

## The B2C Based on JSP Electronic Mall of Designing and Realizing the System

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**Abstract.** Electronic Commerce is in the Internet open network environment, based on the browser/server application methods to realize the online shopping, consumer entered into between online trading and on-line Electronic pay a new type of business operation mode. Traditional electronic commerce system structure to basically have two kinds: B/S and C/S architecture, but the two technologies have their pluses and minuses. C/S technology mainly confined to internal LAN, but the technology and reliable; B/S technology will cause system response <sup>1</sup>speed is slow, server, safety issues such as costs, but easy to operation. But this system adopts the B/S and C/S architecture way of combining, give full play to the advantages of two kinds of system structure, compensate for the lack of two kinds of system structure, make whole system updates simple, simple maintenance flexible, easy to operate.

### Introduction

Electronic commerce is in the Internet open network environment, based on browser/server (B/S) application method, realize consumer online shopping, online transactions between merchants and on-line electronic payment of a new type of business operation mode[1]. The traditional electronic commerce system structure mainly has two kinds: B/S and C/S system structure. But these two kinds of technology have its own advantages and disadvantages. B/S technology will cause system response speed slow, server spending big, poor security problems, but easy to operate; C/S technology mainly confined to internal LAN, but the technology is reliable[2]. In this paper, the B2C mode of electronic mall system USES a B/S with a combination of C/S system structure, and give full play to the advantage of two kinds of system structure, to make up the shortage of the these two kinds of system structure. It makes the whole system update simple, simple maintenance flexible, easy to operate[3].

B2C (Business to Customer) mode of electronic mall system is made of the B/S mode shopping system and background of the C/S model of management system, information release the B/S structure, database end using C/S structure. Enterprise through it can build online sales channel[4], directly to the end user, reduce intermediate links in the process of sales, direct access to benefit. Customers to use the system can see businessmen in the network released on product information, and can make purchases, reduce customer costs. So this system will provide a very practical development mode to e-commerce sites.

### JSP and JavaBean

JSP (Java Server Page) is a kind of Java technology that is used to construct a dynamic Web content of the application system. JSP program conducts analysis in the server, dynamically generate web and transfer to the client. JavaBean is a reusable software components. In JSP program, it is

often used to package business logic and database operation etc. It can well realize the separation of the business logic and foreground program, makes the program have better robustness and flexibility.

The department altogether design for the two modules: front desk shopping system module and background management system module[5].

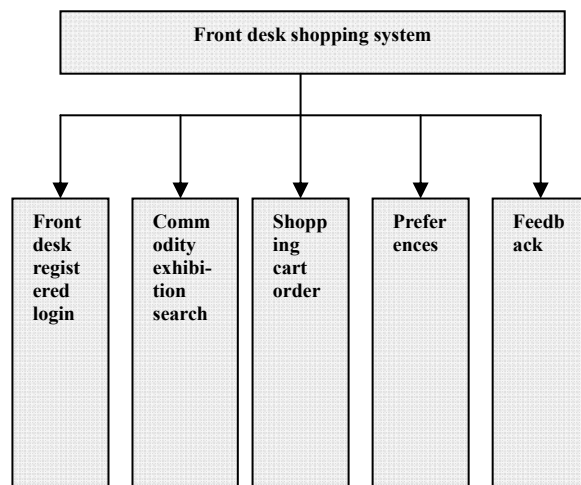


Fig.1 The front desk shopping system structure diagram

Front desk shopping system module function: the user login not only to the identity of the visitors to browse commodity information, unable to do shopping goods. But visitors can be completed by registering module become system members shopping. Registered members login system can through the commodity exhibition/search module find what they are looking for goods, then go what they will need into the cart, select the final purchase goods from the shopping cart. After The user purchase confirmation, the system will generate shopping order for registered members, registered members can view their order information, in order to understand the payment information and commodity distribution situation. Registered members can also feedback through the opinion message board template for site service and website commodity information opinion[6]. In addition to registered members in personal Settings module can view your personal material and modify personal data.

Background management system module function: the administrator fills in the user name and password to login; If the user name or password is empty or not correct, the system will provide the corresponding error message information. After Filling out after the success, the administrator can go into the background management circles. After going into commodity information management interface, administrator can operate commodity information view of modifying, adding and deleting. Modified after the success of the new information will replace the original information appear in interface corresponding position. In addition, the administrator can also carry on the management of product category, can in member management interface view membership information and member last login details. And according to these information to make judgment, freez operation to security threats members account. In the order management module interface, the administrator can also check order detailed information, and order to make delivery operation. The announcement of the information management module, the administrator can add, modify, delete, view and information announcement.

Use SQL Server 2000 background database support system. Database is named for ShopSystem. The main data table: user information table (Customer table), user message table (Idea table), commodity information table (Product table), Notice the information table (Notice table), Product category information table (Main\_type table), order information table (Orders table), order details table (OrderDetails table), pay table (Payment table), administrators table (Admin table).

## The realization of the database connection

The first of the JSP page access database is to realize the JSP program and database connection. Connect to database usually has two forms: Connect to database usually has two forms: one is through the JDBC - ODBC bridge connection; The second is through the database system dedicated JDBC driver connection. The system through the JDBC bridge connection method to realize the JSP and the linking of database, the realization of the function of database connection is through JavaBean component to finish.

JavaBean connected component part of the source code:(ConnDB.java)

/\* Through the bridge completed the database connection

.....

```
public class ConnDB
```

```
{
```

```
    public Connection conn=null;
```

```
    public Statement stmt=null;
```

```
    public ResultSet rs=null;
```

```
    private static String dbDriver="sun.jdbc.odbc.JdbcOdbcDriver";// Get data source, the user name and password
```

```
    private static String dbUrl="jdbc:odbc:shopData";
```

```
    private static String dbUser="sa";
```

```
    private static String dbPwd="";
```

```
// Open the database connection
```

```
public static Connection getConnection()
```

```
{
```

```
    Connection conn=null;
```

```
    try
```

```
    {
```

```
        Class.forName(dbDriver);
```

```
        conn=DriverManager.getConnection(dbUrl,dbUser,dbPwd);// Connection database
```

```
    }
```

```
    catch(Exception e)
```

```
    {
```

```
        e.printStackTrace();
```

```
    }
```

```
    if (conn == null)
```

```
    {
```

```
        System.err.println("Warning: the database connection!");
```

```
    }
```

```
    return conn;
```

```
}
```

```
.....*/
```

## Conclusion

This article introduces electronic business system design and implementation based on the JSP B2C mode .This system program code simplified and the program structure is clear, it has the similar certain guiding role for system development. At the same time, this system reflect good in the actual operation process and achieve the expected goal. In addition, the system also consider the system's safety and practicability.

The analysis of system safety. The security of the system is the system can be one of important index of the available. The security of the system design is: In login identity can be different function distinguish, not to give the user the possibility of unauthorized operation; To the members each login information has carried on the record, the administrator can view the records, and judgment according to the member login information and determine the membership degree of

safety. He will delete or accounts frozen operation for dangerous members, which to a certain extent to ensure the system security.

System practical analysis. The results of all of the system module testing get the user first design requirement. Details are as follows: All functions and all properties can meet, the requirements. This electronic mall system basically achieve information management needs. It is able to handle the daily business for the small and medium-sized enterprise , the future function also facilitate expansion. But the B2C mode of electronic mall still exist inadequacies, such as buyers and sellers interactivity is low and is unable to provide complete commodity use test report and other problems.

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