Design and development of Based on BS College sports network courses arranging management system

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Abstract-- adopting website programming and database, and the use of advanced three layer of software system structure, to construct the public sports network courses management system, this paper introduces the function of network arrangement system, system design and the realization of human interaction, for a Beneficial attempt of the future and scientific university sports network courses management.

Index Terms--B/S application mode; Three system structure; College sports; Elective course system

I. INTRODUCTION

Along with the development of modern information technology and network technology gradually into higher education teaching permeates. Modern information technology and network technology have become the new driving force of the existence and the development for the 21 century universities. College sports course selection plays an important role in the College physical education teaching, it affects students learning process and teaching order stability. At present, with the rapid development of the universities, the numbers of the students is growing, the courses become more and more More rich and diversified, the disadvantages of the original traditional artificial p.e.curriculum elective course arrangement become more obvious, can not adapt to the new changes. Therefore, the use of the existing new technology and network set up a fair, rapid, efficient course platform already is urgently needed. Research and development "university sports network courses arranging management system", this will greatly improve the efficiency and quality of teaching management, at the same time also will greatly reduce administrative personnel work load and reduce the difficulty of management, to promote the development of the school sports work, the improvement of college students' physical quality and the construction of a harmonious campus has a profound meaning [2] [3].

II. Overall structure design on college sports network courses arranging management system

1. Design on overall goal system

For the real demand of Institute of Guangdong petroleum chemical industry, The website programming and database, and the combination of the use of advanced three layer of software system structure, establish a students' course selection and arrangement of the information management system for teachers, can stable to meet large Numbers of students and teachers at online courses online management.

2. Design on System technology route

2.1 Accordance with the software engineering system design method about implementation strictly. First, through the analysis, Establish requirement specification , determine the system function. Then the general design and detailed design. General design phase is mainly to establish the whole of the software system structure, including the subsystem, module and related levels of instructions, each module interface definition. The detailed design phase is mainly produce programmers available that module, including each module in data structure and processing that description. In the code testing phase with the comprehensive test method, i.e. the black box testing method and the white box testing method.

2.2 The design of the B/S model Web application three-layer structure, users said the layer of observation, the comparison analysis and so on, to understand and get the basic functions and the page layout of e-commerce sites, dream-weaver, photo-shop, Flash Web development with Java script + div + CSS, to design out the page templates. Business logic layer divide function module what the system need, design of each module in interface, and then concrete and complete all the module implementation details. Data access layer preferred relational database design, according to the data table, design relation table and relationship view. Then through the ADO and interactive database, realize the data query, add, modify and delete operation, for business logic layer provides services.

2.3 Consider the network safety, using encryption technology is very necessary. In the process of research and development of website, The identity authentication way, use account name and password login system, and the role authorization, different role to the corresponding page will be limited.

3. Module Design
According to the function, it can be divided into three modules: students module, teachers module, administrator module. (as shown in figure 1 below)

Figure 1
University sports network courses arranging management system of the interface
1. Students Module (as shown in figure 2 shows)
   Students of the procedure: 1). To input their own login name (id number and password (initial password for birth date) login elective course system; 2). Into the system, modify their password; 3). Personal material check; 4). Browse the optional course; 5). Conduct classes; 6). The second course selection; 7). Inquires course change results.

Figure 2 Students module interface
2. The teacher module (as shown in figure 3 shows)
The teacher can make the following operation: 1). Through teacher entrance to logon; 2). Into the system, change the password; 3). Inquires the courses; 4). Inquires course students; 5). Download the students' course selection lists;

Figure 3 Teachers module interface
3. Administrator module (as shown in figure 4 shows)
   Administrator module contains the following management: 1). The news announcement management; 2). Students' information management; 3). Change the password; 4). Teachers' information management; 5). Course information management; 6). Course information management; 7). Database maintenance;

Figure 4 Administrator module interface

III. Main function of the university sports network courses arranging management system
1. It will change the current sports elective course arrangement with artificial way, through the system to realize the course arrangement, will greatly reduce administrative personnel work load and reduce the difficulty of management, and at the same time, improve the management of teaching efficiency and quality.

2. The system uses the B/S model of three layer Web application system structure, there is no special requirements to the computer software and hardware configuration, convenient students, teachers and administrators operation.

3. The System is simple, fast, real-time, scalability, security, stability and flexibility, etc. Make courses management work standardized, systematic, and procedures. The system will be according to the basic information of the students, judge the college and conditions, can be selected course; The teacher can login the system to check after selecting course; administrators and the teachers can set optional course course of time, a review of the students course results through this system.

4. The system design expand interface reserved for the further function expansion. (expanding the function is not achieved in the project, just reserved for the further extended interface) a. physical education achievement login and query; b. online examination for theory course objective questions. c. physical quality assessment d. teacher evaluation.

IV. Conclusion
The system accordance with the software development steps strictly, after demand analysis, database design, overall design, code, and one-year practice research, obtained good results in actual teaching work. It has proved in the Institute of Guangdong Petroleum Chemical Industry, in first semester of 2011 ~ 2012, the provisions of the three days, there are 8915 students selected course of all the 9123 students, the number of the first time course reached to 97.7%. College sports network courses
arranging management system design and development, greatly improved the university sports course selection and management efficiency and quality, and the college students' physical and mental comprehensive development, promoted the development of the school sports work, is the truth things of public physical education.

REFERENCES


