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## Construction of Graduate Employment Service System Based on Public Information Platform

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### Abstract

With the continuous enrollment in colleges and sharp growth in the number of graduates in recent years, employment and the amount of information tend to expand rapidly, and then very difficult to split, merge data, facing any one of these huge tasks are not completed things on a single computer in the short term. In view of this, in order to meet the tough changing employment situation and enable the timely effective employment guidance for university graduates, building a dynamic, quantitative and systematic employment information platform has become an urgent task of the current employment guidance for college students.

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Keywords: Employment; Public information platform; Service system;

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### 1. Introduction

As late 90th century university enrollment and the industrialization of education policy since its introduction, students increases far exceeded economic growth in the number of personnel required to growth, "graduate unemployment" become a common phenomenon of Chinese College students in recent years.

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According to statistics, 2010 National University graduates for the 6.3 million people, than the cent in 2009 more than 200,000 people, plus previous failed employment plus fresh returned students, requires employment of graduates more than 8 million people, the employment situation is severe.

As several major participates in the process of employment of college students, governments, universities, businesses, media plays an important role in the information exchange on employment of college students. Information barriers between government and universities mainly reflect in the Government's conditions, not knowing about teachers of colleges, maladjustment of introduced policy situation in colleges and universities. Information barriers between universities and enterprises is characterized not what businesses need to have quality personnel in colleges and universities, and not targeted for training; Information barriers between Government and Enterprise mainly for government enterprises, Enterprise talents did not fully grasp the development of, developing economic policies and development needs of local enterprises are different.

## 2. System design

Demand analysis on employment of college students platform service serve mainly to university graduates, employers, job management and system management of four categories, therefore, the system needs to meet college graduates, employers, employment-related and system administration personnel needs. Demand for university graduates is to understand the employment news, maintain their own account information, see view job fair information, employment information, see the employer's basic and published personal employment information; Recruitment information, view student job employers need to publish information, apply for school to hold job fair; Job management features the most complex, including the management and maintenance of university graduates, employers, and review relevant information for graduates, view a student contracted with units of the employment statistics, and completed operations on the database, including the employment policy, job fairs, employment news, and more information added, deleted, modified; System administration staff is mainly to maintain the system. ASP's operating mode is shown in figure 1.

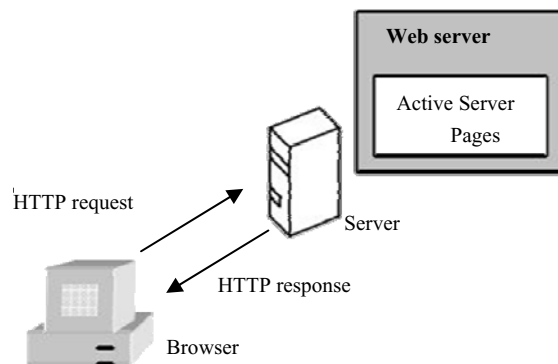


Fig. 1. ASP's operating mode

This article is as the base to ASP. Student employment information platform management system for the application of NET background, research the following two issues: Using the more advanced than ASP ASP. NET technology to build systems model and classification module, using ADO .NET technology to access the database and build a complete management system of college student employment information public platforms. Improving ASENET technical security mechanisms, to comprehensive evaluation of the system,

analysis of evaluation results, and ASP. Research and realization of .NET security put forward some views and suggestions for improvement.

There are two major modes in system structure design model of a web application, namely, B/S (Browser/Server) pattern, C/S (Client/Server) model. B/S mode using two-layer structure, and C/S models generally use three-tier architecture. Structure of two-layer B/S mode for smaller, less users, application software systems within a single local area network, and require the Outlook client has faster response times, higher quality and more complex functionality. Using direct database connectivity and operation does not cause bottlenecks of a database system. C/s mode of three layer structure suitable for developing large-scale, multi-user, software applications across multiple network layers, because times a lot of very frequently on database now, security requirements relatively high, the software client republished will be more stringent. Three-tier architecture by applying a unified control of server resources and unified implementation of function, you can more effectively ensure the efficiency, security, and easier to maintain. On one hand, this framework is currently more popular software applications, the main client software applications purely made without any business logic, and business data presentation layer, which can maximize overall system security, data protection and stability. The other hand, for those who are providing nuclear, If, controls management clients, thanks to special control, use the range is very small, in this case, you can simplify management, safety certification and safety control of client work, to focus more energy on the development of more efficient, more powerful management features. ASP.NET structure is a system of three-layer structure model: that is, the user interface layer (UX) business logic and data tiers.

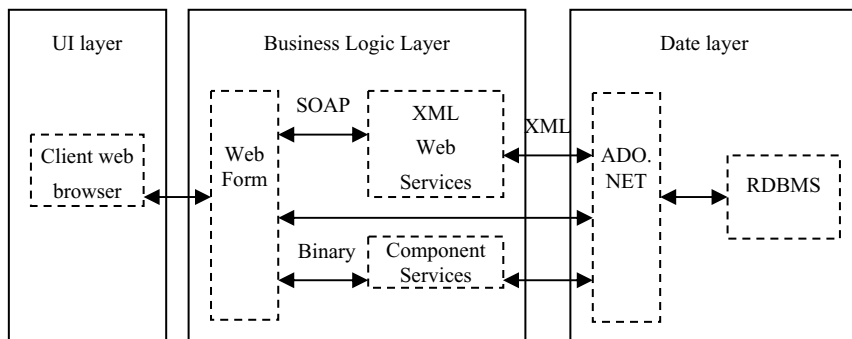


Fig. 2. ASP. NET model of system structure chart

UI layer is responsible for interacting with the user, accepting user input and data from the server-side rendering to the client, the ASP.NET page-level, providing users with access to application features. Business logic layer is responsible for receiving requests from the browser and the request is passed to the data tier, while the request processing results to the browser. It consists of a web form, Extensible Markup Language (Extensible Markup Language, XML) composed of Web services and component services. Web form is ASP.NET of which lies at the heart of the application, it is the basis for presenting data and information to customers, respond to and deal with customers and display web forms generated by the interaction of information and data base, due to the layer directly associated with the database, but also for the UI layer services, so the business logic layer design is directly related to the success or failure of the entire system. Data tier is the system the basement, store.

Of which Web form is the core of the ASP.NET application, it is the base that presents to the customer data and information, but also the foundation to respond to and deal with customers and display of web form w-generated information and interactive data, due to the layer is associated with the database directly, while

services for the UI layer, so the design of the business logic is directly related to the success or failure of the entire system. The data system is the bottom of system, which stores all the data of the system, the system database of this system uses SQL Server 2000 to achieve, through the ADO. NET to manipulate the data for the business logic layer providing data services, such as storing the results of data manipulation, data retrieval to return the results and so on.

### 3. System analysis and general design program

#### 3.1. System Architecture Design

Web application system involving in title uses the three layer structure mode, separately display for Web layer, data access layer, database. The overall design of the system architecture as shown in Figure 3.

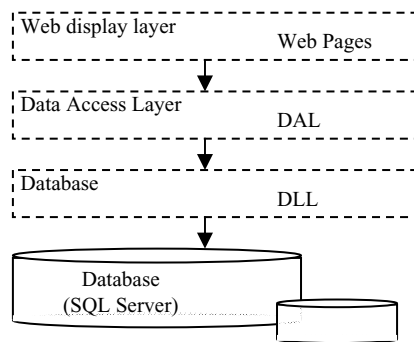


Fig. 3. Overall system of architecture design

Database is the bottom, which stores all the system data. Dynamic link library database operations (DLL), which accesses to the database of application system directly, from ASPNET2SQLHelper to achieve. Data access layer is based on the database, providing data services for the Web display layer, application program access the database through the layer. Data Access General operation of the database layer package to select, add, update and delete operations, but also provides for the business logic for access to the database interface or function or methods. It is associated with the database, while the presentation layer for Web services, so the data access layer design is directly related to the success or future of the entire system.

#### 3.2. System Functional Design

In this system, college student employment information public platform management system is a complete school information management system. According to the requirements of the system demand analysis, it mainly includes the user login and registered module, the user management module, and the role of government information management module,, media information management module, the school information management module, students' information management module, and system maintenance management module of seven major module. The management system function characteristics shown below:

(1) Simple, friendly interface: completely control type the page layout, make the information of the entry work more easily; Many options including information category, the source departments and only have to click on the click of a mouse you can finish; In addition, tracking the hints that appear information also let users always aware of their operations.

(2) Instant visible: the processing of information (including the entry, update, delete, etc.) will be immediately displayed on the home page of the corresponding column out to achieve "instant publishing, instant effective" function.

(3) The perfect function: including common website all aspects of the information management (including information entry, update, browse, delete, query and other aspects), the full realization of the site for information management requirements.

(4) Convenient transplantation: in view of the different schools or related enterprise unit, only minor modifications can be developed for the characteristics of the unit information management system.

### 3.3. System Development Environment

College students' employment information public platform management system development environment system shown below:

- (1) technology platform; Microsoft. NET Framework 2.0
- (2) development tools; Microsoft Visual Studio. NET 2005 Chinese enterprise edition
- (3) development language: ASP. NET, using using c Zeng speech to achieve
- (4) Database: Microsoft SQL Server 2000
- (5) HS: Internet Information Server 6.0

Operating system platforms: development process using Windows XP Professional Edition, you can use run-time Windows 2000/XP/2003 or other operating systems.

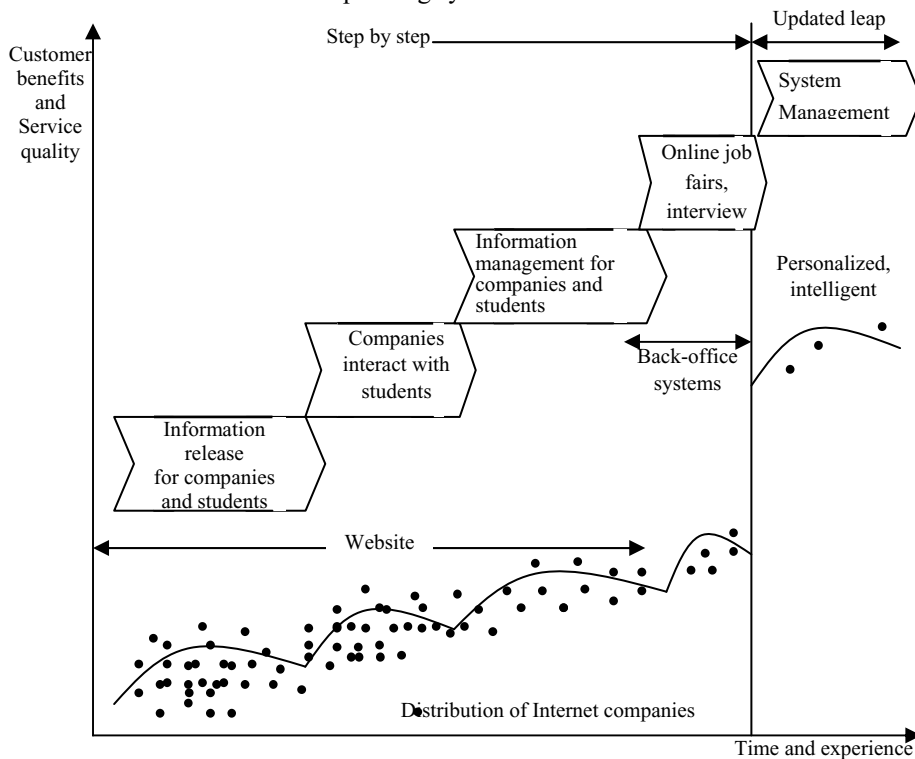


Fig. 4. College students' employment public information platform

#### 4. College students' employment public information platform

Students in basic information management by the page Student Manage. aspx to achieve, StudentManage. aspx. cs code-behind file for it. In the interface design phase, the first page StudentManage. Add a ListBox control on aspx, two Image Button controls and a Button, names are StudentList, EditBtn, DeleteBtn, AddBtn. Which controls StudentList used to display information for all students, control EditBtn, DeleteBtn, AddBtn were modified to achieve student information, delete and add functions. Initialization phase of the page. Display information for all students to achieve the functionality achieved by the function Page Load0. Among them, the student information from the function calls of the Student class GetStudent0 BindStudentData0 way to get from the database and stored for use SqlDataReader object reet results show that all students in the information, and then close the database connection.

College students' employment public information platform is based on ASP.net architecture structures, and its aim is to achieve university employment information of the electronic, digital, and complete the web-based integrated network of information the automatic collection, processing, storage, transmission and exchange, and ultimately students employment information resources to fully development and universally shared. Diagram is as in figure 4.

#### 5. Conclusion

Based on ASP asp.net application integration is the service technology integrated technology of the first important change, and it is considered a new generation of application integration technology. In the college students' employment service information system integration using asp.net service technology, beneficial to protection and utilization of college left over from the past heterogeneous system; At the same time because it is based on open standards and so on, also conducive to data sharing and reuse; At the same time as a modular and loose coupling, also simplified the maintenance, reduce maintenance costs. Of course, asp.net service technology is currently in a period of development, many contents still not mature, for example to solve the security authentication, the service charge, transaction processing and reliability, and many other problems although some related standards, but to public college students' employment information platform security realization are further research needs, based on the grid technology in order to improve the university students' employment information platform, make it play out the business benefits should be.

#### 6. Funding sources

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