

# The Design and Implementation of the international Trade Practice Simulation Teaching System

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**Abstract.** International trade simulation teaching system is based on simulated practice of international trade business and the design and development, is based on the realization of the international trade practice electronic, automation system, but also a quickly master the international trade business and document learning system. The whole process of the production, transmission, reception, audit and feedback of the whole set of documents involved in the practice of international trade from the time and business order. The main object of the simulation is the international trade practice, the relevant enterprises, the various functional departments and agencies of the business, documents and documents delivery. Among them, the business model is based on the business, the actual situation and the relevant rules of the organization, is a simulation of the actual business. Documents in international trade are simulated using paper documents to achieve, it is the actual use of the international trade practice of a variety of paper documents reproduction. Document delivery through the web delivery simulation in the reality of the traditional fax, mail, direct delivery of documents and other documents.

**Keywords:** International trade; simulation teaching system; system design; ASP Technology

## 1 Introduction

After China's entry into WTO, the foreign trade activities become more popular and frequent, and the demand for talents in foreign trade is increasing, and the school is facing more and more difficulties in the corresponding teaching field. How to enrich the content of teaching how to enhance the students' enthusiasm for learning how to improve the students' practical ability to rest assured that the students sent to school in view of this situation, we propose the newest mode of international trade practice simulation teaching system in the Internet era, simulation teaching. He positioning in Colleges and universities at all levels of foreign trade related professional teaching practice, understanding practice and professional practice, through summarizing the whole foreign trade processes and practices, on the Internet established near real international trade in virtual environment, lets the student experience of international trade risk and have fun in the [1]. Every student who participates in the virtual trade will play the different parties in the import and export business process according to the practice plan. By such mutual competition and cooperation of the role playing, they will face the daily work of the exporters, importers, suppliers and even bank, and proficiency in a variety of business skills, experience of the interactive relationship between customers, suppliers, banks and government agencies, truly understand the international trade logistics,

capital flow and business flow of the mode of operation, finally reached the "learning". International trade practice simulation teaching system mainly divided into the role of exporters, importers and suppliers, banks, Bank of imports, transport companies, insurance companies. Each role can be freely under the established rules to find business partners, the preparation of the transaction, transaction negotiation, contract, perform the contract and other business activities, and finally reach the goal. International trade practice simulation teaching system is a simulation of the electronic commerce center, each student participating in the internship program will play in the process of import and export business process of different parties, together constitute the simulation of the trade environment. By competing and cooperating with each other, they will be faced with the daily work of exporters, importers, suppliers and even banks, so as to master all kinds of business skills. Based on the Internet environment of international trade practice simulation teaching system design and realization mainly consists of eight parts constitute administrator, teachers, exporters, importers, suppliers, transport companies, export bank and imports of banking system. In the course of the project, the overall planning of the system was first carried out, through analysis and demonstration, the key technology of Server ASP+SQL was selected, and the overall design and detailed design of each module was carried out. Finally, through the debugging and verification, the goal of the application of international trade practice simulation teaching system based on network environment is achieved [2].

## **2 Analysis of the Key Technologies Involved in the System**

ASP technology ASP (dynamic web page) is a Microsoft Corp introduced to replace the CGI (Common Gateway Interface) technology. Currently, many on the Windows platform based on the Web Internet site has begun to replace the ASP to replace CGI. Simply speaking, ASP is a server-side scripting environment, in this environment, users can create and run dynamic interactive web server applications, such as interactive and dynamic web page, including the use of HTML form to collect and deal with information, upload and download. Typically, users through the browser to see the pages are mostly static, many of the current Internet on the site, still provide "static" (static) of the main page content. The so-called "static", refers to the site's home page content is "fixed". When the Internet browser HTTP (Hypertext Transport Protocol) protocol, to the site server (web server) requirements for home and site server after the receipt of the request, the original transmission has been designed static HTML file data to the browser. A "static" site, if you want to update the contents of the home page, you must manually update the HTML file data. With the development of Web applications, users want to be able to see the dynamic generation of the home page according to the requirements, for example, in response to the requirements of the user to query the database, generate reports, etc.. When you fill out the form (form) of the input data in the browser to provide HTTP requirements, you can execute the application in the site server, and not just a HTML file. The site server receives the request to execute the application, analysis form (form) of the input data, the results of the implementation of the HTML format to the browser.

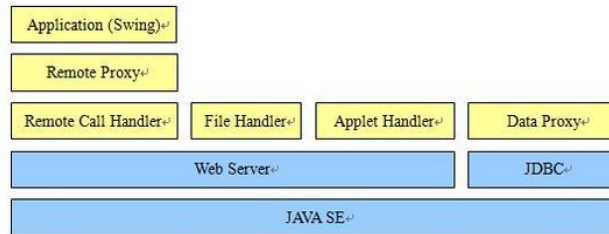
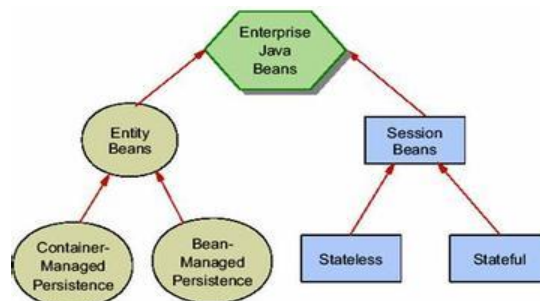


Fig. 1. Schematic diagram of ASP frame

## 2.1 Frame Structure Design

At present, there are three versions of the Java 2 platform, which is applicable to small devices and smart cards of the Java 2 platform, Micro Edition (Java 2 platform Micro Edition, J2ME), applicable in desktop Java 2 platform, Standard Edition (Java 2 Platform Standard Edition, J2SE), applicable to create server applications and services of the Java 2 platform, Enterprise Edition (Java 2 Platform Enterprise Edition, J2EE). J2EE is a system architecture that uses Java 2 platform to simplify the complex issues related to the development, deployment and management of enterprise solutions. J2EE technology foundation is the core of the Java platform or Java 2 Platform Standard Edition, J2EE not only consolidate the standard edition has many advantages, such as "write once, run anywhere" the characteristics, convenient access to a database JDBC API, CORBA technology and can protect data security model in the application of Internet and so on, and also provide the full support of XML technology and the EJB (Enterprise JavaBeans), Java servlets API, JSP (Java Server Pages). Its ultimate goal is to become a business developer can significantly shorten the market time of the system structure. With the support of IDL Java, developers can integrate Java and CORBA together. They can create a Java object and make it available in ORB CORBA, or they can also create a Java class and serve as a client for the CORBA object that is launched with the other ORB. The latter approach provides another way through which Java can be used to integrate your new application with the old system. Servlet is a small Java program, which extends the functionality of the Web server. As a server side application, when it is requested to start execution, which is very similar to the Perl CGI script. Most of the functionality provided by Servlet is similar to JSP [3], but the way it is implemented is different. JSP is usually the majority of HTML code embedded in a small amount of Java code, and servlets all written by HTML and generated Java.



**Fig. 2.** J2EE technology framework chart

## **2.2 Frame Structure Design**

MVC originally exists in the Desktop program, M is the data model, V is the user interface, C is the controller. The purpose of using M is to separate the MVC and V implementation code, so that the same program can use different forms of expression. For example, a number of statistical data you can respectively by histogram, pie chart to show. The purpose of C is to ensure that the M and V synchronization, once the M changes, V should be synchronized with the update. Model view controller (MVC) is a software design pattern, which was invented by PARC Smalltalk in the eighty's as a programming language, Xerox 80, and has been widely used. In recent years has been recommended for the J2EE company Sun platform design model, and more and more use of ColdFusion and PHP developers welcome. Model view controller model is a useful tool kit, it has many advantages, but there are some disadvantages. The controller accepts the user's input and calls the model and view to complete the user's needs. So when you click the hyperlink in the Web page and send the HTML form, the controller (for example, servlet) itself does not output anything and do any processing. It simply receives the request and decides which model component to handle the request, and then determines which view is used to display the data returned by the model. Now we summarize the process of MVC, first controller receives the user's request, and decided to call which model should be to deal with, then, the model is used the business logic to handle the user's request and returns the data. Finally the controller with data returned by the corresponding format view model, and through the presentation layer presentation to the user. Because the data returned by the model is not formatted, the same component can be used by different interfaces. For example, a lot of data may be represented by HTML, but they are also likely to be represented by Flash Adobe and WAP [4]. The model also has the function of state management and data persistence processing, for example, based on the conversation of shopping cart and e-commerce process can also be used by Flash or wireless networking applications. Because the model is self-contained and separated from the controller and view, it is easy to change the data layer and business rules of your application. If you want to migrate your database from MySQL to Oracle, or change your RDBMS data source to LDAP, just change your model. Once you have the correct implementation of the model, regardless of your data from the database or the LDAP server, the view will be the right to display them. Due to the use of the MVC application of the three components are independent of each other, one will not affect the other two, so based on this design idea you can construct a good loose coupling component.

## **3 System Design and Implementation**

The biggest difference between the design of the international trade practice simulation teaching system and the demand analysis is in the logical segmentation. From the user point of view, in accordance with the process of learning, the way to master the most habits, each process will encounter what role, in the actual business of their own role to play what processes need to be exposed to clearly understand. But for the system design, by contrast, due to the system in the main data, documents, basically across multiple processes, in the system if change to arrange the documents in accordance with the process, it will relate to larger data

revision. Due to the function of the ASP itself has certain limitations, the business logic must be focused in ASP file, and in the process design of the system need to carefully consider the process characteristics and avoid duplication of code, and the database table design, can also through the database table a certain degree of reduce the business logic in an ASP file, which uses space loss method to obtain efficiency. For a international business simulation teaching system, is a desirable way. A brief description of the program through specific business logic table to determine a business in the international trade practice system link, so that the user can quickly understand the documents in international trade practice system relationship and role related procedures. After the completion of the contract with the importer, the exporter and the importer can sign the purchase and sale contract with the domestic suppliers. If the exporter does not sign the contract with the importer, the contract is not signed with the importer ". When the purchase and sale contract is signed, the state value of the document is changed [5].

## **4 Conclusion**

In the process of writing the thesis, through access to a large number of relevant information, analysis and simulation teaching system of some of the main issues on the international trade practice, and introduces the international trade practice simulation teaching system design and related technology development, and on the basis of analysis and research to achieve a one vote in the end business of international trade practice teaching platform simulation. Based on the study of international trade practice simulation teaching system, this paper studies and develops an international trade practice simulation teaching system based on the combination of theory and practice. System with the experimental content as the center, highlighting the theme of the experiment, through a complete international trade process, a comprehensive understanding of the role of the international trade process and the relationship between the roles. The realization of the system is based on the detailed analysis and design, and gives the specific implementation process, which can be used as a separate system. The research and development of the system is conducive to improve the user's ability to operate in the international trade business, the system has a strong practical and advanced nature, and in the process of simulation to do the key research.

## **Acknowledgements**

Project results: this paper subsidized by Beijing non-government funded education development and promotion project, 2015 and by Beijing Higher Education Young Elite Teacher Project No. YETP1884

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