Design and Analysis of College's CPC-Building System Based on .NET Platform

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Abstract

In this paper, we accomplish the design and analysis of college's CPC-building system accordance with the characteristics of college's CPC-building work. By the means of analysis the CPC-building work specifically, we accomplish the framework and detailed design of system which establish the basis for realizing it based on .net platform.

Keywords: party affairs; College's CPC-building system; .NET platform

1. The purpose and significance of system

College's CPC-building work is an important activity of management and affairs within the party, it also the guarantee of implementing the party's basic line for the entire historical period of socialism. It plays an important position and role because it is the basic way to realize the party's leadership and the necessary condition for the existence and development of the party itself. The development and changes of era put forward new challenges and requirements for CPC-building work, so it must keep pace with the times and we must accomplish the work informationization.

CPC-building system is a typical application of management information system [1], its goal is collect inner-party information through the network, analysis and process, inquiry statistics and output flexibly. The system is the support and guarantee for the decision of leadership by the characteristics of optimizing the

manner of working, reducing labor intensity and improving work efficiency. College's CPC-building system can meet the demand of information management for party organizations at all levels, so it is a favourable tool to push the college's Party management forward informationalization and standardization.

College's CPC-building system manages all levels party members uniformly, it can be easily inputting, query, modification, transfer and delete. Correspond with the characteristic of student party members fluidity fast, the system should grasp the changes and transfer the situation of the party members' information at any time to provide comprehensive solutions for the party members' management. College's CPC-building work play prominent and important role in the construction of colleges because it is the guarantee for the party's leadership and the party's construction.

2. The research status in China and abroad

CPC-building system is one kind of E-government system. In general, E-government refers to the application of modern information and communication technology of government agencies which is used to integrate the management and service through the network technology. The object is to achieve the optimal reorganization of the government organization structure and working process, beyond the limitation of time, space and departmental separation. So as to strengthen the effective regulation of government operations, improve the efficiency of the work of the government, provide quality, standardized and transparent integration of management and service to the society in all aspects. Compared with the traditional government affairs, it is the application of modern electronic information technology and management theory, and it is the continuous innovation and improvement for traditional government affairs, so the high efficiency of government management and service can be realized [2].

In abroad, former US President Bill Clinton's initiated electronic government affairs as early as 1993. The next years, they injected a lot of money on the implementation of E-government to promote the rapid development of it. The early development of Chinese E-government [3] mainly manifested in two aspects: China formulated the planning of office automation and the development of the country since 1985; The Three Golden Project was started at the end of 1993's and the national informatization development compendium ninth five-year plan and 2010 documents were established by the leading group for information technology advancement under the State Council in 1996. Along with the progress of informatization in China, CPC-building of information research is also in full swing. In recent years, some provinces and cities including some cities and counties in the province party committee have constructed the electronic party affairs, such as constructing CPC-building web site, development and application in party affairs management software and the construction of electronic party affairs platform.

3. Development platform

3.1. NET Framework

The .NET Framework is the core and foundation of Microsoft .NET development. It provides the application execution environment to memory management and version control, and improves the reliability, expansibility and security of the application program. The .NET Framework includes two main parts: the Common Language Runtime environment and the Framework class library. The Framework class library contains ASP.NET, Enterprise Services, ADO.NET and Windows Forms [4].

3.2 XML

In a world which critical data stored in different heterogeneous sources, XML-eXtensible Markup Language provides a powerful mechanism for the data exchange between different applications and the integration between different system through a standard format. XML is a set of defined rules of semantic markup, these tags divide document into many parts and add identification for them. XML provides a standard, we can define our own new standard language according to the actual need by using it, and we can set special language code for the tags. Accurately, XML is a provenance standard language which formulate all kinds of standard setting language according to its rules [5] [6] [7]. In general, XML has characteristics of separation in content and form, good scalability, good cross-platform portability and good self descriptive [8].

4. System analysis

According to the Party's constitution, the Party's daily activities includes the following contents: Party members must be into the party's system of an organization, which is both the basic rights of party members and also the important responsibility of the party organization; The Party's organization life system which is to strengthen the management for party members, to criticize and supervise for party members plays pioneer exemplary role and is the guarantee of improving the Party's fighting capacity of an organization; Regularly report thought and work to the party organization system is one of the fine tradition of Chinese Party life, it is a way of working for the party organization understanding and mastering thoughts and condition of party members; Party members pay dues' system is the duty of party members to the party, and it also is the manifestation of the party member concerned about the party's cause; Democratic appraisal system is a basic system to strengthen the construction of the Party, it integrates party members' education with management and supervision according to the policy of governing party; Because the liquidity of party members in colleges is strong, transfer system of party organization relationship is the top priority in the system. The above function concrete analysis are as follows :

4.1 Daily management

Daily management includes organization-maintenance and personnel-maintenance. Organization-maintenance means that in the party organization relationship maintenance the higher party organization can add, delete and change the party organizations' information of lower level, the organization information includes the name, types, organization's dependency relationship, the day of set up, team members and phone number etc. Personnel maintenance refers to specific party organization can add, delete and change the information of the basic-level party organization's full member of the party, probationary party member, development object, activist and applicant, as we can clearly see in Fig.1.

Figure 1. the Maintenance Of organization and staff

Figure 2. The Party Management

4.2 The party management

According to the process of joining the Party, all the people want to be a member of the communist party of China must experience five stages which contain applicant, activists, development object, probationary party member and full member of the party. Specific process is as follows: the applicant apply->the applicant is identified as activist->educate and examine the activist-> recommend to be the development of object through the crowd and league organization optimal recommendation->the group determine the discussion for the development object-> political censorship for the development object-> focus on training of development object- >submit to the higher party organization for pre-qualification-> publicity->the higher party organization examine and approve-> educate and examine the probationary party member- >group discussed whether positive on schedule -> ask for the opinion on schedule->probationary party branch committee review on becoming a full member-> discussion -> the superior party committee examine and approve. The result of the analysis is Fig.2.

4.3 The party organization life

After be a full member of the party, all the people have been enrolled a branch, group

or other specific organization. The full member of the party should attend the organization life regularly or irregularly and report the thought and work to the party organization at the meeting. The party organization leader convey the party's principles, policies and the spirit at the meeting, carry out criticism and self-criticism in the party and play the role of management and supervision of party members. The organizational life mainly includes theme, types, time and place, as we can clearly see in Fig.3.

Figure 3. the Party organization life

Figure 4. the organization management

4.4 Thought report management

Party members should report individual learning and the work situation to the party organization regularly, that means they should give an account of perception and cognition for the party's line, principles and policies in the form of a written report for a period of time. In this system we can provide the function of uploading the electronic document, so the party members submit electronic thought report and the organizational leadership can check and add the opinion. The system also can give notice to the party members who do not report and submit thought report regularly. The result of the analysis is Fig.4.

4.5 Dues' management

The party constitution stipulates that if a party member do not to attend the party organization life for no good reason last six months or do not pay dues', it is considered to be given up. Pay dues' is the duty of every party member. However, failure to pay dues' is not a party intentionally but often due to busy work in many cases, therefore it is necessary for organizations to remind them. In addition, dues' management module should be able to store dues' pay and provide the function of dues' books online query. The party organization leader can comprehend and supervise the party members to perform personal obligations consciously real time by providing the dues' pay case query service of each branch and the party members'. The result of the analysis is Fig.5.

Figure 5. the Dues' management

Figure 6. Democratic appraisal

4.6 Democratic appraisal system

Democratic appraisal is an important measure to govern party strictly and enhance the party members' quality, and it is also an effective way to educate, manage and supervise for party members. Democratic appraisal work is usually under the leadership of party committees at higher levels, all the branches implement activities according to the steps in relatively concentrated time. The specific process of democratic appraisal in different branch will be different, but in general the implementation of the democratic appraisal steps usually has five phases :

learning and education-> self assessment-> review in party and non-party->investigation-> recognition and processing stage. According to the practice of party members the result is in the use case diagram as shown in Fig.6.

4.7 Organization relationship transfer

Due to personnel changes, go out learning, college graduates and other reasons, in order to grasp the change situation of organization members the system often need to record the relationship change of the party members. Organization relationship transfer management should be able to achieve the register of inputting and outputting, transfer confirmation and the printing of relations introduction. The result of the analysis is Fig.7.

Figure 7. organization relationship transfer

Figure 8. System module structure

5. The system design

5.1 Overall functional design

Designing the system function structure usually use the method of system decomposition and coordination. System decomposition refers to a complex system is decomposed into several modules. System coordination refers to the mutual coordination between the various modules according to the system's total structure, the goal of general function and the general requirements, and we can realize the overall optimization of the system based on local optimization and the internal balance coordination controlling.

Through the system analysis we can see that the job of each part of the party member management is the premise of the various phases and the result is clearly. Therefore the party member management information system is divided into the party member information management, the party organization information management, join the Party management, dues' management, relationship management and activity management using the method of functional division of the work. In addition the system also includes a support subsystem called system management. System function structure is shown in Fig.8.

5.2 Detailed module design

5.2.1 The party member information management

The party member information management includes the functions as follows: The system can input, modify and delete the basic information of the party members; The system can statistical query and print the basic information of the party members; The system can print the Party member list and the blank register.

5.2.2 The party organization information management

The party organization information management includes the functions as follows: The system must implement the function of adding, deleting and modification the information of party organizations; The system must implement the function of managing the information of current leading members and all previous leading members; The system must implement the function of printing the leading members, printing the party organizations, dynamic query and calculating the average age of all previous leading members

5.2.3 Join the Party management

Join the Party management includes the functions as follows: The system can

input, modify and delete the basic information of the applicant; The system can store, dynamic query and print the information of the applicant.

5.2.4 Dues' management

The Dues' management includes the functions as follows: The system must implement the function of adding, deleting and modification the condition of party membership dues; The system must implement the function of statistics, query and printing the condition of party membership dues; The system must implement the function of publishing the payment notice.

5.2.5 Relationship management

Relationship management includes the functions as follows: The system can realize the function of inputting and outputting the organization relationship transfer ; The system can realize the function of statistic and query the organization relationship transfer.

5.2.6 Activity management

Activity management includes the functions as follows: The system must implement the function of planning, adding and verifying the activity of the Party; The system must implement the function of adding, deleting and modifying the feelings and experiences of the party members; The system must implement the function of adding the democratic appraisal plan, inputting, adding, deleting and refreshing the appraisal information.

6. Conclusion

In summary, combined with the status quo of domestic electronic party affairs system of China, we protocol the technical proposal of the system on the basis of comparing and analyzing the technique and development methods. By investigation and analyzing the demand of the party, we build the entire system using the current mainstream information technology and method.

In order to facilitate different user has different permission, the system adopts role-based access control model. In the process of party affairs management system implementation, we realize that in order to ensure the implementation of the party affairs management system what we need is not only technology but also party affairs knowledge. At the same time, the construction of the party system still has two problems: Firstly the ideological understanding does not reach the designated position. For electronic party affairs healthy and continuous, the leadership, functional department and office worker must form the resultant force. The second is lacking of technical talents, especially the interdisciplinary talent who understand both information technology and party affairs. Facing the problems already exist in the construction of the party system, we must change the thinking and understanding and use unified department to lead the party system construction. Meanwhile we should accelerate the cultivation of the party affairs management talent, cultivate a large number of interdisciplinary talents who understand both information technology and party affairs.

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