, in the above-mentioned website design, the one-to-one correspondence between the front-end functions and the back-end database is closely integrated.

2.7 Scalability Analysis

This webpage is designed to design a shareable blog-style website. There are three levels of people who browse the website in the design, namely administrators, registered members and the general public. The blog in the website is also divided into three levels: public visible, members visible, and administrator visible. With a well-established framework and the popularity of blog-sharing websites, the scalability of this website is enforceable.

2.8 Security Analysis

Website security is a design aspect that must be considered. The association with the database in the website, such as registration of uploaded member information and account password retrieval from the database when logging in; checkout of the interface in different states, etc. These above-mentioned operations that involve data flow need to consider data security. Therefore, applied the session function in PHP.

For example, there is only one website administrator account by default in

this design. The administrator account cannot apply for registration. It can only be added through direct database operations. Add the administrator account admin password sun in the database table in advance, the implementation process is as follows: Account password database verification code, to determine whether the administrator account and password are correct, if the correct access to the management page is incorrect, return an error message, and return to the login interface. [4]

In terms of website stability, only the shallowest basic framework, subsequent anti-hacking functions, login verification functions, and simultaneous access by multiple users need to be considered in the construction of the website stability. [5]

2.9 Website Test

The main content is to test whether each function of the website can work normally under different systems and browsers. In some cases, design vulnerabilities can cause errors. The database is also the focus of the test. Correct addition, deletion and modification of data is necessary for the website to work properly. The image upload function and Ajax have various conditions in different browsers, and multiple tests must be performed to check whether the expected goals are achieved. The function check is followed by the interface check. This design uses CSS layout to check whether the browser is displayed in disorder, etc. It is necessary to check and adjust the interface layout. Then perform web test and multi-user access test to check the program performance. [6]

3. Conclusion

After learning this module, I learned the basics of HTML, PHP, CSS / JavaScript. The learning objective of the course is to design a website using what you have learned. The website implements a lot of functions, including registration, login, search, update / delete blog, etc., but there are still many that have not been done. Many details such as comment function, reading volume display function have not been done yet. In addition, in security, the session function is applied, but double insurance such as authentication is not implemented. The back-end database is also not well-developed, with only three basic information tables. This is a website, but it is really very basic and needs to be improved.

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