Revolutionizing Sales with Phone Systems: Design and Implementation Best Practices

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Abstract

In the 20th century, computer has become the necessities of our life, online shopping has entered our lives, the need for mobile phones is also more and more, and mobile phone sales website design and implementation of technical requirements are higher and higher. The paper outlines the mobile website design and development background and significance, as well as its related technology and operating environment, followed by its demand analysis and outline design, and finally its implementation and testing. In the system design and development process, using My Eclipse as a development platform, using JSP technology to design and achieve the mobile phone network foreground functions and background management functions, Foreground includes online shopping user registration, modify information, mobile phone to add shopping cart, user messages and user comments, background includes add delete goods, user information query, order number query, new station connection. The design and implementation of the system has certain use value.

Keywords: Mobile phone network, Dynamic web pages, JSP, Internet

1. Introduction

Nowadays, there are thousands of online shopping malls, which is what we call e- commerce. Now online shopping is becoming more and more popular. Internet shopping has become the theme of shopping. It is through browsing the web to understand the information of the goods, to solve the trouble of going to the store to understand, to provide us with faster information, because there is no shop rental on the Internet, so relative to the physical store is cheaper, because of its two points, Slowly accepted by the majority of customers, in today's online sales, more humane, systematic, so that we are more convenient, fast, safe purchase of goods, now online shopping has become a fashion, e-commerce has been a household name. In China, China's netizens have reached more than 500 million, the Internet is no longer so remote for ordinary people, In the popularity of the Internet today, almost everyone will know something about online shopping, and more than half of the 500 million netizens have online shopping experience [1-2]. Around 1996, the concept of "electronic commerce" (E-Business or E-Commerce) was put forward by American academic circles in just a few years, which has been widely accepted all over the world. According to the definition of the special report on electronic commerce of the World Trade Organization, electronic commerce is the production, operation, sales and circulation activities carried out through the telecommunications network. It refers not only to transactions based on the Internet, but also to all business

activities that use electronic information technology to solve problems, reduce costs, add value and create business opportunities material query, procurement, product display, ordering to production, storage and transportation, electronic payment and so on. With the advent of the information age, online bookstores have changed from the budding period at the end of the last century to the period of high tide and pragmatic innovation. But at the same time, it should be seen that there is still a big gap between the strength and scale of China's online shopping system and its foreign counterparts: imperfect information services, backward settlement methods, bottleneck of communication charges, and so on. Use the profit of commodity sales, emulate Amazon to improve the value of intangible assets, pull advertising to make money, keep up with the trend of e-commerce, and so on, the first two of which account for the majority. However, the actual situation is that online shopping has not achieved the desired results, some do not have much traffic, some although the number of visitors, but the transaction is limited, marketing mediocre, at the same time, online advertising has not been recognized by the majority of businesses. For example, Taobao, JD.com, Dangdang and so on, are our first-choice shopping website, is a good model for my design, in the design can refer to its functions, ideas and points for attention.

2. Literature review

System design process will involve a lot of technology, such as using Photoshop mobile phone renderings, there are Dreamwaver and Divcss to typesetting, with the way to achieve a variety of positioning, so that the site is more compatible with more humane, and can make the site more efficient, the site's various functions can be achieved smoothly. To implement JSP technology, you first need to set up the runtime environment, because theJava SDK is installed in the operating system before you can program in Java. The system design process you've outlined involves graphic design tools for visual elements, web development tools for typesetting and layout, and the use of JSP technology for dynamic web pages. The importance of correct SDK installation and the adoption of recommended solutions for efficient execution. The latest specifications for servlets and JSPs are implemented in the new version of tomcat [4-5]. The web server for this design is tomcat. The latest version of tomcat is 5.0, which fully implements the servlet 2.3 and JSP 1.2 specifications with a new servlet container, Catalina. Note that the system must have JDK 1.2 or more installed before installing. As a test, tomcat is a web server, so we don 't have to install Apache, but it can be integrated with Apache, below you can test the JSP and servlet examples that come with it [5]. If the SDK is installed incorrectly, it can cause errors in writing and compiling Java programs. The most innovative java product at the same time it is the official recommendation of the sun servlet and JSP container, so it's more and more software companies and developers love. Photoshop is a graphic design software that is commonly used for creating visual elements of a website or application [6]. Mobile phone renderings imply designing visuals specifically tailored for mobile devices, considering factors such as screen size and resolution. Dreamweaver is a web development tool that provides a visual interface for building and editing websites. Divcss refers to using CSS (Cascading Style Sheets) to style HTML div elements. This approach is often used for layout and design purposes on websites. Positioning refers to the arrangement of elements on a webpage [7]. Effective positioning ensures compatibility with various devices and a more user-friendly experience. JSP (JavaServer Pages) is a technology used for creating dynamic web pages in Java [8]. Setting up the runtime environment involves installing the Java SDK (Software Development Kit) correctly on the operating system. Servlets and JSP containers are components of Java web application architecture [9]. They are responsible for processing requests and generating dynamic content, making the website more

efficient and capable of handling various functions. Incorrect installation of the Java SDK can lead to errors in writing and compiling Java programs [10]. Proper setup of the runtime environment is crucial for successful JSP development. Sun Microsystems has developed servlet and JSP containers, which are widely recommended for Java web development [11]. Many software companies and developers prefer these solutions due to their reliability and official support.

3. Research Methodology
3.1 Needs analysis
The site enables users to query the information they need, and to buy the phone they want, and also to view their phone configuration. The website completed the basic operation of the shopping website, check the information, price, and configuration of your phone, and then you can add the shopping cart for payment, and give the seller evaluation and message after the completion of the payment. This system is the most important: customers can shop according to their own needs, customers can view their mobile phone information, you can join the shopping cart to buy fast.

3.2 System design objectives
The system that I designed is to be able to provide shopping information for customersmore quickly, to achieve customers can view their mobile phone information on the Internet, andfast payment, both safe and fast. This mobile phone website can be divided into two parts: the foreground and the background, the foreground is used by the user, including user registration, generating orders, checking shopping cart, ordering products, order query, posting messages and user voting 7 modules; The backstage part is used by the administrator, including adding goods, processing orders, viewing user information, adding links, adding announcement information, the latest product management six modules. In the process of information system development, the tendency is that with the deepeningof the design, developers tend to be caught in the solution of specific technical problems, while ignoring the goals of the system itself, which is often one of the reasons for the user dissatisfaction after the system is applied [12]. So, we should achieve the basic requirements of customers online shopping, but also to achieve the administrator updated items basic requirements. Customer Interface Part, Information interface of various mobile phones Shopping Cart Features, View phone detailsUser registration User login, View user order information management Interface Part Existing phone management: modify, delete, view User information management: view, delete Order management: can view and modify the information of orders, add a phone add mobile phone categories.

4. Results and Discussions
4.1 Overall system design
The logical architecture of the system is shown in Figure 1. There is a huge middle layer between the client's PC and the company's host or database. The middle layer includes everything related to data transmission. There is often some data processing, especially when data is transferred from a large database to the end user. Raw data is generally difficult to understand. An online customer would like their online shopping cart to be a small icon to click on; When he clicks on the icon, he wants the data on the Web to appear as a coloured table. Middle layers are intermediate systems that process raw data into attractive pages [13]. They are used to perform middle level tasks. This entire server-side application -

which performs data exchange between the Web server and the database - is called application server software [14]. Figure 1 shows the logical framework of database processing.
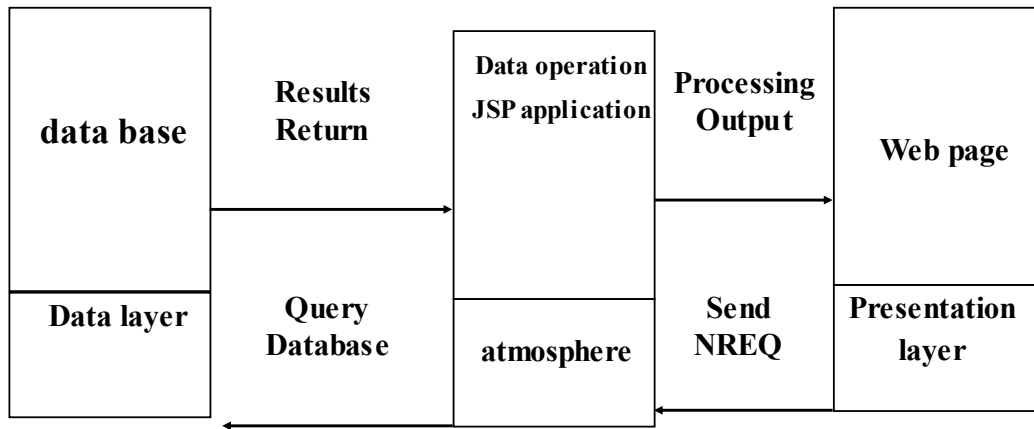

Figure 1 Logical architecture

Application server software is a vague concept. For some, it means the backend of the entire site, including all the different components and storage from server software to intermediate software to databases. For others, application server software is the complex intermediate programs that connect Web servers to databases and other back-office components [15]. Website information structure planning: the system uses a hierarchical information structure; the hierarchy is simple and clear. The basic information of the goods is shown in Table 1.

Table.1. Basic Information of Commodities

Field name	Type	Wheather primery	Is empty
Wareid	Int	Is	Y
Warename	Varchar	No	N
Wareprice	Bigint	No	Y
Waretype	Varchar	No	Y
Wareintro	Text	No	N
Wareimage	Varchar	No	Y

The database is a very important part of the system that i design, it makes today's computer more perfect, the use of database technology can effectively establish the Web site, the database system contains administrators, databases, management systems and applications and hardware facilities [16]. The data table is shown below. The user's information is shown in Table 2.

Table.2. User Information Table

Field name	Type	Whether primer	Is empty
Userid	Int	No	Y
Username	Varchar	Is	N
Rprice	Varchar	No	N
Userpass	Varchar	No	Y

Email	Varchar	No	N
Address	Varchar	No	N
Photo	Varchar	No	Y
Question	Varchar	No	N
Resul	Varchar	No	N
Dattime	Datetime	No	Y

The administrator information table is shown in table 3. The system's main interface is divided into two main sections. On the left side, the upper part facilitates basic user operations such as registration, order viewing, shopping cart management, user comments, and login.

Table.3. Administrator Information

Field name	Type	Wheather primery	Is empty
Id	Int	Is	N
Admin	Varchar	No	N
Adminpass	Varchar	No	Y

The middle part of the interface is dedicated to product-related information, showcasing details about products, user purchases, and user comments. This layout is commonly found in e-commerce platforms, offering a user-friendly structure for seamless navigation and interaction with both products and platform features. The middle part of the interface is designed to focus on product-related information, providing users with details about the products available on the platform. This includes information such as product descriptions, specifications, and features. Additionally, the middle section may display details about user purchases, allowing users to track their buying history or view items currently in their shopping cart. User comments and reviews related to specific products are also showcased in this section, providing valuable insights and feedback. The announcement information table is shown in table 4.

Table.4. Announcement information

Field name	Type	Whether primers	Is empty
Id	Int	Is	N
Admin	Varchar	No	Y

This layout is commonly found in e-commerce platforms, which are online platforms that facilitate the buying and selling of goods or services. By organizing the interface in this manner, the platform aims to create a user-friendly structure that allows for seamless navigation and interaction. Users can easily access and explore product information, make informed purchasing decisions, and engage with the platform by leaving comments and reviews. The IP address table is shown in Table 5.

Table.5. IP addresses

Field name	Type	Whether primers	Is empty
IP	Char	Is	N

The system foreground function process flow diagram is shown in Figure 2.
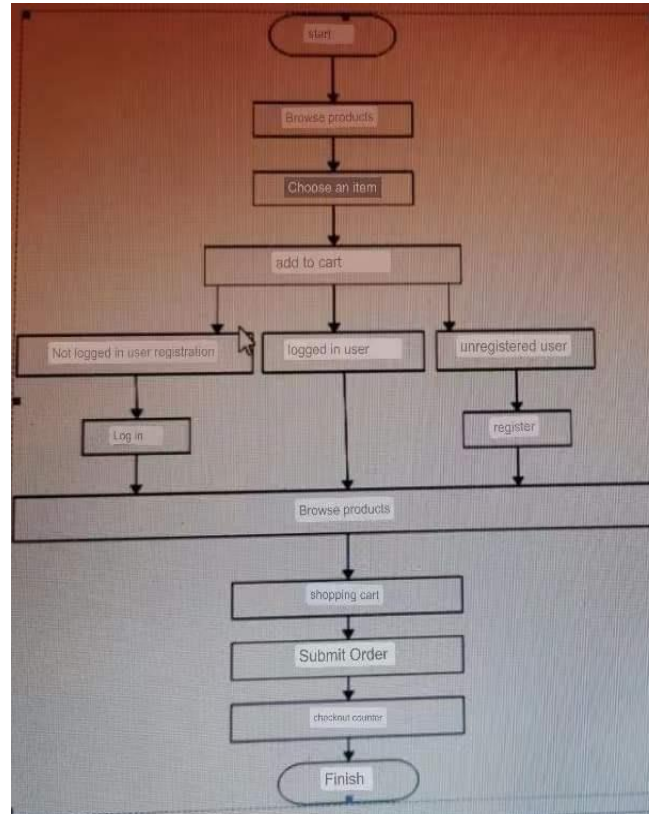

Figure 2 system foreground function process flow diagram

5. Conclusions

With the rapid development of the Internet, network sales slowly improve, more and more shopping sites in front of us, online shopping is becoming more popular, I design a mobile phonesales site for example. Below is a summary of what I did for the design of the website; Introduced the trend of today's network sales, network sales in the introduction of the trend I access the Internet and access to books collected a lot of information, I put this information together, the trend characteristics of some classic summary out. The function and realization process of each interface are described. I first of all,according to the network a lot of shopping site template to study, summed up the major shoppingsite some of the basic operation, as well as to understand the phone some information, slowly summed up my set of functional module map. I do this through some image processing software and by connecting to a database. Continuously study and solve the problems encountered, In the process of completing the graduation project, I encountered a lot of problems, in the course of encounter, through constant research and learning, slowly understand the problem and deal with. Here I asked the teacher, access to books and the Internet to find information, and finally solved the problem.

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