

Design and Implementation of Pencil Sales Website based on Echarts

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Abstract: With the development of computer network technology, online shopping has been in full swing. In this paper, according to the needs of the national pen users, a pencil sales website is designed to facilitate users to purchase pencils online. The website is mainly composed of two parts : foreground display and background data management. The main functions of the foreground subsystem are user registration and login, personal information modification, detailed product display, shopping cart, order management and so on. In the background subsystem, the functions of user management, commodity management and order management are realized based on Echarts.

Keywords: GIS ; mysql ; shopping website ; JSP ; echarts; Online Sales

1. INTRODUCTION

Pencils are an indispensable part of children 's growth. At the same time, pencils are the most widely used pens in our country. In this paper, GIS technology is used to design and develop pencil sales website. GIS can display geographic information in the form of intuitive maps and charts. Improving the effect of information expression and user experience can also help website managers make more scientific decisions. This paper combines Chinese GIS technology with Echarts visualization tools to achieve a more innovative information display. Using Echarts ' heat map, geographic coordinate system and other components, the regional sales data and geographic information correlation are visually displayed. At the same time, Echarts supports dynamic data updating and visual changes, which can vividly display the trend of geographic information over time and enhance the user experience.

2. REQUIREMENT ANALYSIS AND SYSTEM ARCHITECTURE DESIGN

This system is a simple online shopping platform, mainly to provide users with a convenient online pencil shopping platform. According to the analysis of the demand for pencil sales, the whole system is divided into two roles, namely the platform administrator role and the platform user role. The system architecture is the core part of a system and the key to running the system. According to the demand analysis of the system, the architecture of the system is built in detail. The system is divided into two foreground subsystems and background subsystems. The main functions of the foreground subsystem are user registration and login, personal information modification, product display, shopping cart, order management and other functions. The backstage subsystem realizes the functions of user management, commodity management, order management and so on.

3. DESIGN AND IMPLEMENTATION OF FOREGROUND SYSTEM MODULE

3.1 User login module

When users want to buy goods, they need to log in first, enter the login account and password. The system determines

whether the account exists and the password is correct. If it is successful, they will jump to the registration page and enter personal information for registration. After the user is registered successfully, they can successfully log in to the system.

3.2 Personal information module

The main function of the personal information module is that the user can change his personal details after logging in. You can also make personal password changes on this page.

3.3 Commodity display module

The commodity display module is used to display commodity information on the platform, enabling users to browse and query commodities on the platform. The home page will have the announcement of the product display, and the content of the product display. The goods are recommended by the system, and users can also search for the goods. When users click on the product page, they will enter the detail display page. At the same time, users can use the Echarts visualization tool to count the sales of best-selling goods in different time periods in the top three sales of goods, and users can view the sales of goods in different time periods. The real-time sales volume of goods are shown in Figure 1.



Figure 1. Real-time sales volume of goods

3.4 Shopping cart module

The shopping cart module mainly displays the goods added by the user. After the goods that the user wants to buy are added to the shopping cart, the user can filter and place an order on the shopping cart page..

3.5 Order management module

The order management module realizes the management of all orders by users, and the order interface will display the order status in real time. Users can view the order information or delete the order.

4. BACKGROUND SYSTEM MODULE DESIGN AND IMPLEMENTATION

The background system includes four modules user management, product management, order management and product announcement management. System administrator login system background URL, you can carry out the background operation of the system, the function design of each module is as follows.

4.1 User management module

The module contains the user 's basic information and shopping information, while the administrator can view the store 's user purchases, including the increase in new users.

4.2 Commodity management module

Administrators can add, modify and delete items in the background system. At the same time, they can see and modify the purchase volume and inventory of items. When the inventory is insufficient, they can change the inventory or remove the items.

4.3 Order management module

The module mainly shows the order situation of the user, including the status of the order. Clicking on the order interface can display the detailed information of an order, which is convenient for the administrator to manage. At the same time, the order management module also uses Echarts to realize the order data visualization function, which shows the shopping situation of users in different regions, marks the number of purchases in each province, and facilitates the administrator to analyze the data. The order quantity statistics are shown in Figure 2.



Figure 2. Statistics of pencil sales orders

5. CONCLUSION

The main purpose of the pencil sales website designed in this paper is to facilitate users to purchase pencils online. The website uses GIS technology, based on Echarts data visualization tool, Tomcat server, MySQL5.7 database, Bootstrap front-end open source framework, Ajax, JQuery, html hypertext markup language and JSP dynamic web page technology. The specific operation is simple and clear, and the design is humanized. In general, the sales website meets the functional requirements of the pre-designed, but there are still some deficiencies.

6. REFERENCES

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