

An Information Education Management and Teaching Information Management System Construction of Universities in Guangdong Province

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Abstract: Information education management is a complex and tedious work, especially with the continuous expansion of the scale of colleges and universities, the number of students has risen sharply, the relevant student information has doubled and doubled, to bring more pressure to the information management. The construction of information-based educational administration and teaching information management system is an inevitable choice for the development of contemporary education, which drives the modernization of education through informationization and realizes the leapfrog development of education.

Given department in colleges and universities set up more less tedious, management staff, all kinds of students to the current situation of increasing year by year, the new system can design students throughout the school each department and each link of the students to meet the needs of the school information management, information management of students, teachers and other information digitization, automation, scientific management, to improve the teaching quality and management level, Promote the informatization reform of education.

Keywords: Information management; University scale; Digital; Automation; scientific

I. Introduction

With the rapid development of information technology, informatization management is the current general trend of university management development, especially for Information education management system has been promoted and applied in many universities. General university student information management system can improve the efficiency of student information management, ensure the security of information, at the same time has easy to maintain, modify, access and many other advantages. At present, the general Information education management system can not meet the daily management needs, the system security is not high enough, this paper plans to absorb the advantages of the traditional information education management system, on the basis of the design of colleges and universities, meet the specific needs of colleges and universities of high security student information management system.

This system on the basis of the mature information management system to optimize, through analysis of the demand in colleges and universities design system includes students file management, course management, information management, rewards and punishment information management, difficult allowance management, employment information management, and other functions, including student records management, curriculum management and performance management is a major students' basic information management; The reward and punishment information management, hardship subsidy management and employment information management are specially designed according to the needs of colleges and universities, and more close to students' attention and use needs. After analyzing the actual demand of colleges and universities, the system intends to use ASP.net, SQL Server database and other mainstream technology, the design includes student files management, course management, performance information management, reward and punishment information management, difficulties and subsidies management, employment information management these six functional modules.

This paper designs a student information

management system for the specific needs of colleges and universities, which is improved on the basis of the traditional information management system. On the premise of retaining the most core student information management functions, it has abandoned the uncommon functions and added many functions that are more in line with the needs of colleges and universities and humanized management.

II. RELATED STUDIES

This paper mainly studies the construction of information education management and teaching information management system. Aiming at the problems existing in the current Information education management system, the author optimized and innovated, deleted the uncommon functions, retained and increased the main management modules, optimized the setting of functional modules, and improved the system performance.

In the 1970s, the Massachusetts Institute of Technology in the United States first proposed the student information management system, the system as an indispensable part of the management information system, through continuous efforts, has become increasingly mature. Information management is to realize the organization catalog, meet the requirements of the organization, to solve the environmental problems of the organization and the development of information resources, planning, control, integration, utilization of a strategic management.

At present, almost all colleges and universities have built Information education management systems and achieved the popularization of campus network, but its development is still in the initial stage of deficiency, restricting the university student information management work.

III. RESEARCH METHODOLOGIES

This system is intended to adopt the prototyping method, that is, the first prototype is made and tested, and then rework according to the needs, until finally an acceptable prototype is obtained, and then the whole system is developed and tested by different IT evaluators and research-related professional experts. In order to facilitate the maintenance of the system prototype, the relatively mature ASP.net and SQL Server development software will be used as the development basis.

Through communication and discussion with student work leaders and current students, as well as reference to successful cases of the existing Information education management system, the system plans to carry out demand analysis from the following aspects:

- (1) Maintain the information of the Student office, the College, the class and the individual information of students and the contact between them;
- (2) Make statistics and analysis of student information, and give statistical reports;
- (3) To provide a suitable platform for information release and exchange between student and labor organizations;
- (4) It is convenient for student staff to input, query, change and understand the relevant information of the college's students (accommodation, suspension, resumption of study, withdrawal, reward, punishment, etc.);
- (5) It is convenient to manage and make statistics on the reports and registration of students at the beginning of each semester, students returning to school during holidays and other work;
- (6) Provide a convenient, fast and friendly management interface to facilitate users to use and improve management efficiency;
- (7) Standardize student management and reduce the repetitive work of student staff;
- (8) Strengthen information sharing and timely release.

According to the analysis, The functional structure chart of the new information education management system is obtained, as shown in Figure 1.

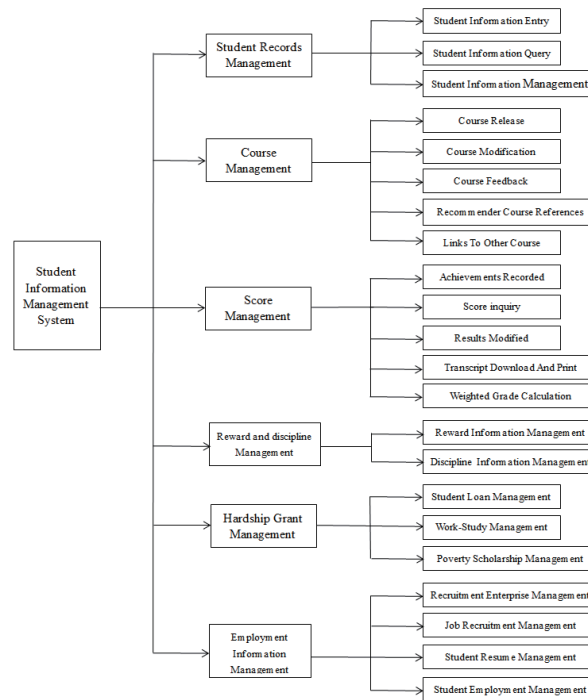


Figure 1: System function module diagram

A. System Features

The Newly designed information education management system provides comprehensive student information management functions, including student file management, course management, score management, Reward and discipline information management, difficulty subsidy management, employment information management and other main functions.

Student archives management mainly includes: student information input, student information query, student information maintenance.

Course management mainly includes: course release, course modification, spy feedback, course reference book recommendation, links to other courses (video open courses, etc.) and other functions.

Score management mainly includes: score entry, score query, score modification, transcript download and print, student weighted score calculation and other functions.

Reward and discipline information management mainly includes: reward management and punishment management. The reward management mainly includes the student award information input, the punishment management mainly includes the student punished information management.

The management of hardship allowance mainly includes the management of student loan, work-study program and poverty scholarship. Employment information management mainly includes: information management of recruitment companies and enterprises, recruitment post management , student resume management and student employment tracking management, etc.

B. System flow process

Each functional module has its prescribed process. This section will take the student archives management module as an example . The other modules have basically the same process and will not be described again. Student archives management mainly includes the personal information input system after the enrollment of students, and the maintenance and preservation of personal information during the period of students in school. First of all, the school will make the students’ basic information collection form and distribute it to the students in each class. The head teacher is responsible for collecting the students’ information collection form and submit it to the Teaching Affairs Office, which will sort out the collected information form and input it into the system. After the information is input into the system, students can log in the system to check their personal information. If the information is wrong, they can submit the personal information error report and modify the information to the system. The system administrator can update students’ personal information after obtaining the submitted information from the system. The system also provides the functions of student archives preservation and flow tracking, as shown in Figure 2.

C. System interface

This system mainly faces the university, in order to facilitate the staff and students to operate, will be around the friendly, intuitive goal and design, Figure 3 shows the login interface.

When the logon is legally authorized to log in to the system, the operation interface will be presented in a simple and convenient style, which is greatly convenient to use. Figure 4 shows the interface for the administrator to log in to the system

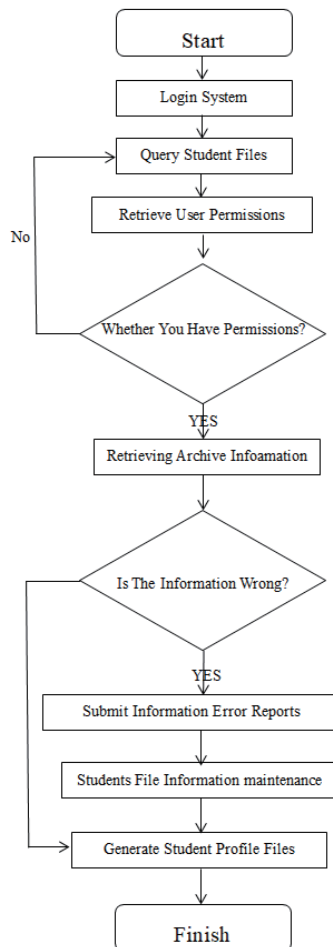


Figure 2: Student records management flow chart

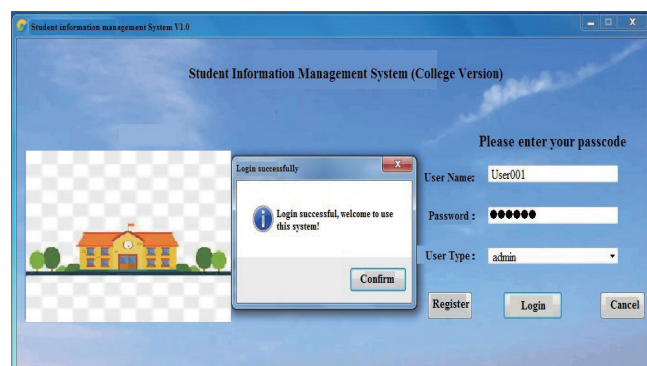


Figure 3: Stem login page

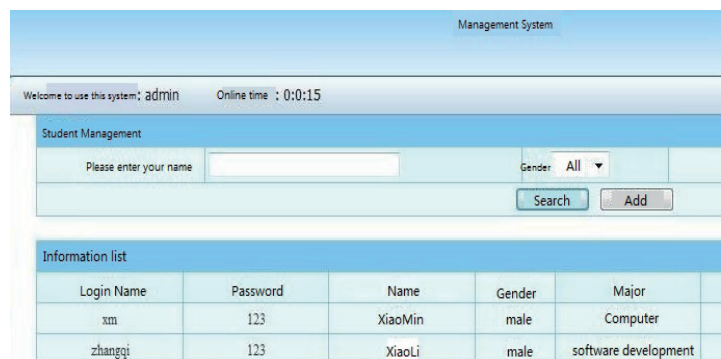


Figure 4: The function interface

IV. RESULTS AND DISCUSSION

After inviting professional computer programmers to try it out, and arranging leaders in charge of student affairs and 300 school students to test and discuss it, the new system has the following features, with detailed statistical results attached in Figure 4.

1. Technical feasibility

This system plans to develop on the basis of ASP.net and SQL Server mature development software by adding new technology. The

hardware requirements of this system are not very high, the system has technical feasibility.

2. Operation feasibility

The operation of this system is mainly the student information data input, modify, query and so on, therefore, this system has operational feasibility.

3. Social feasibility

This system is already exists on social optimization and upgrading of the information management system of university students, is to improve the shortcomings of the existing system, perfect the student information management system, this system development can not only after the student information management of universities , so that the students information management than before more human, intelligent, Jane jie, also can be applied to other universities and social, This system has social feasibility.

Statement	Mean Response	Interpretation	Rank
Technical feasibility	4.32	Good	6
Operation feasibility	4.36	Good	4
Social feasibility	4.43	Good	3
User-friendly	4.54	Excellent	1
handleability	4.51	Excellent	2
fluency	4.34	Good	5

Figure 5. Statistics on the trial of the new system

V. CONCLUSION AND RECOMMENDATION

In the design process of the system program, always around the actual needs of the system, respectively from the three perspectives of students , teachers, comprehensive management personnel for development and design. In the process of system design, combined with the original information education management system and the development trend of guangdong universities in the next few years, the system also reserved update interface, convenient for later updating according to the need, easy to maintain, considering the friendly interface of the system, the whole system adopts tree structure, easy to operate; Considering that the student work involves several departments, the system realizes the combination of different departments and resources sharing, which lays a foundation for the construction of digital campus in our school.

In the whole research process, the Information education management system has been systematically and scientifically researched, and the research results have certain theoretical and practical significance. However, there is still a long way to go in the research of information education management and teaching information management system construction. With the deepening and advancing of the student management reform in colleges and universities , the requirements for the perfection of the Information education management function also emerge in endlessly. Therefore, it is necessary to further deepen and expand the research of Information education management system with the reform of Information education management and the problems encountered in the actual operation of the system, so that the system meets the actual work needs of Information education management and improves the quality of Information education management.

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