Analysis of the Application of Interactive Network Management in Enterprises

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ABSTRACT

With the rapid development of information technology, computer talent training has become an indispensable part of various industries. In this context, the application of interactive school enterprise network computer talent cultivation management is gradually emerging, aiming to improve the efficiency and quality of computer talent cultivation. This article will analyze the application and explore its advantages, challenges, and solutions. The interactive application of computer talent cultivation and management in school-enterprise networks adopts various interactive methods, such as online forums, real-time chat, online testing, etc., to enhance the interaction between students and teachers, as well as between enterprises and schools, and improve teaching effectiveness.

1. Introduction

As a teaching platform, the interactive computer network integrates computer technology, multimedia technology, and communication technology, differing from the traditional teaching model. Information resources sharing, interaction and real-time can be realized in the interactive computer network learning platform, which can break the space and time constraints of traditional resource sharing. Interactive micro-video is a teaching method in the interactive computer network platform. Many scholars at home and abroad have studied and explored this teaching mode. Because interactive micro-video pays more attention to the development of students' hands-on and practical abilities, this kind of teaching resources has certain application advantages in software teaching courses. Most colleges and universities develop and utilize the teaching resources in order to improve their own teaching quality. Some scholars in the United States have proposed some elated concepts on one-minute micro-video. Superficially, it is mainly to complete micro-video teaching tasks within one minute.

School-enterprise cooperation is an effective mean for training talents in the

country, and it is an advanced talent cultivation concept proposed by foreign developed countries. Because the cooperation model can transfer talents for regional socio-economic development and promote local economic development, foreign governments support this talent training model and cultivate targeted talents through various school-enterprise training cooperation models. Due to the advanced computer technology in foreign countries, the use of computer technology for the management of related data in the school-enterprise cooperation personnel training will provide important reference for both parties to cultivate outstanding talents [1-2]. In the management mode of computer network sharing mechanism, universities and enterprises can realize resource sharing and exchange resources with each other, thus providing technical support for both parties to establish a solid cooperative relationship. Compared with foreign developed countries, the results of training domestic school-enterprise cooperation talents are barely satisfactory. Although some colleges and universities have begun to develop and utilize computer network management systems, there is still a gap between the effectiveness of system management and the expected goals. In the development and application of the interactive computer network management system, it is difficult for both parties to share resources, and system services tend to be more economical, as a result, it is difficult to play an effective role in the management of university resources. Therefore, it is necessary to carry out research and exploration on the interactive computer network platform and apply researches on how to establish a platform for the training of school-enterprise personnel training.

2. Methodology

2.1. Overall System Design
The system architecture is an important part of the overall design of the system and has an important influence on the subsequent design. (The system technology architecture diagram is shown in Figure 1 below.) To facilitate system data management, set the system mode to B/S and open the browser anywhere. The technical architecture of this research system is mainly based on the MVC layered model to process the system, including hierarchical patterns such as data storage, views, and business logic. Through the related technology, the system page is planned and designed with system applicability, combined with the relevant database design to improve system data storage and data management capabilities. When related school-enterprise cooperation users of the B University use the management system application, they first need to send a request through the client browser, and then the follow-up operation can be performed after the control layer and the business logic layer accept the processing. In terms of data processing, system users can enter the data access layer to visit database access through the Connection Pooling Technique, and update the relevant school-enterprise cooperation personnel training data in the database. After the data processing, the system user needs to return to the control layer. The control layer transfers the data processing result to the view layer. The user can browse the corresponding view in the view layer to check whether the data processing is complete. If the data processing is correct, users can exit interface. The designed system package structure in this study mainly includes five classes of permission, entity, control, exception, and logic [3-5].With rich contents of system control and logic, the core control class mainly includes student employment management, student work management of school-enterprise cooperation, information management of training student and information resource sharing management, etc. The logic class mainly includes department setting and user management of training bases, and skills training activities management.
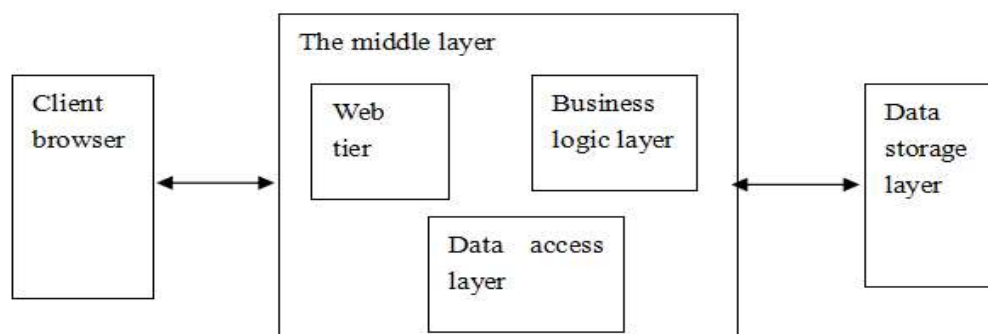

Figure 1. System technical architecture

2.2. System Function Design

The functional design of this research system mainly includes the management design of school-enterprise information center, the design of university business management, and the management design of school-enterprise cooperation.

The management design of school-enterprise information center is divided into two types: management design of B university information center and management design of enterprise information center. The management design of B university information center mainly includes the design of entities, logics and controls. Among them, the design of entities includes teachers' information, student information, and information entities of institutions; the logics are mainly based on the management design of school information centers; the controls design is mainly divided into college professional settings, teacher-student information management, leadership team management and information management of training student. Institutional professional control design mainly includes professional revision, query and deletion; teacher-student information management mainly includes student and teacher information management; leadership team management mainly includes leadership photo and information management; trainee training management mainly includes training student inquiry, delete, modify, etc. In the training information management process of the college, the system user first needs to log on the training student management page to inquire related training student information materials. When the information management control class receives a request from the system user, the training student information will be retrieved, thus achieving student information inquiry. If it is necessary to add, delete, or modify operation management for trainees, the trainee information list must be rearranged to use the trainee information management control function to perform system operations. The management functions of the enterprise information center mainly include information control centers of control, logic, and entity. The control class includes enterprise information statistics, cultural and team management [6-7]. In terms of function design and application of the enterprise information center management system, information management of enterprise organizations is mainly conducted. First of all, the system user needs to enter the information query conditions, and the related information is called by the management of the enterprise information center. The invoking information is displayed through the view layer, and provides the system user with the relevant enterprise organization information. (The internship management method is described in Table 1 below)

Theserial number	The name of the class	Methods
1	Corporateculture management control class	View enterprise organization information and enterprise snapshots
2	Enterprise department architecture management control class	View, delete, add, modify enterprise department architecture
3	The enterprise management team controls the class	New, query, delete, modify enterprise management team
4	Enterprise information statistics control class	Human resource strength, production and operation summary, technical process equipment

Table 1. The management class and method introduction table of the internship enterprise

In the design of school-enterprise cooperation business management functions, it mainly includes management of course technology R&D, management of school-enterprise cooperation agency, control class of student employment management, teacher-student information and enterprise information entity, and logic class of cooperation business management. Course technology R&D management mainly contains product technology and curriculum material R&D. School-enterprise cooperation agency management is mainly divided into enterprise and school management departments; student employment management mainly

includes graduate information, results of student employment and employment cooperation enterprise. For example, in the design and application of curriculum technology R&D management, it is necessary to set selection functions in the management interface to determine the R&D management content by selecting functions. Then the technology R&D management control class will receive the related information from the system user request and call related technology development research materials.

In terms of designing school-enterprise cooperation results management, the management system control class mainly includes student work management, memorabilia control, and student employment analysis control. The management system entity class mainly focuses on teacher-student information management, and the logical class is school-enterprise cooperation achievement management. The student work management mainly includes query, addition, modification and deletion of works; the memorabilia control management is divided into memorabilia modification, deletion and addition; the student employment analysis management control mainly includes pie chart, histogram and status chart statistical management.

2.3. Database Design

The system database design is mainly divided into one-to-one and one-to-many relationship design through database management functions to manage related data of school-enterprise cooperation personnel training. For the design and application of the system database, it is necessary to carry out statistical management of relevant information of the school-enterprise cooperation partners. The basic school information includes equipment, school name, school code, and land occupation. The company's basic information includes office locations, production and operation status, internship positions, and business registration numbers. (Part information of cooperative institutions with B University is shown in Table 2 below)

The project content	Field data type	The length of the field
Office	VARCHAR	45
Production and operation status	VARCHAR	90
Business registration number	INT	4
Internship	VARCHAR	25

Table 2. The cooperation enterprise part

2.4. Study Object Analysis

There are a relatively large number of users involved in the cooperative management of schools and enterprises in B University, such as teachers, students, managers and cooperative enterprises. Among them, the teachers and students of the colleges and universities have limited management authority, so it need to carry out system operations within the scope of management authority; the administrators have the highest authority in school-enterprise cooperation management in B University, and can implement relevant data information inquiry, deletion and modification according to the needs of school-enterprise cooperation personnel training modes. (The system role analysis table is shown in Table 3 below)

The management content of the University information center mainly includes information of training students, school development overview, and department setting. B University information center management business is divided into professional management of colleges and departments, basic situation management of colleges and universities, and information management of teachers and students. The development of colleges and universities overview of functional management have lots of functions, mainly including grade management,

basic information management and management of campus culture snapshots, etc., belonging to administrators management. Function design of training student information management mainly includes training inquiry, deletion and addition management. Department setup includes department information management, such as organization abbreviation or organization name. The cooperative information management business of the B University mainly includes information statistics management, department structure management and team management. Information statistics management mainly includes enterprise technology and process equipment, human resource and production to analyze the relevant data through histogram methods [8]. Departmental structure management is mainly divided into the basic information maintenance and management of the enterprise department structure, such as information query, deletion and modification.

Character name	Role analysis
students	Inquires athletics activity, inquires the student employment information, inquires the enterprise information and so on
Teachers'	Skills competition management, student employment management, student training management and class.Technology R&D management, etc
Enterprise	Enterprise organization culture management, enterprise ik department structure management, enterprise management team, school-enterprise cooperation major events, etc
Management personnel	School development overview, school leadership team management, student information management, training students' information management, user management, etc

Table 3. System role analysis table

The enterprise management team information management is consistent with the functions of above-mentioned departmental architecture management.

Considering the training of school-enterprise cooperation talents in the University, it is pay more attention to the management of training base and internship, providing infrastructure for talent training for both parties. Training base management mainly includes base information maintenance, such as management of base information call, base information modification, and base information addition. The internship management mainly manages the risks of the internship position, the basic information about students' internship, and the instructors' information. When the student staff at the internship position changes, managers need to add or delete the trainee information for the internship, and re-establish the student's internship statistics. For the risk that may exist in the student's job internship, it is necessary to provide protection through safety accident management, internship risk management and student internship insurance, so as to minimize student losses.

In terms of system function design and application, it must reflect the system's usability, security, and robustness. Usability refers to the system's humanized design, which makes the system more professional, efficient, beautiful, and flexible. Security refers to improving the performance of system data information management, avoiding system data loss or system network management confusion; robustness means improving the operating stability of the system, even if the system data is lost, the operation can be resumed in a short time without adversely affecting the normal operation of the system.

3. Results Analysis

3.1. System Function Implementation
When using of school-enterprise cooperative management system of the University, the system users need login interface, enter the user name, user password and random verification

code into the corresponding functional interface after system verification. The system user needs to maintain personal information in the main page, select corresponding function options according to their own needs, and then perform system operations. For example, in the leadership of team management in the B University, you can use the page management to understand the relevant information of leaders, such as their contact methods, gender and positions. In the information management of training participants, management personnel first needs to input the contents of the query, obtain the relevant basic information of the training students through the query, and then maintain the trainee information through the system operation. (Algorithm of querying training student informationtions of training base management, the ground training is mainly carried out through this training system in the research. In terms of specific system operations, managers need to input the information contents such as the name, location, and time of the training base related to the school and enterprise of the University into the system.Thesystem will conduct training base information query and display the query information on the system page. In the applications of training base information query, the operator can know about the risk management process of internship, enterprise information, management of student internship and instructor, etc., and plays an important role in the formulation and adjustment of the internship program in the school-enterprise cooperation training. For example, in terms of consulting students or teachers' internship management information, the operator needs to invoke the teacher and $t$he corresponding instructor's data information [9]. For student training management, management personnel can carry out training project management according to the management system, including social training, staff training and job practice management projects.
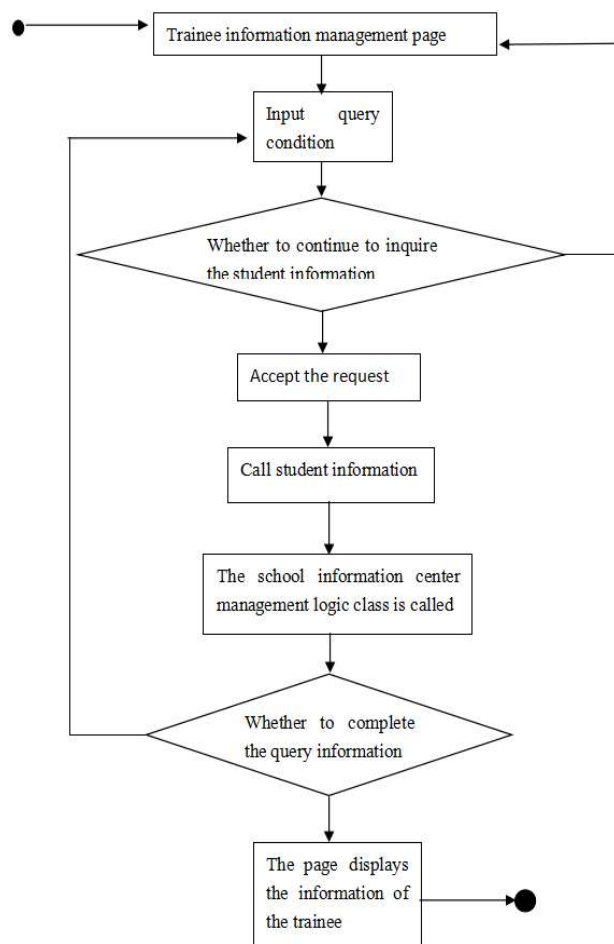

Figure 2. The information algorithm of the trainee

3.2. System Testing Analysis

As an important part in the system design application, system testing mainly deals with the problems, which may exist in the system operation. This study mainly tests system security, system functions, and system performance. In the aspect of school-enterprise cooperation information management testing in the B University, it mainly tests system business cooperation management, school-enterprise information center management and system function performance management. In terms of functional testing of the system's cooperative business management, the company mainly conducts test and analysis in school-enterprise training base management, student employment management, cooperative organization management, and internship management. In the management function test of the school-enterprise information center, it mainly tests the management functions of the B University and cooperative enterprise information center. The design of the management function of the University information center is relatively extensive, including the training of student management, teacher-student statistics management, and school leadership information management. For example, in the training of trainees, it is necessary to understand the relevant system management applications of the training student interface, including the student number, gender, name, and department, etc., so as to understand the management of new and the deletion of trainees. In the aspect of functional testing and analysis of the enterprise information center management system, it is necessary to test and research the enterprise's human resources strength, organization information, and departmental structure. For instance, in the management of human resources strength information, it is required to carry out statistical operations through the system management interface. Through the system execution results and the actual statistics of relevant enterprises, a comparative analysis is performed to judge the effectiveness of system function tests. After the functional test of the management system, the system must be tested for usability, security, and robustness and the first two properties of the systems operating state must be analyzed through system test results [10]. It is found that this research design management system can meet the needs of personnel training in the school-enterprise cooperation of the B University by the research and analysis of the functional test of this research system, which is conducive to strengthening personnel training and management, and reducing the management risks and costs, with a certain application research value.

4. Conclusion

The school-enterprise cooperation model is one of the most important management methods for colleges and universities to cultivate professional counterparts, which can make up for the lack of human resources of enterprises. In the process of developing computer network technology, the interactive information exchange platform has gradually become one of the important methods in the training of talents for school-enterprise cooperation, and it has a certain positive effect on the sharing of resources between the two parties. This study mainly takes the B University as research cases to explore the application design of computer network information interaction platform management system in the training of school-enterprise cooperation talents. The research has discovered that the management system designed in this paper has a relatively complete function, which is conducive to the enhancement of related data information management of school-enterprise cooperation personnel training. Since the author's professional learning ability is limited, the designed school-enterprise cooperation personnel training information management system is mainly aimed at the B University and related cooperative enterprises, so the system has certain limitations. Therefore, this research system can only meet the demands of school-enterprise cooperation model management for B University, and it is difficult to promote in other universities, which is the key direction that the author needs to improve in the future.

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