



Design and implementation of campus commodity trading platform

Haizhi Hu

School of Computer Science and Technology, Zhoukou Normal University, Zhoukou
466001, China;

huhaizhi@zknv.edu.cn

Abstract: With the booming development of commodity economy, there are a large number of commodity trading needs in colleges and universities every day. The campus commodity trading system can facilitate students' study and life. On the basis of understanding the feasibility analysis and significance of the campus commodity trading website system, this paper analyzes and practices the functions of the website of the campus commodity trading platform, so that students can conduct shopping anytime and anywhere through the system. The transaction website is mainly divided into two parts: the front-end UI part for users and the back-end part for administrators. This system USES Visual Studio2010 development, the database part USES SQL Server 2008, using c# language to achieve the registration and registration, commodity search, order management and evaluation management functions.

Keywords: Campus commodity transaction; SQL; C #; Function implementation.

1. Introduction

Since the beginning of the 21st century, the level of global informatization and informatization have developed rapidly. In People's Daily life, information plays an increasingly important role, ranging from the basic needs of daily life to the operation and development of enterprises. Information globalization plays a very important role. Era in unceasing development, the people quality of life is increasing day by day, the emergence of campus commodity trading platform provides students with a touch of e-commerce environment, idle items, and spot for the students to sell the goods provides a good platform, to the student's study and life provides a great convenience, the future will be more and more colleges and universities have recognized and choice. Therefore, the design of a campus commodity trading platform website has a very good application and development prospects.

2. Feasibility study and analysis

2.1 Technical feasibility

Technically, many development languages support the development of this system. In the process of website development, I learned a lot from the experience of e-commerce websites such as taobao, jingdong and other well-known websites. The system has realized many functions, such as registration, registration, order placing, evaluation, order inquiry, etc. Its interface is intuitive and simple, easy to operate and convenient for users, and the efficiency of commodity transaction will be greatly improved.

2.2 Economic feasibility

Almost all the system selection of development tools for the free software, users are mostly college students, the system is relatively small is simple, do not need to spend a lot of money, compared to traditional management pattern to do conservation and rational utilization of resources, to reduce the workload and improve the work efficiency, so as to improve the efficiency of the entire site sales and sales.

1.3 Feasibility of operation

In the design of the interface of the campus commodity trading website, make the system function as comprehensive and simple as possible, so that the user's operation is more convenient. For managers, the site's background interface is more intuitive, convenient for the administrator to manage all kinds of information. So the operation of the site whether users or background managers can be a good operation of the site. From the running environment point of view, only need a browser and a server, relatively easy to implement.

3. Demand analysis

Before the system development, you can browse some large and small commodity trading websites and visit some shopping malls and supermarkets. We will find that there are still many deficiencies in the current commodity transaction management, such as the inability to manage the sold goods in an information-based way, which is not conducive to data collation and statistical analysis. Therefore, it is necessary to manage commodities in the way of networking and informatization.

3.1 User functional requirements

Meeting users' needs is the foundation of development. Through the investigation and study on the functions and operation process of other similar website system, the author preliminarily comes to the conclusion that the system needs to realize several functions, including registration and login, commodity search, order placing,

evaluation and order inquiry.

3.2 Development tools and technologies

Visual Studio is currently the most popular application development environment on the Windows platform. Microsoft Visual Studio 2010 supports C#, C++, VB and other mainstream languages. JavaScript is one of the most commonly used scripting languages today. Often used to add dynamic functionality to HTML web pages. Using JavaScript technology is more convenient for development, strengthening the real-time, dynamic interaction between the web page and the user. In this system many times USES the JavaScript technology.

4. General design

The system mainly designs the user registration login function module, the commodity search function module, the order evaluation function module, the order inquiry function module and the backstage manager module. The function of registration and login is that after entering the system, users must first register and input personal information in the system, and log in the system according to the registration information. The commodity search function is that users can search for the commodities they want after entering the system. The system retrieves the commodity names entered by users and displays them in the form of lists. Order evaluation function is that users can place an order to buy goods after logging in the system, and then evaluate the quality of the goods after using the goods. The order inquiry function is for the user who has placed an order in the system. After logging in the system, the user can inquire the order information of the goods he has purchased. Background administrator module is the administrator can add, delete, change and check all kinds of information in the database, this module only for the system administrator account, so as to improve the security performance of the whole system.

5. Realization of campus commodity trading system

5.1 System front interface and code design

This paper analyzes the functional requirements of the system organization and users of the campus commodity trading system, but how to realize these functions? This chapter has carried on the optimization design to the system structure on the basis of the overall elaboration campus commodity transaction system design goal.

5.1.1 User registration and login

To buy goods on the website, students first need to register and log into the system. User registration login function: set the user name, password and other Label control location and its properties, after each Label control to fill a text box for the input of

content, but also need to add validation controls, such as RequiredFieldValidator control, the control can ensure that the input content in line with the rules of the system. The system will judge the information filled in by students. If the content input by users meets the requirements of the system, the system will automatically execute SQL addition statement and prompt users to register successfully. When a user logs in, you need to add the RequiredFieldValidator control to ensure that the user input is not null. According to the user entered the user name and password, the execution of SQL query statement, and the database is the user information table for comparison, if the record is consistent, the user name assigned to the Session, then jump to the website home page, if the record is inconsistent, then prompted the user to enter the user name or password is wrong.

5.1.2 Homepage

After users log in the system, the first thing they see is the main page of the system, which requires the page to be beautiful and elegant, to attract users' eyes as much as possible, and easy to operate. The system front main interface navigation bar is mainly composed of the home page, the latest goods, hot goods, all goods, website announcements and my orders. The middle and upper part of the homepage USES JavaScript technology to achieve automatic switching of images, and the lower part USES Repeater control, and obtains the required data in the database through `<%#Eval(" bound field ") %>` to bind the data, which is used to display the basic information such as the name, picture and price of the recommended commodities. The homepage interface of the system is shown in the figure below

5.1.3 Search module design

The commodity search module mainly USES the DataGrid control to realize, through `<%#Eval(" bound field ") %>` to obtain the required data in the database and then bind the data, and then configure the data source to display the data in the bound commodity information table.

5.1.4 User order evaluation module design

When a user places an order, the system will automatically verify whether the user has logged into the system. In other words, the `Session[" user name "]` is detected to be empty. If it is null, the system will determine that the user is not logged in and automatically jump to the login UI; Otherwise, the system automatically generates a unique order number and adds an order record to the database order table. After the user successfully in order to evaluate the purchased goods, after users click the evaluation button the same system will detect whether the user login the system first, if the user has logged in, detected system will first check the order whether about the user's purchase records in the table, if there is no order record will prompt the user to buy goods; If there is an order record, the system automatically executes an Insert

statement to add an evaluation record to the merchandise evaluation table.

5.1.5 Order query module design

Users can also query their purchase orders on this website. Similarly, users can only query after successfully logging into the system, and then query the user name Session[" user name "] record in the order table. If the record is empty, the system temporarily USES JavaScript technology to scroll through images of some items for the user to choose from.

5.2 System background administrator page

Planning and design system is the first step of e-commerce, can effectively manage the website is e-commerce system to maintain good operation guarantee. Background management mainly includes: user management, commodity management, order management, seller management and evaluation management. This part is managed by the background administrator. In order to facilitate the management of each data information, the background mainly USES the GridView control binding data source to query, modify and delete data at the same time. When the user clicks the delete button, the system will pop up a confirmation box to confirm whether the administrator really wants to delete this piece of data, and select confirm and cancel according to the need to prevent the user from deleting the data by mistake. The backend can also perform an Insert by clicking the add button to add the data information that the administrator wants to enter into the database. By analyzing the data in these corresponding tables, the administrator can add, delete, modify and check the data, so as to maintain the order of normal operation of the system.

6. System test

6.1 System test

System testing is a very important stage in the website development cycle and the final inspection of website development. At the beginning of the test, the input data is very random and has no practicability. In order to improve the system, in the process of system test, after cleaning up all the data entered at the beginning at will, some effective test data can be input to reflect the function realization of the system more perfectly and truly. After repeated testing, debugging and error correction, the system finally runs normally.

6.2 System test steps

- (1) Functional test: test whether the existing functions can meet our needs and whether they are the functions we want to achieve;
- (2) Performance test: test the maximum performance of the system, that is, whether

the system can operate normally when the system is overloaded;

(3) Security test: it is very important to test the system authority and the anti-interference ability of entering illegal data.

References

- [1] Yanguilan, liujiayao. Design and implementation of e-commerce website [J]. Journal of huaqiao university,2016(1):4-7.
- [2] Sihomwu. Design, implementation and security enhancement of e-commerce website based on ASP.NET [D]. Hubei: central China normal university,2018.
- [3] Huguangdong. An e-commerce website based on ASP.NET technology [J]. Information science,2015,(2):6-8.
- [4] Liu li. Application of ASP.NET in e-commerce websites [J]. Department store modernization, 2014,(the previous issue):2-4.
- [5] lilidong, yuejunhua. ASP based commodity trading platform on campus network [J]. Guide to getting rich through science and technology,2016:5-6.
- [6] zhangdanyang. Design and implementation of campus online second-hand information release platform [D]. Shanghai: east China normal university,2018.
- [7]Mohammad MasumuzzamanBhuiyan,AbuSayed Md. LatifulHoque. High Performance SQLQueries on Compressed Relational Database[J]. Journal of Computers,2016:10.
- [8]Gibbs, Mark. CSS animation and Web content editing[J]. Network World (Online),2018:6.
- [9]Anonymous. Research and Markets: Professional ASP.NET 3.5 SP1 Edition: In C# and VB[J]. M2Presswire,2016:3-5.
- [10] Janet Brennan Croft. Changing Research Patterns and Implications for Web Page Design [J]. Journal of College and Undergraduate Libraries, 2018:7.