Meet what you will meet——Club Communication Platform

社 团 交 流 平 台

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1. Project Background

As an important part of the university life, the clubs provide a platform for students to make friends according to their hobbies, which greatly enriches the after-school life in the university. In addition, different clubs often provide a variety of activities to let students relax in the fulfilling study life. Numerous clubs and activities require the participation of students and teachers in different roles. In order to effectively manage the internal personnel of the clubs, carry out the special activities of different clubs, and let different roles participate in the college clubs in an orderly manner, it is necessary to develop a club management system.

At present, most club management forms are traditional human management, but traditional management cannot achieve the purpose of real-time update of personnel data and active promotion of club activities. In order to facilitate different

objects on the campus to be more convenient to participate in related matters of the club, it is great to shift the focus on integrating community information with big data and software development technology. By constructing a community management system, it is convenient for different users to participate in it well.

2. Main Goals

- To comprehensively apply Object−Oriented, combine the content learned in *the system analysis and design* course with the aim of making reasonable plans for the system;
- Through the construction of the web framework, the community management system is realized to facilitate the use of different objects.
- To delimit the system and clarify every physical object during the design process;
- Achieve unification with the community management center and confirm the functions that need to be included

3. Main Functions and Characteristics

3.1 Functions Overviews

- The system can integrate data from various sources, as well as using appropriate models and methods to arrange, store, analyze and design the data;

- The system supports a variety of terminals, which is convenient for users to use this system on various terminals to participate in the community.

- Considering the shortcomings of the current community management, optimize the community management system to facilitate different users to participate in the related matters of the community:

    - Manage the club members and promote the club activities
    - Learn about different clubs and submit an application for club change
    - Participate in club activities and communicate with others online.

3.2 Characteristics Overviews

- This system adopts OO thinking (short for object-oriented thinking), including

    - Object-oriented Analysis
    - Object-oriented Design
    - Object-oriented Programming
- Based on users' experience, it is convenient for different users to quickly get started and design the system.

- The system is analyzed and processed with the help of UML and improved based on consideration of the user layer.

4. Expected Users and Key Usability Goals

- Students not participating in the club: Ordinary students can learn about the clubs in the school and recent activities through the club system, and can apply for clubs online according to their hobbies, screen eligible club activities and apply for participation, and conduct friendly communication through forums.
- Students participating in the club: On this basis, students participating in the club can learn about the contact information of the internal managers of the club, the recent activities within the club, and the tasks issued by the club.
- Club managers: Through the platform, they can easily manage the related matters of the club, including the review of applications for personnel changes, launching new activities, issuing notices and tasks, and managing personnel information.
- The teacher in charge of the club: manage the related matters of the club through the platform, including setting up the club manager and reviewing the activities of the club.
- Administrator: Deal with illegal users through platform review activities and related posts in the forum

5. Analysis of Existing Similar Products

- There is no existing system that directly faces the community communication, but only uses the community as an auxiliary function.
- Most community management systems are aimed at community management or internal members. The main function is to facilitate community management personnel to process and update member data and release activities for members. However, the system's large functions are not for ordinary members who have not participated in the community.
- The club management system improves the communication within the club and facilitates the students in the club to control the activity information, but it does not extend to the cooperation and development of activities on a certain theme between different clubs.
- Most club management systems focus on management, and there is no corresponding communication platform to meet the needs of students to make friends according to their hobbies or discuss activities with classmates from different clubs.

6. Novelty and Enhancements

- The system is open to all students, and the club can choose the target people according to the actual situation.
- Create a communication platform for registered members of the system to facilitate students' understanding of the internal information of the club and discussion of their hobbies.
- Improve the organization's activity mechanism. Event organizers can choose the main students to participate in according to the nature of the activity and

the number of participants.

7. Potential for Further Development

- Compared with traditional community management, the system can completely save community personnel data, and record personnel changes and information changes in real time, avoiding inconsistencies in the process of information iteration.
- Break the communication barriers between different associations, shorten the distance between associations, and promote the diversified development of association activities. Through the management system, association activities are not limited to the participation of internal members of the association to achieve the purpose of recruiting new members. The promotion of the event will be published through formal channels, increase the number of participants in the event, and further expand the influence of the community.
- After the function of the system forum is improved, the quality of club activities can be improved to meet the purpose of making friends with "hobbies". Further development can be combined with campus forum functions to expand the scale.

8. Project Challenges

- The private data of many students is stored in the community management system, and the data viewing permissions of different roles should be planned reasonably and the corresponding security control conditions should be increased to achieve the purpose of protection.
- Users should conduct rigorous verification and investigation when registering in the system to prevent outsiders from logging on to the system to announce fraudulent information and disclose information about club activities.
- Determine the system boundary and adopt appropriate technology for project development
- How to better communicate with commercial advertisements is a problem that the web development will face in the future

9. Related Technologies

- UML Modeling: Use the UML knowledge learned in the course to model, analyze and design the community management system
- Database system technology: Create a community management database system to save and provide the basic information of the community, the basic information and contact information of the community administrator and ordinary participating members.
- Front-end development and mobile App development technology: the system supports multi-terminal login, which is convenient for students who need the system at various times and places
- Front-end and back-end interaction: Reasonable interaction between front-end and back-end data can provide security protection for data

10. Project Experience

From this project, we can gain experiences as follows:

Project Management practice

Investigate the concept of the project system before developing the software, analyze the current market demand for the system, study the advantages and unfinished functions of other software in the same period, quickly master knowledge and business in other fields, and integrate software development with reality;

Technology knowledge acquirement

Learn knowledge about UML to model system software and standardize software development process standards;

Teamwork experience

Exercise team development skills, improve communication skills in docking work, and cultivate the ability of description and expression;

Survey   Learn   Cooperate