Design and Implementation of College Graduate Departure Management System

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Abstract. The Spring Boot framework is adopted in the system development, and the requirements analysis, system design, system implementation and system testing are completed according to the software engineering development process. After testing, the completed system can meet the business needs of college graduates leaving school management, optimize the process and improve the work efficiency.

Keywords: College informatization; Departure management; Spring Boot framework

1 INTRODUCTION

The management of college students leaving school is an important work faced by every college every year. For a long time, this work has been managed by manual methods, and there are many problems, such as cumbersome process, poor information transmission, low efficiency, and long waiting time caused by centralized business management. With the development of the Internet, graduates in different places begin to use the Internet to publicize school leaving information. However, the school leaving management in different places establish their own websites and operate independently, so the information is not interoperable. People need to log in different websites or download the school leaving APP in the same place to understand the information, which is more complicated to operate[1]. As the country breaks down digital barriers, information about graduates leaving school is connecting[2]. And can leave messages and comments online, administrators can also update the school information online at any time, improve the utilization of people's time, but also increase the convenience of people's lives[3]. This system can help schools effectively solve the above problems. Graduates can monitor the progress of their school-leaving process throughout the whole process. For the relevant processes that do not require students to go to the site, the approval department can directly approve the online process, which improves the efficiency of graduates' school-leaving work and user satisfaction.

2   SYSTEM FUNCTION ANALYSIS

No matter what kind of operation a Java page performs, it can be done by a servlet, and the Java page will eventually be converted into a servlet page[4]. In the system, when it is necessary to add data, you can call the plug-in data to carry out the data update step of the database[5]. The MySQL database has rich security and permission management functions to help users protect the security of local data. Developers can also restrict users' access to and modification of data by setting user management permissions, access control and other methods to ensure the integrity and confidentiality of local data. A data processor based on an open source architecture that can be converted into SQL based on an open source architecture[6]. The MySQL database accesses data information by writing SQL[7]. In the continuous optimization of functions at the same time, the MySQL database in terms of performance is also constantly soaring, MySQL database storage space is very sufficient. MySQL database has a lot of security precautions to protect the security of system data[8].

This system mainly has three roles: administrator, teacher and student. Administrators can log in to the system for system management, file management, certificate management, card cancellation management, student card cancellation management, school application management, book lending management, accommodation information management, funding information management and league organization relationship management. Students can initiate an application to leave school, the teacher checks the information, and the administrator of each department can approve it. When designing the matching database, it needs to spend more time to think about it, and consider the problem should be comprehensive enough to avoid one-sided generalities and cause later code redundancy[9]. The specific functional module diagram of the system is shown in Figure 1.
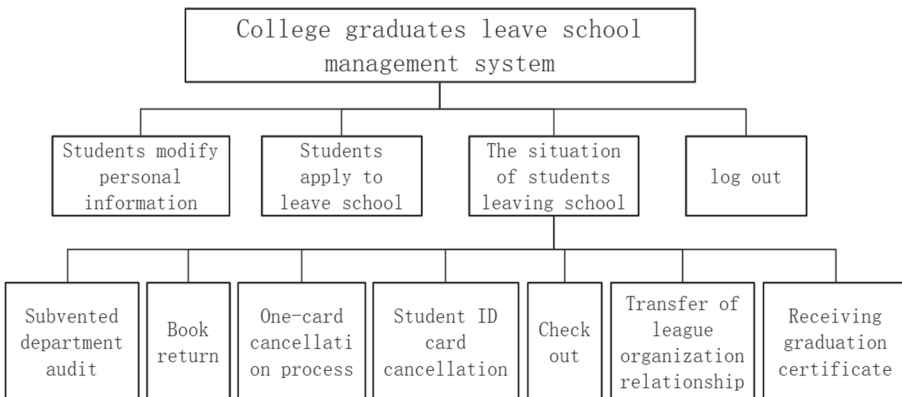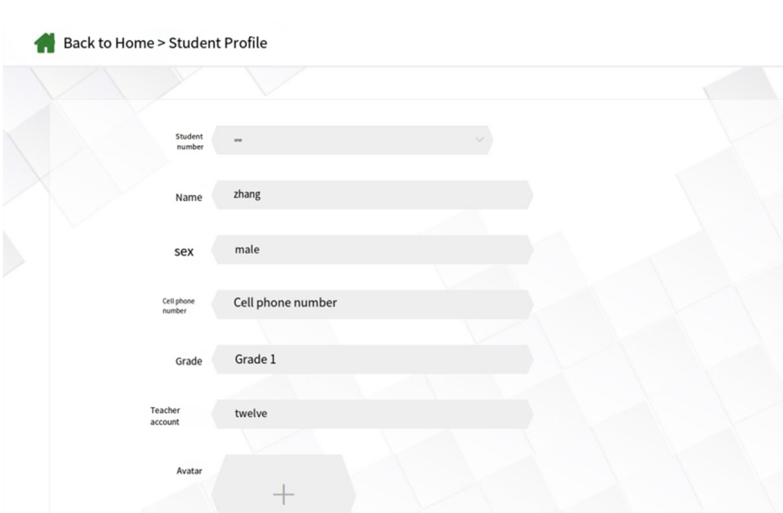

Fig. 1. System Specific Function Module Diagram

3 THE REALIZATION OF THE MAIN FUNCTIONAL MODULES

3.1 Graduates Modify Information Modules

After the successful login of the module, the graduates mainly check their basic information, and inform the teacher in time if they find any errors, and the teacher makes the final modification and check. The display diagram of graduate file management module is shown in Figure 2.

Fig. 2. Graduate File Management Module Display

3.2 Graduates Initiate the Exit Application Module

After the graduates confirm that their information is correct, they can click "Add" in "Leaving School Application" to initiate the leaving school application. The display diagram of the module for initiating the application for leaving school is shown in Figure 3.
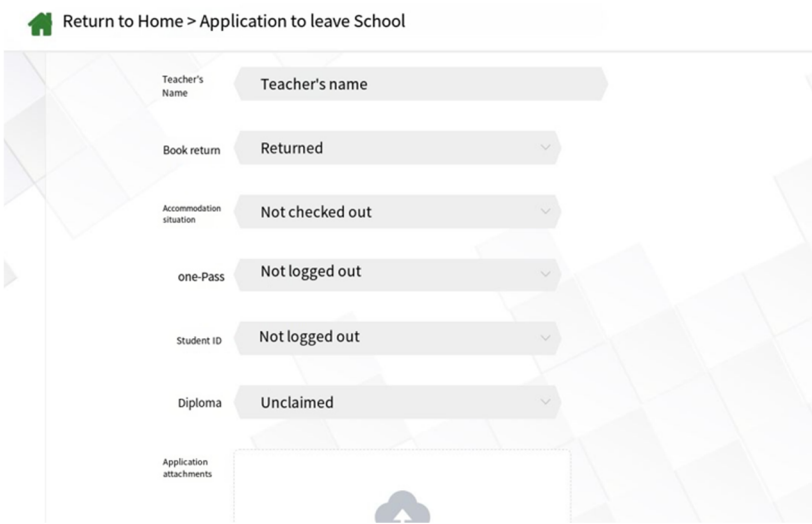
Fig. 3. Launch the Exit Application Module Display Chart

3.3   Graduate Management of School Leaving Link Module

The administrator checks the library borrowing, accommodation procedures, the cancellation of the card, the cancellation of the student card, the transfer of the league organization relationship and the receipt of the certificate of the graduates. After confirming that the application is correct, the application is reviewed and approved. At this point, it is deemed that the student's departure procedures have been completed. Students can check their departure module in time to check their departure progress. An overview of the application for leaving school is shown in Figure 4.
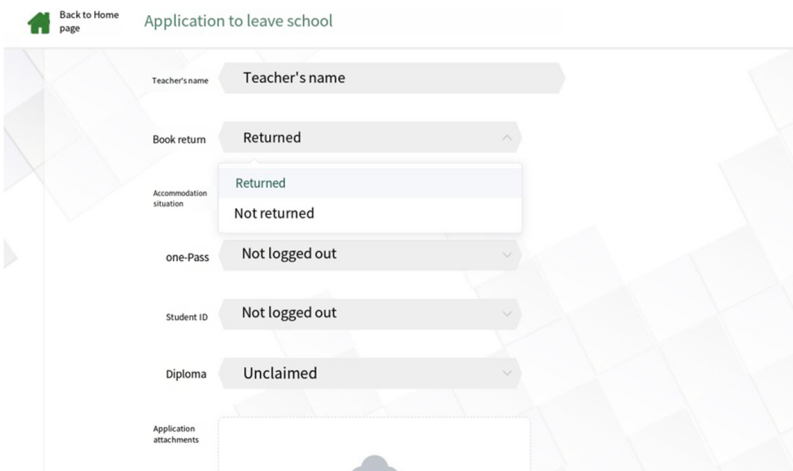

Fig. 4. Leave Application Processing Overview Map

3.4   Graduate Leaving Statistics Module

This module can check the certificate of the current graduates, that is, the number of graduates who have completed the leaving procedures, can count how many graduates have completed the leaving procedures, and can timely communicate and supervise the graduates who have not completed the leaving procedures. After successful login, the administrator can directly view the specific number of people. The statistical chart of school leavers is shown in Figure 5.
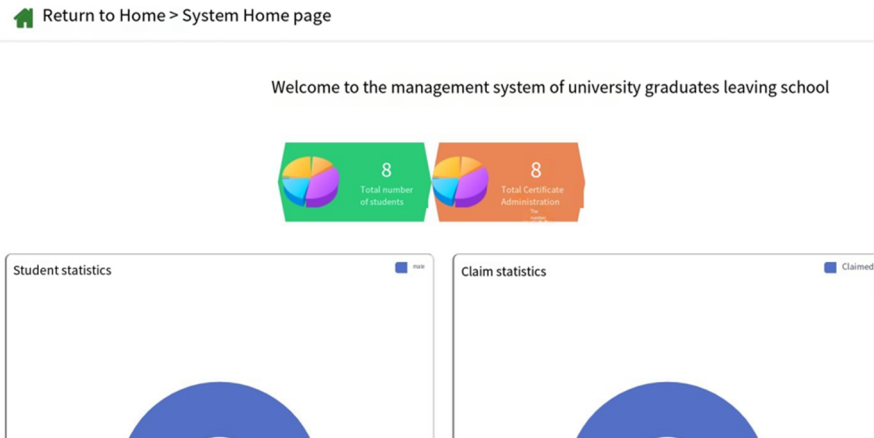

Fig. 5. School Leaving Statistics Chart

4   SUMMARIZATION AND PROSPECT

After the system design is completed, the last step is to conduct a comprehensive test on the system. Through the test, we can check whether the system design is complete and understand whether all functional modules of the system can be implemented normally. Once any problems are found, they can be repaired in time. And there will not be some big problems and loopholes affecting the use of users, so that users have a good operation and use experience, so that the designed system is a qualified, can better promote the software[10].

Spring Boot framework is used in the development of this system, and the design and implementation of the graduate leaving management system is completed. After the successful operation of the system, the school departure procedures can be handled anytime and anywhere, and the efficiency and accuracy of the school departure management can be improved, and the human cost and management risks can be reduced. Through this system, the management of college students leaving school can be more intelligent, convenient and safe, and greatly improve the efficiency of leaving school procedures.

In the era of rapid development of scientific and technological information, the management system of college graduates leaving school needs to be constantly explored, improved and developed to meet the ever-changing functional requirements and solve

possible problems. The system can be extended to alumni management, employment services and other fields to provide more comprehensive services for colleges and universities. And hope that the future can be achieved through the mobile phone!

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