

Second-hand Trading Website Based on PHP

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ABSTRACT

The system is based on PHP5.3.10 version and MySQL5.5.20 version database, using B/S development mode, the project structure is clear, and it is easy to maintain. The front desk of the system is divided into three roles: tourists, buyers and sellers. Tourists are unlogged users, They can register and browse website information; Buyers and sellers are logged users, buyers have shopping cart management, personal information management, order management, address management, collection management, evaluation and leave message; sellers have function of personal information management, order management, address management, commodity management and activity management. The administrator can maintain the system after logging in to the system, including buyers management, sellers management, commodity management, order management, activity management, audit management, evaluation management and message management functions. The function of the system has been developed in accordance with the requirements. After testing and inspection, the function of the website is basically realized and achieve the effect of the initial idea. The system is easy to operate and practical.

KEYWORDS

Second-hand trading website, PHP, MySQL

1. INTRODUCTION

1.1. Background of the project

The improvement of human material living standards is accompanied by rapid economic development, in recent years, China's rapid economic development, which means that a large number of surplus goods will be produced. The development of the economy has promoted new technologies, and a large number of high-performance products have emerged in our lives. In the case of the public's consumption concept and lifestyle are not the same, even if they have a product to meet the needs, in order to pursue the same product with more powerful functions and more practical, they must buy new functional goods. So there will be a large number of second-hand goods in life, such goods are not damaged, but have been used for a period of time, and some second-hand goods are sold at a lower price than the original price to meet another group of consumers. This business model not only solves the problem of the accumulation of goods, but also maximizes the utilization of resources. From the perspective of environmental protection, it effectively reduces the proportion of domestic waste generated. From an economic point of view, it reduces the purchase funds of consumers and reduces the loss of sellers. Therefore, the second-hand commodity trading market appears in the public's vision, and its scale is gradually expanding, and it is favored by the public.

1.2. Purpose and significance of the project

The second hand trading website aims to solve the problem of the accumulation of unused items between teachers and students on campus, so that unused items that are not damaged can be reused. The existence of the second-hand trading website solves the mandatory requirements of the traditional second-hand trading model in time and trading place, simplifies the traditional second-hand trading model, and enhances the activity of the second-hand market. Second-hand trading websites have appeared at the same time as the sale of new commodities. Such websites include second-hand cars, bicycles, idle fish, etc., which mainly sell used commodities at lower prices than the original price. For those who want to sell second-hand commodities, the existence of second-hand shopping malls greatly reduces their time and energy invested in the flea market [1-2]. The design and development of second-hand trading website is conducive to developing a more intelligent system and improving the system. The system uses intelligent information technology for design and development, can be well combined with the Internet, has the advantages of short development cycle, convenient update and maintenance, and can meet the needs of many college teachers and students for second-hand goods.

1.3. Related technology introduction

PHP is a scripting language that runs on the server side, it can be nested freely with HTML, can connect to the MySQL database to process user requests, and PHP has some built-in functions, arrays, and loops. PHP technology is established on the basis of the CLR platform, so that the PHP platform has a huge use function and flexibility. People can program in the form they are most familiar with, or they can use different languages in the same application. The application of PHP technology realizes the simplicity of work, which allows people to build an interface jack between users and logic code in the process of code, which can perfectly separate logic code from user page system [3-5]. MySQL is a relational database management system. In the history of MySQL version update iteration, it finally realizes a multi-user and multi-threaded fast storage database server, which has great application value in data storage. Because of its small size, fast speed, reliable, easy to use, open source code, and support for multi-threading and multi-users, it is widely used as a website database in many small and medium-sized websites [6-8]. The full name of Apache is Apache HTTP Server, is the world's mainstream Web server software, installed on the computer to open the network interface of the computer to accept requests in the network, and process the response to the client. WampServer is a Windows system under the Apache, PHP, MySQL integration environment integration package, this tool has a simple graphical interface and configuration environment. PHP extensions, Apache modules, open/close the mouse click to do, no longer have to personally modify the configuration file, WAMP it will do it [9]. Eclipse For PHP Studio 4.0 (EPP4 for short) is compiled using the core of Eclipse. Eclipse belongs to a kind of programming language, it is not only used as a Java integrated development tool, but also supports C/C++, COBOL, PHP and other programming language plug-ins can be used [10].

2. ANALYSIS OF SYSTEM REQUIREMENTS

2.1. Feasibility analysis

2.1.1. Economic feasibility

This system uses PHP, MySQL, WampServer and Eclipse For PHP Studio 4.0 to develop and realize. The above software does not cost any money and can be obtained through network resources, so the project development cost is low, the investment risk is small, the operation income is high and the maintenance cost is low. And the development of this website requires only a small amount of human resources, so the website system can be economically low-cost and high-yield.

2.1.2. Technical feasibility

This system is a small second-hand trading website, the development of small websites can be completed in a short time by using PHP and MySQL technology, and PHP and MySQL have powerful functions and stable performance. The development tools of the system are Eclipse For PHP Studio 4.0 and WampServer. These two visual tools make development easy and powerful, so it is technically feasible [11].

2.1.3. Social feasibility

The technology used in this system is open source, and resources can be obtained for free on the network, so it complies with any law and does not have any infringement problems. At the same time, this system is independently developed by myself, without plagiarism, infringement, infringement of others' rights and interests, and infringement of national laws, so it has legal and reasonable development and operation feasibility.

2.1.4. Operational feasibility

The system only needs a computer and a browser to run. In today's society, with the popularization of information technology, it is no longer a problem for people to operate computers to shop online. The system is clear in the layout of the page, the user can see at a glance what they need to go to the function, and most of the user only need to click the mouse without too much complex operations. Therefore, the user can use the system easily, and the system operation is feasible.

2.2. System requirement analysis

The front desk of the system is divided into three roles: tourists, buyers and sellers. Visitors, that is, users who have not logged in, can register and browse the website information; The buyer user and the seller user are registered users, and the buyer user has the functions of shopping cart management, personal information management, order management, address management, collection management, evaluation and message. The seller user has the functions of personal information management, order management, address management, commodity management and activity management. The background administrator logs in to manage and maintain the system information, including buyer management, seller management, commodity management, order management, activity management, audit management, evaluation management and message management functions.

2.2.1. Visitor function description

1. Visitors can browse online, and users can browse the sales ranking information and product information of the website. There are search and category navigation bars for browsing.
2. Tourists have the registration function, and tourists can register two types of buyers and sellers.

2.2.2. Buyer user function description

1. Buyer login enter the user name, password and verification code information. After successful login, the home page displays the login user name and performs operations related to the buyer user.
2. Personal Information management: Buyer users manage personal information, including modifying basic information and passwords.
3. Collection management: Buyers can view the collection information and cancel the collection function.
4. Order management: Buyers can view order information, complete orders, and delete orders.
5. Address management: Buyer users can add the delivery address, modify the delivery address and delete the delivery address.
6. Shopping cart function: Buyers can add goods and delete goods in the shopping cart.

7. Evaluation function: Buyers can evaluate the goods after completing the order.

8. Message function: Buyers can leave messages to the system administrator.

2.2.3. Seller user function description

1. The seller logs in to enter the user name, password and verification code information. After successful login, enter the business background management page and perform the relevant operations of the seller.

2. Personal information management: Seller's personal user information, including basic personal information and password modification.

3. Address information management: Seller users can add shipping address, modify shipping address and delete shipping address.

4. Product information management: Seller users can add, modify and delete products.

5. Order information management: The seller user can view the order information, process the order (delivery), the order information has not shipped, not received and completed three states.

6. Event information management: Seller users can add, delete and modify events.

2.2.4. Administrator function description

1. Enter the user name, password, and verification code. After the login is successful, go to the background system management page and perform operations related to the administrator.

2. Buyer management: The administrator adds, deletes and modifies buyer user information.

3. Seller management: The administrator adds, deletes and modifies the seller's user information.

4. Product management: Administrators add, delete and modify products.

5. Order management: Administrators can view all orders.

6. Activity management: The administrator mainly adds, deletes and modifies the activity information.

7. Audit management: The administrator reviews the product information and the seller's user name, and deletes the information if it is not true.

8. Evaluation management: Administrators view the evaluation content of all products.

9. Message management: The administrator can reply to the buyer's message and delete the message.

3. DEMAND MODEL

3.1. User use case analysis

Visitors, that is, users who have not logged in, can register, log in, and browse the website information; The buyer user and the seller user are registered users, and the buyer user has the functions of shopping cart management, personal information management, order management, address management, collection management, evaluation and message. Seller users have personal information management, order management, address management, product management functions and activity management.

3.2. Administrator use case analysis

The background administrator logs in to manage and maintain the system information, including buyer management, seller management, commodity management, order management, activity management, audit management, evaluation management and message management functions

4. SUMMARY

The purpose of software testing is to find out software errors, effectively define and complete the assembly process of software components from the bottom to the top, verify whether the software meets the technical requirements in the task and definition files, and lay the foundation for software quality modeling. The test process goes through four parts: unit test, integration test, system test and acceptance test. From the perspective of whether to consider the internal structure of the software, it can be divided into white box testing and black box testing.

After the test, the function of the second-hand trading website is basically realized, the test data is accurate, and the expected effect is achieved. All the functions of the system are perfect and can run normally, and the logic design is more rigorous. Even if there is no error in the current system operation, the perfect data also has missing points, and it is necessary to constantly test and compare and improve the test method, find and solve problems, and make the system more complete.

REFERENCES

- [1] Li Qi, Jing Feifei. Analysis of Internet second-hand trading platform based on "Xianyu" and "Zhuan" [J]. Shopping malls,(15):29-31.
- [2] ZHENG Shichuang, LI Jiajun, Chen Yulu et al. Online second-hand car trading platform based on PHP technology under the framework of Internet + e-commerce [J]. Electronic Manufacturing, 2022, 30(2):39-41.
- [3] Technology of Tomorrow. PHP from entry to mastery [M]. Beijing: Tsinghua University Press, 2019.
- [4] BAI Yingjie, Zhao Zhengxu, Wu Xiaojin et al. Design and implementation of domestic operating system PHP service deployment strategy [J]. Computer Applications and Software, 2019, 36(1):17-21. (in Chinese)
- [5] GAO Luofeng. Detailed Introduction of PHP (4th Edition) [M]. Beijing: Publishing House of Electronics Industry, 2019.
- [6] Lin Hui. Application of MySQL in PHP Dynamic Web Design [J]. Electronic Technology and Software Engineering, 2021, (6):141-143.
- [7] Wu Chenxi. Research on MySQL Database Access based on PHP [J]. Information Construction, 2016, (07) : 398.
- [8] Ma Hailing. Design and implementation of network teaching platform system based on PHP and MYSQL technology [D]. Jinan: Qilu University of Technology, 2016. (in Chinese)
- [9] Bo Jianming, Liu Binwen, Dong Yinlin. Multi-version PHP website group construction based on WampServer environment [J]. Modern Computer, 2019, (35); 97-100.
- [10] Li Jinping, Cheng Manling The Application Development of Eclipse [J] Computer Programming Skills and Maintenance, 2016, (16): 31-32, 58
- [11] Ji Bin, Wu Jiaju, Ma Yongqi et al. Modeling XML Schema Based on UML [J]. Computer Engineering and Design, 2019,40(1):109-115.