Research on the design of costume performance professional evaluation system based on information management

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Abstract. In the continuous improvement of the level of computer technology, the education field proposed to use information technology to build a professional evaluation system, its purpose is to replace the traditional manual management mode, improve the efficiency of practical work, shorten the practical work cycle. According to the application of the educational information evaluation system in recent years, it can not only provide technical support for information statistics and assessment work, but also ensure that the practical operation is simple and fast and the performance is outstanding. Therefore, on the basis of understanding the current situation of costume performance education in modern colleges and universities, and according to the technical theory of developing educational informatization evaluation system, this paper deeply discusses the structural framework of costume performance evaluation system with informatization management as the core, and conducts systematic evaluation with practical cases. The final results show that the overall system design meets the needs of educational management of costume performance specialty, which is of great significance to the innovation and development of college education.

Keywords: Information management; Major in costume performance; Evaluation system; J2EE framework; AJAX technology.

1. Introduion

As the core content of modern education innovation and exploration, fashion performance has been set up in colleges and universities since the late 1970s, when Pierre Cardin brought foreign models to China. In the mid and late 1990s, the training level was gradually raised to undergraduate level. At present, there are more than hundreds of colleges and universities in China with this specialty. A relatively mature cultivation scale has been formed. In the process of social economy and technological innovation and development, the market scale of costume performance industry is getting bigger and bigger both at home and abroad. Therefore, how to improve professional quality and moral level of students, formulate a perfect evaluation system, speed up the professional training and professional development process of costume performance in accordance with the needs of market economy, and actively seek diversified development paths of educational innovation? It becomes the core subject of the study of higher education work.[1-3]

In the early 1960s, Japanese scholar Tadao Umeda put forward the concept of informatization, which has been widely used in the field of education after entering the era of big data. Countries began to organically combine educational research theories and educational informatization technology, and achieved excellent results. In essence, educational informatization has transformed the traditional teaching mode and is an important reform in the history of education. The specific advantages are reflected in the following points: First, information transmission. In modern economics, some scholars believe that access to information is one of the main ways to solve human ignorance. However, in the traditional education work, it is difficult to realize the shared application of teaching resources, and teachers need to explain for many times to complete the knowledge transfer, which requires a lot of time and energy. The innovation and development of educational informatization can make information and data be shared and applied, and it has multiple functions such as remote synchronous education and network video education, which provides convenient conditions for teachers and students. Second, information quality. Under the

traditional education model, the knowledge level of teachers in different places is not consistent, and it is difficult to obtain excellent teacher resources in remote areas, and the teaching quality cannot be fully guaranteed. Nowadays, excellent teacher courseware and excellent course resources stored on the network platform can provide abundant technical resources for teachers and students to learn, and ensure the quality and safety of applied education information; Third, the cost is low. At present, people have different economic levels and different environmental conditions. Therefore, promoting the network information education management platform and realizing the shared application of educational resources can enable teachers and students to arrange learning tasks according to their own needs, reduce the cost of practical learning and help students to fulfill their dreams. Finally, efficient information exchange. The network teaching platform can use software technology to realize communication, but the traditional teaching can only be communicated in classes and schools. Therefore, under the background of education innovation, the design and implementation of education information evaluation system has been widely concerned in the field of education.[4-6]

The education information technology theory in our study is late, there is a gap with the developed countries in the world, but with the continuous improvement of the social economy and science and technology, the future is bound to master more experience in the practice of inquiry. In the process of the development of education informatization, the education department has always tried to change the development status quo, through a variety of channels to raise funds or allocate funds to aid the education of colleges and universities in remote areas, to provide technical support for the education innovation in rural areas, which has far-reaching significance for the development of national education informatization. Therefore, on the basis of the accumulated experience of costume performance professional education, this paper mainly discusses the design and implementation of a professional evaluation system based on educational informationization, so as to lay a foundation for cultivating outstanding technical personnel.

2. Method

2.1 J2EE Framework

J2EE technology, as an extension of the Java language platform, enables system developers to create scalable and powerful portable enterprise applications. The overall application can use relevant kernel files to interact with other components, as shown in Figure 1 below:
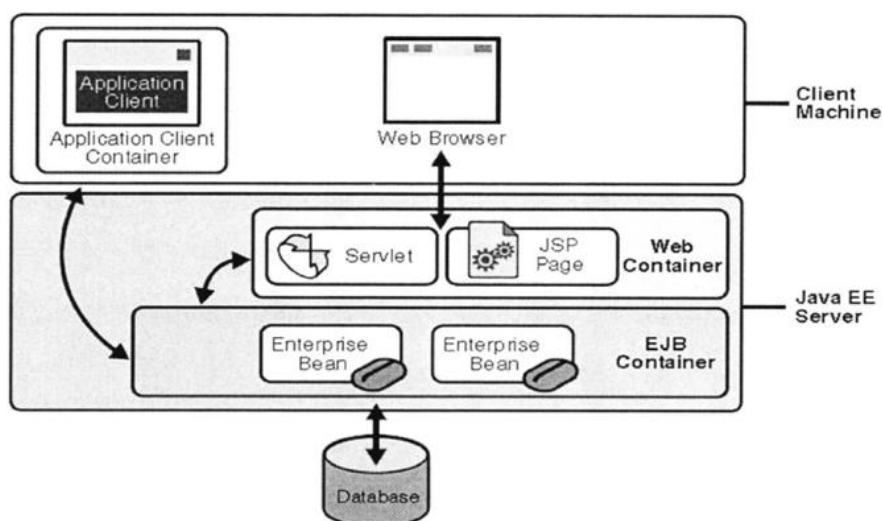

Figure 1 J2EE technical architecture diagram

Based on the above analysis, we can see that Servlet, as a very key server-side group, can effectively interact with system users, correctly process and respond to data submitted by users.

Servlet is a server-side component based on Java and platform independent, which can use Java language to write a program running in the network server. The browser sends a request to the network server, generates a corresponding webpage according to the client request and returns it to the browser, so as to interactively query and modify data.[7-9]

2.2 AJAX Technology

This technology and the traditional web development choose synchronous way is not consistent, belongs to the asynchronous transmission mode, will use XmlHttpRequest object to send a wave of requests to the server, in turn obtain the relevant data information in the server, and use the operation and update the page. The key to the whole technique is getting the request data from the server. To understand the process and technical rationale, focus on Xml Http Request. In essence, Xml Http Request, as the core mechanism of AJAX technology, is the basic condition to achieve asynchronous communication. Compared with the traditional browser mode and mode, after adding XMLHTTP processing layer, add a new one between the page display processing and protocol layer. XMLHTTP processing layer provides a channel that can directly communicate with HTTP. AJAX technology can present two communication modes in operation, one is synchronous communication, the other is asynchronous communication. The specific structure is shown in Figure 2 below:
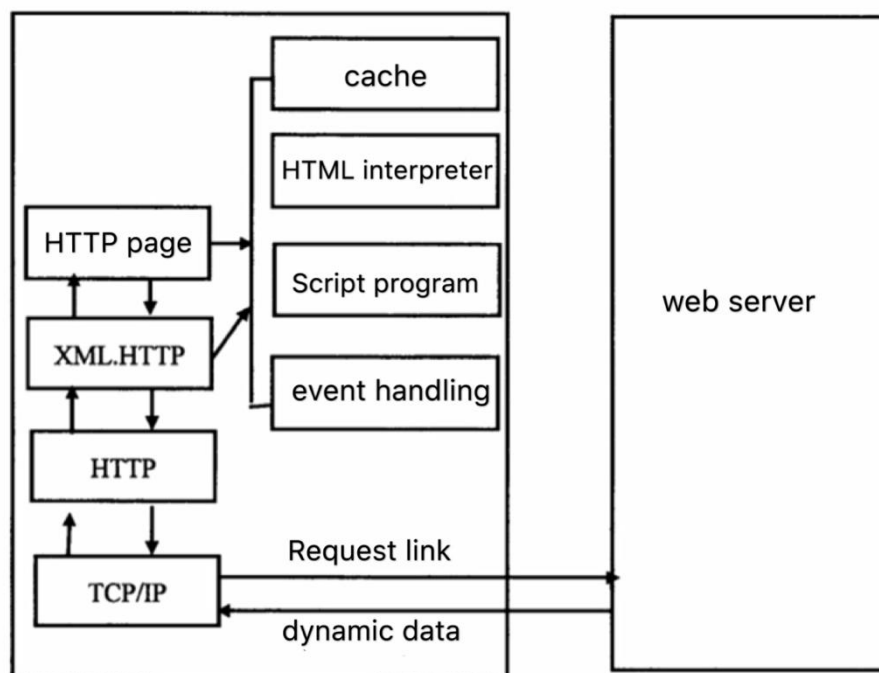

Figure 2. Communication structure diagram of AJAX technology

2.3 ORM framework

The basic idea of object relational mapping (ORM) is that the tabular data in the relational database should be broken into concrete objects, which helps the developer to translate the operations of the database into operations on these objects, so as to simplify the overall operation process. Among them, Hibernate is the technical software of object relational mapping solution, and its practical operation is shown in Figure 3 below:[10-13]
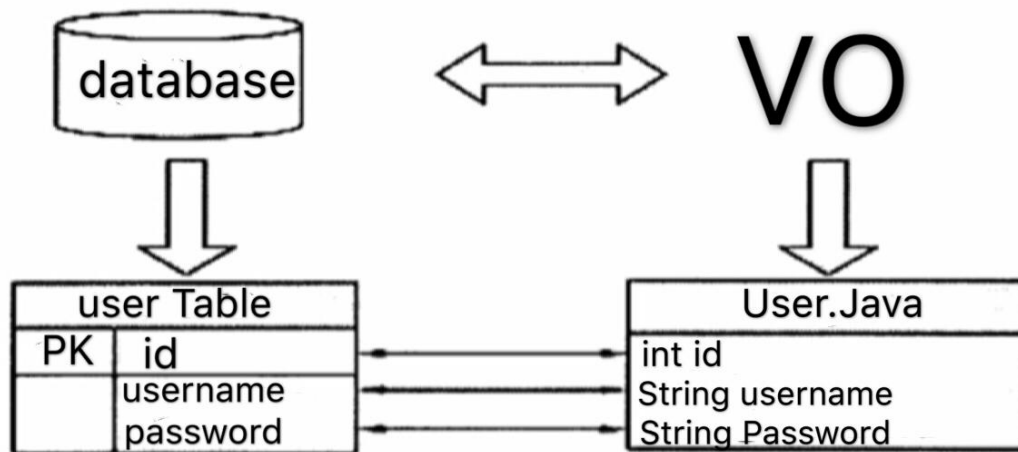
Figure 3 Flow chart of object mapping

Based on the above analysis, we can see that the overall architecture is very convenient for developers to design applications. Only specific attributes need to be designed in the database, and files can be generated in the corresponding database.

2.4 System Architecture

In essence, the evaluation system of costume performance major is mainly used to solve the problem of statistical data faced by traditional teaching management, provide a rich and high-quality scoring interface, and facilitate the staff to use the browser or App software for calculation and analysis. Therefore, the overall platform adopts multi-layer processing design, processing the presentation layer, business layer and data access layer separately, with strong maintainability and expansibility in the operation process, while information security, information management and technical specifications are integrated into each layer. The specific structure is shown in Figure 4 below:[14-15]
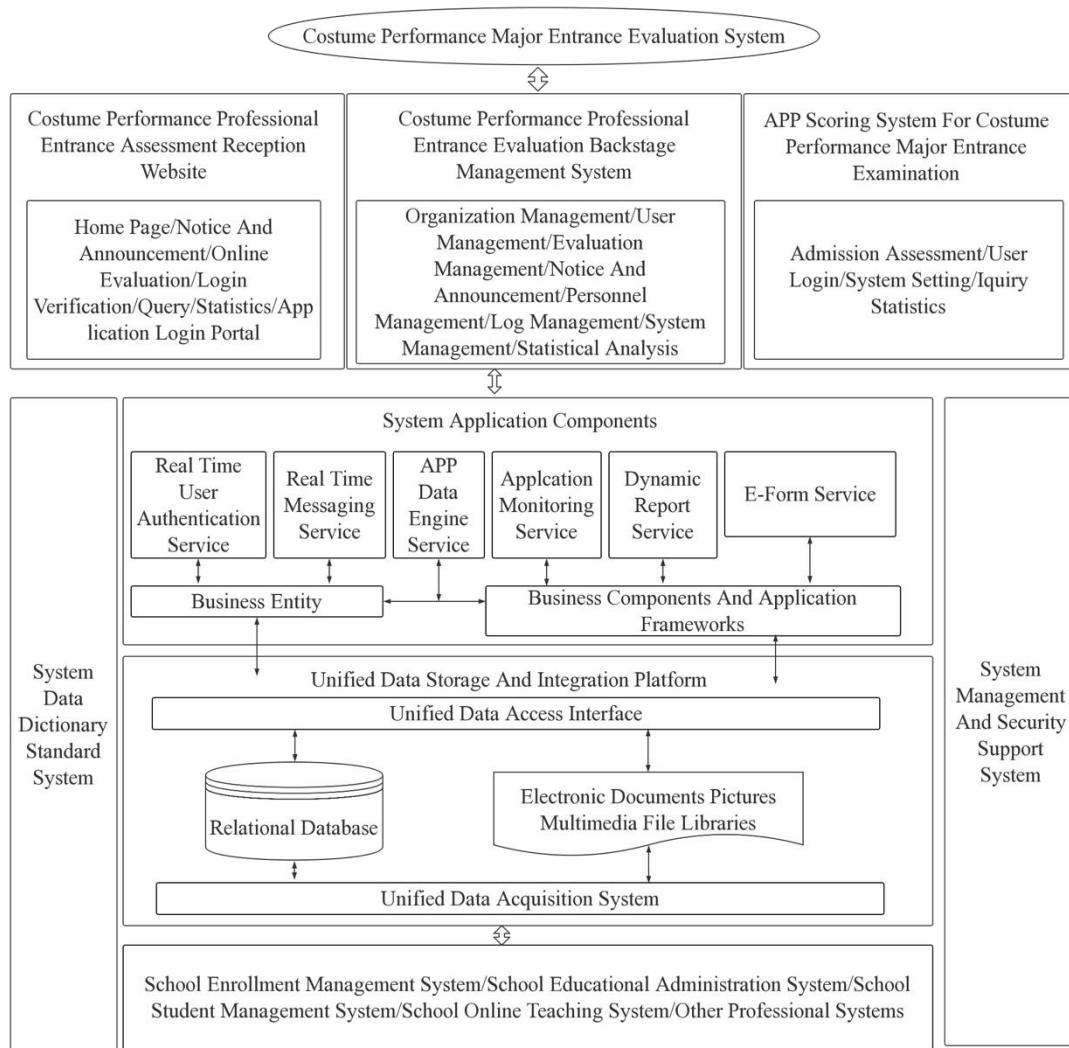
Figure 4 System architecture diagram

Based on the analysis of the figure above, it can be seen that the overall platform adopts the mixed application mode of B/S and C/S. Data collection is processed in the data center on campus, and all end users will directly access the system through browsers or mobile apps to complete business operations. The application system server is mainly used to publish the data information of the system, will form a unified portal website, can also integrate the data of other systems, is the actual operation of the system program server. The database server is mainly used to store the structured data and unstructured data of the project, including electronic documents, drawing information, application reports, etc., which is the storage area of each subsystem database. At the same time, the database server will be configured with disk array, in order to facilitate database storage and backup processing.

3. Result analysis

As the key link of system development and application, system test mainly includes functional test, performance test, integration test, unit test and so on. During the test, the application template of the test should be designed first, and the modules such as system login, information query and authority authentication should be regarded as the basic basis. The application effects and specific problems of each module are mainly discussed. System login, as the first link to enter the system, is the main factor affecting the system operation.

Table 1 Test content of system login

Use case	02

number					
Functional characteristics	System login				
Test purpose	Test whether you can log in successfully.				
precondition	System started normally, user, Liq password, Liqiqiang identity, system administrator.				
Use case branch	Operation description	data	Expected result	net effect	T/F
01	Start the system: 1. Enter the correct user code, 2. Enter the correct password, 3. Select the role of system administrator, and 4. Click OK.	Liq（default）Liqiqiang（default）	Enter the evaluation system main interface.	Achieve the expected results, and enter the main interface.	T
02	Start the system: 1. Enter the correct user code, 2. Enter the correct password, 3.. Click OK. （No role selected.）	Liq（default）Liqiqiang（default）	Return to login interface	Achieve the expected results, reminding that no role is selected.	T
03	1. Click OK	without	Prompt for user name and password	Achieve the expected results	T
04	1. Enter the wrong user code. 2. Enter the correct password, 3. Select the role of system administrator, and 4. Click OK.	admin Loqiqiang	Unable to log in, prompted that the user name is incorrect.	Incorrect input information, re-input to achieve the expected results.	T
05	1. Enter the correct reader number, 2. Enter an empty password, 3. Select the system administrator role, and 4. Click OK.	Liq	Unable to log in, prompt password cannot be empty.	The expected effect is achieved, and the prompt password cannot be empty.	T

By integrating the final test results, it is found that the application requirements of different modules are in line with the predetermined requirements, the practical function modules have been successfully debugged and applied, and the system database has been re-improved according to the problems. The overall test results are satisfactory, and good feedback results have been obtained from users. As a modern content proposed based on the professional education management of costume performance, the educational informatization evaluation system, after a large number of demand survey, field investigation and practical experience analysis, found that the overall includes the system management module, standard management module, statistics management module, data management module, information management module, etc. And integrate the use of J2EE

framework and AJAX technology, which provides effective support for system development applications. From the perspective of practical application, the system design and implementation mainly start from two aspects, one is the function flow, the other is the system interface. The application of educational information evaluation system in the educational management of garment performance can not only reduce the working pressure of the internal staff, provide accurate and perfect statistical data, but also provide information inquiry, import and export, forum exchange and other functions according to the requirements of educational management, so as to provide convenient conditions for the innovation and development of modern education. As the education information-based evaluation system has met the requirements of modern education development and enabled the college education network platform to play an important role in creating a high-quality environment for teachers and students to study and explore, the future education field should continue to study and design and implement the professional evaluation system based on information management. It should be noted that although the system research has achieved excellent results, it still needs to be improved and innovated in the follow-up development. We should focus on further expansion based on the functional structure of the system, fully consider the relationship between educational development and professional evaluation system, and then learn from the accumulated experience of system design in developed countries to gradually optimize the internal functional structure of the system. It has realized the miniaturization and intelligentization of the system, so as to make it convenient for system users to access the system function at the end of mobile devices, so as to raise the professional level of Chinese college education.

4. Conclusion

To sum up, the entrance evaluation system of costume performance major studied in this paper improves the informatization and automation level of college enrollment to a certain extent, effectively solves various problems existing in the evaluation management of professional teaching, automatically selects students who meet the enrollment conditions, and relieves the pressure of data statistics and data analysis of staff. It can guarantee the fairness and accuracy of data information and research results on a basic basis. At the same time, the whole system can also expand research according to the demand of education, continue to increase other technical functions to improve the new era of college education management mode, so that not only can obtain the good education effect, but also can lay the foundation for our college education reform and development.

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