

Higher Vocational Schools Professional Training Programme Management Information System

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Abstract: Given the vocational school training program management problems in the process, this paper discusses the design of higher vocational colleges training program management system. The article first analyzes the vocational college training program on the problems, and then the question of the functional requirements analysis training program management systems, business processes and user roles; according to the functional requirements of the system, designed the training program system architecture, network architecture model, analysis of the database model of the system, Finally training program management system are summarized.

Keywords Training Program; Course Library; Management System

INTRODUCTION

Vocational training program is a vocational college "legal" documents, is to carry out teaching guide to action. In order to better enable professional development adapted to regional economic development, vocational colleges should organize professional annual professional training program be revised. Personnel training program revision is a time-consuming effort to spend more of a project, the reason is mainly the following aspects:

1) Training Program in the Department, and the Office of Academic Affairs Department of the Ministry repeatedly circulation, auditing, version control on cause difficulties. A professional training program may have to modify the draft more, pay more than the audit, if tracking is not in place, it is likely to cause which version is the latest version of the question.

2) traditional hand-made training program before and after the data prone to inconsistency. Because of the professional training program document length, related to the course a few more doors, describe some courses, class assignment and assessment methods and so will come out in more than one place, it will be very likely to cause data inconsistencies before.

3) traditional hand-made training program data calculation error prone. In the professional training program in the course of weeks and the number of class hours per week can calculate the total hours of a course, but often there will be a lot of curriculum theory and practice lessons to be involved in the calculation, under the manual operation mode, a large number of courses total hours, total hours semester hours in total and professional computing easy to produce errors, and these errors are not easy to find.

4) Query training program is not convenient, because the finished training program based mainly in paper

documents, paper manuscript limited number of teachers and students is very difficult to have a copy, so the query data in the training program will be very difficult.

5) Since the training program is a review long documents, very difficult way traditional manual typesetting.

6) The training program is not well with the Department of the Ministry issued a teaching task and teachers to prepare lesson plans or schedules were very good convergence. Departments in the production of each semester teaching assignments table, takes a lot of time and effort to proofread important data class, school weeks, test methods, teaching management system to the Department brought a lot of trouble. Also at the beginning of each semester to be prepared teachers teaching schedule, but also detailed data class, the examinations for the course taught by check, access is also very convenient.

In summary, if the professional training program of college information management, to improve personnel training program was revised in the future related to the efficiency of access and use, the Department of the Ministry of teaching management and students will bring it Great benefits.

NEEDS ANALYSIS

Analysis of roles and permissions

Training program in the system user roles into ordinary teachers and director of the Department, Dean, Dean's office and system administrator. The users in the system operating authority is not the same, the relationship between roles and permissions as shown in Table 1.

Functional requirements analysis

Training program management system is mainly to achieve paperless management training program of the entire process, including the creation of personnel training programs, and other audits, teachers and curriculum library database creation and audit personnel training programs. The system provides service to students and faculty through the B / S mode, the training program for the internal data Institute data, not open to the public, and only legitimate users can access status. According to the above features, functions training program management system shown in Figure 1.

Table 1 Training Program Management System User Role Analysis

No.	User Type	User rights
1	Teachers	Search all grades personnel training programs, courses and other information
2	Master of professional	The library management professional teachers, curriculum library, generate and query-year training program each year training program, course information
3	Department master	Audit of the system library teachers, curriculum library, director of the Department review of the submitted training program
4	Provost	Teachers review the hospital library, curriculum library, each system submitted, personnel training programs and related inquiries
5	Administrator	Basic data system maintenance, server management

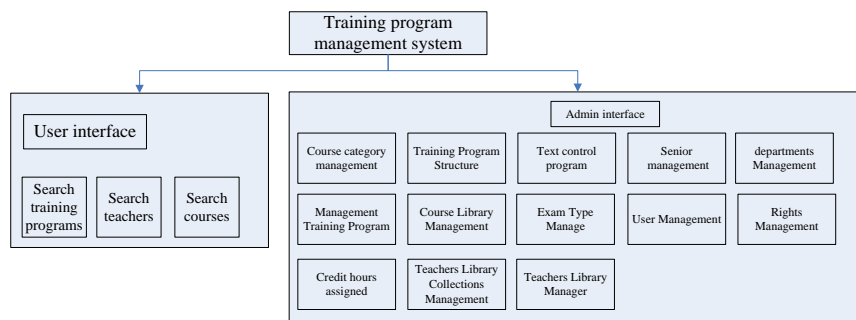


Figure 1 training program functional requirements

In the training program functions, program libraries, professional name, grade and type of course is the basis of the data system, all the training program should focus on some basic data to generate two additional personnel training programs as well as part of the text, such as Training Target, professional orientation and so on for the text, the text needs to be managed separately. Ordinary users can only operate foreground program inquiries, curriculum and teacher database query database query. Director of the Department can operate Course category, curriculum library, library teacher, course type, text control personnel training programs and personnel training programs generate. Training Program Director of the Office of Academic Affairs Department of the Ministry can be submitted to the director of the Department, the curriculum library, library and other teachers review the data. System administrators can the department of information, user information, authority information and other basic data maintenance.

System running mode

Training Program Management System first adding user information, permissions information, department information and other basic data by the system administrator, according to Dean's request, customized training program structure to Zhejiang Oriental Vocational and Technical College, talent Training program includes training objectives, training levels, personnel positioning, fourteen part of teaching process table, practical courses, graduation

requirements, etc. Then director of the Department by the professional training program according to the structure of the composition, complete professional name, grade, specialty curriculum, curriculum classification, text and other personnel training programs. Department Director design good year training program to be submitted to the Department after level for review, approval and then submitted to the Office of Academic Affairs audit, after completion of the audit of Academic Affairs, Health and version information personnel training programs. If you need to modify director of the Department, the Department of the Ministry and the Office of Academic Affairs would like to submit to amend the application, two management department consent amend, revise the process to submit and resubmit modify records, and generate a second version information. System operating mode shown in Figure 2.

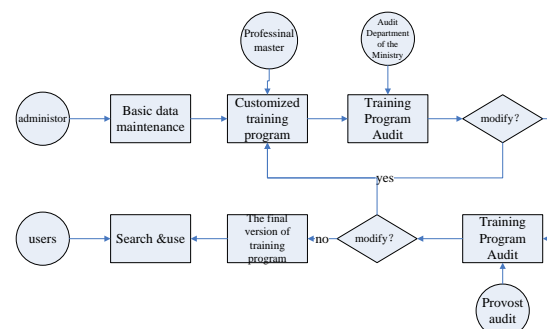


Figure 2. Training program running mode

System Design and Implementation

Network Design System

In order to facilitate the external provided no time and no space constraints services, structure of the system to be adopted B / S mode, the server can be set up on the campus network, without providing additional expenses, because it is multi-user service, the platform should have level scalability, increase

the number of users in the case, you can just add hardware to solve, without the need for reconstruction of the platform. In addition the system in addition to providing services for the campus network users, but also for external users over the Internet to remote access, network structure of the system shown in Figure 3.

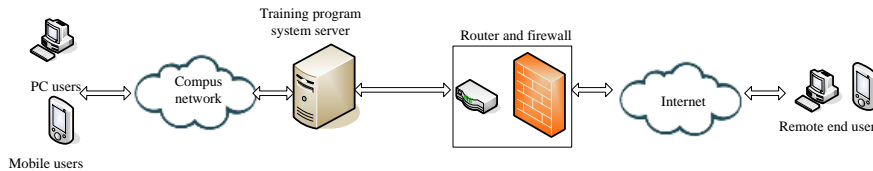


Figure 3. Training Program Network structure

System Architecture Design

Training Program system uses multi-layer architecture implementation, as shown in Figure 4, the following is a description of the different levels of functionality.

Platform interface: the user interface operation, depending on the user permissions feature presents different interfaces for users with different permissions operational functions to provide differentiated interface, such as a different user interface and Department Director, Director of the Department of the user interface, these different mainly related to personalized display system menu and page elements.

Presentation Layer: receiving user input data, and the data processing results presented to the user.

Collaboration Layer: mainly used to implement customized to provide users with custom features and system configurations to meet user-specific needs.

Platform through this layer to coordinate the exchange between the presentation layer and business logic layer.

Business and logic layer: business logic platform judgments.

The main function of the platform: Business Services.

persistence logic implementation, application data source separation of its use.

Database layer: to save the user a variety of data: business data warehouse data, metadata, and various data files.

Platform security: mainly used to ensure the safety and smooth operation of the platform, including disaster recovery, network monitoring, version management, user management, system logs, etc., in which the system log detail recording all user actions in the system, for the latter part of the site audit provide data support.

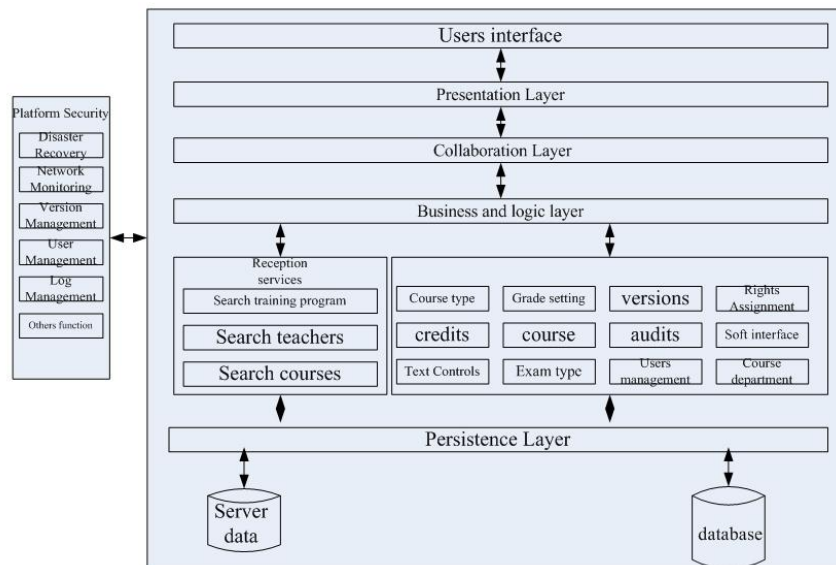


Figure 4. Training Program System Architecture

Database Design System

Management Training Program involves multiple departments, business process is relatively complex, it is more difficult in the database layer modeling relatively general management information systems. In the business layer and database persistence layer for an intermediate layer to be mirrored by the original data table view, to provide fast data support services for the business layer.

System on the basis of data classification table includes curriculum, curriculum library, library personnel training program structure, personnel training programs Text Library, personnel training programs in the process table, library teacher, department information library, library privileges, grade library, specialized libraries, and so on. After the training program curriculum library in turn, professional library, grade library, personnel training programs in the process table, personnel training

programs Text Library few tables combine to produce, in order to provide fast service to the business layer, according to the structure of the training program, from above the library to extract some form field training program view to achieve. Database design of the system shown in Figure 5. Given the vocational school training program management problems in the process, this paper discusses the design of higher vocational colleges training program management system. The article first analyzes the vocational college training program on the problems, and then the question of the functional requirements analysis training program management systems, business processes and user roles; according to the functional requirements of the system, designed the training program system architecture, network architecture model, analysis of the database model of the system, Finally training program management system are summarized.

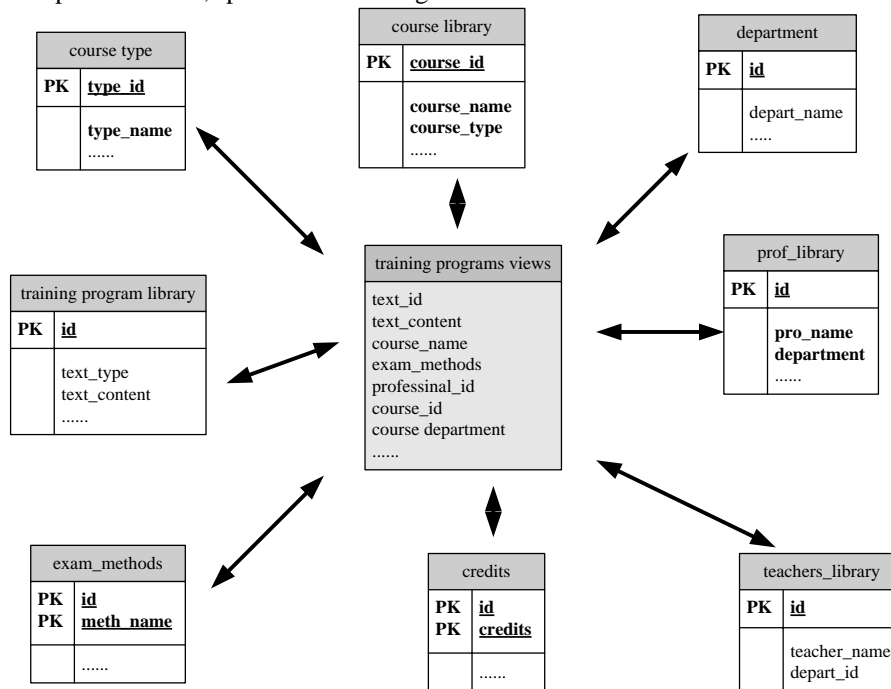


Figure 5. Database Design training program system

CONCLUSION

In view of the higher vocational colleges to develop training program and management process problems, this paper proposes a means of information management, personnel training programs based on the campus network management system environment. The system by dividing the different user roles to implement hierarchical management training program, the effective operation of the process and the actual docking. Given the vocational school training program management problems in the process, this paper discusses the design of higher vocational colleges training program management system. The article first analyzes the vocational college training program on the problems, and then the question of the functional requirements analysis

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Each functional module system design can achieve a good training program to develop, review, by means of information, can be a good solution training program to calculate error-prone in the development process, resulting in inconsistencies in the document is too long and many other issues the most noteworthy is that the system can be a very good solution training program in the sharing of the hospital for the hospital and students query training program provided for convenience.

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