# Design and implementation of e-commerce system based on the Web

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***Abstract*—This Paper Design and implementation an e-commerce systems based on B / S mode, and given the needs analysis of the system and design method for the system implement. The basic features of the system include the user purchase and administrator. Users to buy the system, including product inquiries, order inquiries and product orders; administrator login system, including administrators, merchandise management, order processing and calculation of the user users the amount of the purchased goods. The system is divided into two pieces: the back-end database and Web site. This system is based on the structural design, so it is very convenient for the future to expand into more complex environment. In short, the system is a reliable and useful system.**

***Keywords- Web; ASP.NET; e-commerce; B / S mode***

## I. INTRODUCTION

With the rapid popularization of Internet and e-commerce over the economic benefits arising from communications and aviation industry to bring people to enlightenment, at present, it has become an important part of modern life. E-commerce is on the network to create a virtual shopping mall, avoiding the tedious process of selection of merchandise, the shopping process easy, fast, convenient and very suitable for modern fast-paced life, and can effectively control the "mall" Operating costs, opening up a new sales channel.

However, the domestic e-commerce is still in an initial stage, the need to develop and use. ASP.NET implementation based on an online shopping network, can be ordered through the networks, sales and management products. Aims of the new e-commerce business model, both to reflect the e-commerce can reduce costs, and spread rapidly, the advantages of high quality services, The other hand, Microsoft's ASP.NET Web Site in the advantages of the process, such as: multi-language support, the standard is open, cross-platform interoperability, code reuse, and Business Integration. [1]

## II. WEB TECHNOLOGY

### *A. ASP.NET technology*

ASP.NET is Microsoft following the ASP (Active Server Pages: Active Server Pages) after the launch to create, manage and deploy Web applications for new ideal platform. It is used. NET Framework class library is built to provide the programming. To ASP.NET to create, manage and deploy Web applications very easily. Visual Studio.NET is a powerful, efficient and extensible programming environment. It fully demonstrates the potential of application development and provides the tools needed to build applications and technologies. These applications will give today's businesses, and institutions provide a strong support and promote the next generation of XML Web services-based software development. In Visual Studio.NET, you can refer to the resources of the two: one is displayed in the toolbox of components added to the Form, the other is only referenced in the program all kinds of object libraries. [2]

### *B. SQL Server database*

SQL (Structured Query Language) is the acronym in English, meaning a structured query language. Its main function is to establish contact with the various databases, for communication. In accordance with the ANSI (American National Standards Institute) requirements, SQL is a relational database management system as the standard language. SQL statements can be used a variety of operations such as update data in the database, extract data from the database and so on. Microsoft SQL Server (Structured Query Language Based on the database server) is based on the client / server database management system. Users through the use of client systems to retrieve information from the server and the local operation, the server database process concerns, but said customers were concerned about the information. The database management system can store large volumes of data, to ensure data security, maintaining data integrity, but also has auto-run and efficient mechanisms and distributed processing. [2][3]

## III. PROGRAMMER DESIGN

### *A. Browser/Server mode*

E-commerce shopping system is characterized by the use of Browser/Server (B/S) mode, the realization of goods online search, marketing, and product line management. This system has the advantage of the system is simple, powerful, good scalability and the ability to facilitate cross-regional operations and other properties.

Figure 1 below is a B / S structure of the online shopping system application diagram.

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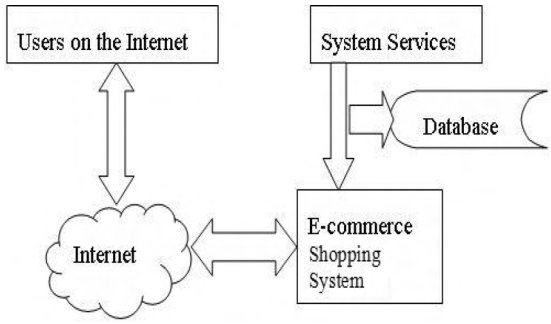


Figure 1. B / S mode of the application of the online shopping system schematic

### B. *Browser/Server the application of multi-layer structure*

Browser/Server the application of multi-layer structure is in the C/S mode based on the sum generated, and also has been extended to the B/S application development areas. Applications will be divided into three layers (you can have multiple, but three layers is the most common): the user interface layer, business logic layer, database layer.

In this system, using the three-tier structure that as a "Web Browser-Web Server-Database Server" to access the database. [4]

## IV. DESIGN METHODS

The e-commerce systems design overall follow the software engineering methods,

After these stages for needs analysis, design, preparation of documentation and code, module testing and system implementation, following are software engineering approach to the design and development of an electronic commerce system of steps:

Through the analysis of user needs, an e-commerce site's main function is to:

For product sales system, it should have features include:

- Allows the user to view the latest merchandise shelves.
- Allows users to search by product category.
- Allows the user to buy their favorite products.
- Allows the user to manage the shopping cart.
- Order processing system implementation.
- System to complete the entire shopping process.

Additional products for system management system, it should have features include:

- Verify the identity of the administrator.
- Product information in the database management.
- The Link Management Add and delete.
- The information in the database to manage customer orders.[4]

Features of the site through the analysis of each module, you can draw the following system flow chart shown in Figure 2.

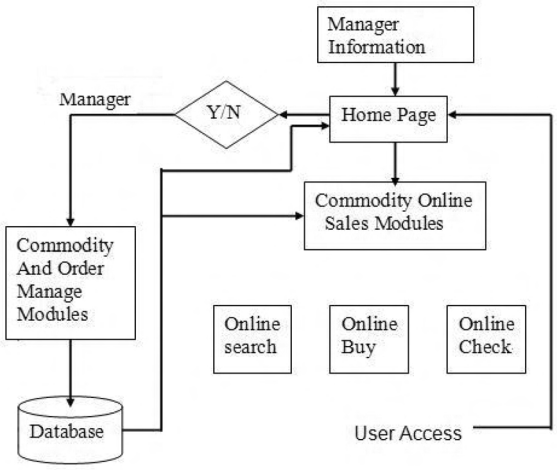


Figure 2. System flow chart

Through the system flow of the site can be drawn from the data flow shown as the Figure 3.

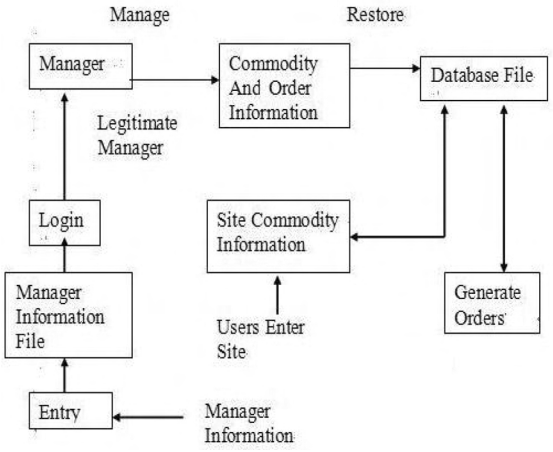


Figure 3. Data flow

## V. DESIGN AND IMPLEMENTATION OF SYSTEM MODULES

### A. *View Order Page*

Click the Manage Home "view order status" after the hyperlink, the pop-up view order page.

The main page uses a table and a large control hyperlink control. With the database connection, spgm table shows the information will be removed to view the order page. Relevant code is:

SQL = "SELECT * FROM spgm order by business conditions, ID desc"

rs3 = Server.CreateObject ("ADODB.RecordSet")

rs3.Open (sql, conn, 1,1)

### B. *Commodity Management page*

When the main commodities, increase the success of sub-categories, you can add new products. But a great shopping

site must also have the background to manage the daily management of commodities, including modification of the wrong commodity information and to delete the temporary shortage of the commodity.

This page uses one table control and three hyperlinks control. Relevant code is as follows:

```
dim rs1
rs1 = Server.CreateObject ("ADODB.RecordSet")
idzy = request ("idzy")
if (idzy <> "") then
SQL = "select menub, menub1 from menu where id =" &
idzy
rs1.Open (sql, conn, 1,1)
SQL = "SELECT name, origin, units, price 1, price of 2,
size, profile, menua, menub, id, date, tu FROM sp where
menua = '" & menua & "' and menub = '" & menub & "
'order by date desc, id desc "
rs3=Server.CreateObject("ADODB.RecordSet")
rs3.Open (sql,conn,1,1)
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### C. *Commodity Management page*

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```

## VI. CONCLUSION

After the development of this system, by a series of running tests, it has met the design requirements. Effective implementation of this shopping site and make purchases of commodities show all the features; management platform is also very easy to use, efficient, more comprehensive functions. The whole system is very suitable for small and medium sized shopping site requirements.

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