

# How to statistics and manage the personal and intellectual property information in the office automation system

Biqing Li<sup>1, a</sup>, Zhao Li<sup>\*2, b</sup>

<sup>1</sup> College of Mechanical and Electronic Engineering, Hezhou university, Hezhou  
Guangxi 542899, China;

<sup>2</sup> Management Engineering Department, Guangxi vocational and technical college of  
communications, Liuzhou Guangxi 545000, China;  
<sup>a</sup>janliful@163.com, <sup>b</sup>229292710@qq.com

**Abstract:** This paper uses an object-oriented analysis, about personal directory management and intellectual property management of the development process office automation systems, some of the core operating processes and technology systems. In this paper, in order to study the personal directory management and intellectual property management Hezhou Technology Office Automation system of basic functions, based on the use of current popular B / S (browser / server) architecture and ASP.NET technology development, the use of Windows7 operating system, Visual2010 and Microsoft SQL Server2005 database as a development platform. Through a series of demands for the system analysis, design coding, testing and other operations, the system basically realized upload, download and delete functions personal directories; IP management IP data import, export, modify, statistics, delete function; test the system to achieve easy to understand interface rationalization, data show clear.

**Keywords:** VS 2010; SQL Server2005; B / S; ASP.NET

## 1. Analysis on the System Requirements

### Functional Requirements

The functional requirements of the personal directory management and intellectual property management under the office automation system are as follows.

#### (1) Personal directory management

Every users of the system can add their personal directories and upload their directory documents to the designated directories. The directory documents can be downloaded. But individuals cannot delete the directories or directory documents themselves, and only the office administrators have the authority.

#### (2) Intellectual property management

A large part of intellectual property management is to manage the registration data of intellectual property. It mainly involves the following functions:

Intellectual property import: to conveniently enquire, revise, count and export the intellectual property data in the future, it is necessary to import them into the corresponding

sheet in the database.

Intellectual property retrieval: as the quantity of intellectual property data is large, to rapidly find the data required by users, it is a must to provide the function of quickly retrieving and enquiring the relevant data.

Intellectual property editing: while importing the intellectual property data into the database, users may revise or delete some data, therefore, the function shall be provided.

Intellectual property statistics: if users want to know about the quantity of intellectual property application and authorization of a certain region in a certain period and provide the work efficiency, therefore, the function shall be enhanced.

Intellectual property export: if users want to export the intellectual property data in a certain period, therefore, the function shall be provided.

## **2. System Design**

### Detailed Design for the Personal Directory Management Module

#### (1) Add Personal Directories

Every users' new personal directory whose name are is repeated can be added in the corresponding table of the database in the system. The module is available for the registered users and system administrators.

#### (2) Change Personal Directories

The module is used to change the personal directory names. According to their requirements, users can change the names of their own personal directories. The module is available for the registered users and system administrators.

#### (3) Delete Personal Directories

If a user wants to delete a certain personal directory, he must submit his request to the office administrators but cannot delete it himself. The function is only accessible to the office administrators.

Module input: "Department", "Staff".

Module processing: the system firstly shall find the deleted directory according to the inquiry conditions set by a user and then display it on the list box below. When the user clicks "Delete", the system shall start a message box to ask the user whether to conform to delete the directory, only after getting the user's confirmation, the system can delete the directory record from the directory table and give the corresponding prompt that directory has been deleted successfully.

Module output: the system will give different prompts according to users' different settings.

#### (4) Upload Directory Documents to Corresponding Directories

If users want to upload directory documents to the designated directories, the module is required. The module is available to registered users and system administrators.

Module input: directory documents.

Module processing: the system displays a user's all directories in the list box of the page, when the user selects and clicks a directory, the system goes to the page of uploading the directory document. At this time when the user clicks the button of "Browse" on the page to select the document which needs to be uploaded, and then clicks the button of "Add Attachment", the system shall display the document which needs to be uploaded on the list

box below. Lastly, the user clicks the button of “Upload”, the system adds the document to the corresponding table in the database.

Module output: the system will give different prompts according to users’ different operations.

#### (5) Download Directory Documents

The users download the documents as required, the module is available to all the users.

Module input: select the directory documents.

Module processing: When the user clicks a certain directory, the system goes to a new page and displays all the directory documents under the directory. The user selects a directory document and clicks the button of “Download”. The system starts a dialogue box to let the user to select the download path for the directory document, and downloads the directory document to the designated position only after the path and clicks the button of “Confirm”.

Module output: the system will give different prompts according to users’ different operations.

#### (6) Delete Directory Documents

If a user wants to delete a certain personal directory, he must submit his request to the office administrators but cannot delete it himself. The function is only accessible to the office administrators

Module input: “Department”, “Staff”, and “Directory Name”.

Module processing: the system firstly shall find the deleted directory document according to the inquiry conditions set by a user and then display it on the list box below. When the user clicks “Delete”, the system shall start a message box to ask the user whether to conform to delete the directory, only after getting the user’s confirmation, the system can delete the directory document record from the directory document table and give the corresponding prompt that directory has been deleted successfully.

Module output: the system will give different prompts according to users’ different settings.

### **3. System Realization**

The system development is based on ASP.NET and with the B/S design model, the system development is to be completed in the Wind 7 system and ASP.NET platform, C# is used as the development language for ASP.NET, and SQL Server 2005 as the database.

#### 3.1 Logging-in Function Realization

The Logging-in module is the system portal, and logging-in is also the most commonly-used example that programmers are in contact with the user page.

Its process is: the system accepts a user’s logging-in request and finds the user from the database, if there is the user and the password is correct, the system records its authority, logs in the system according to the authority, and shows the corresponding authorization page, otherwise, the system prompts the user name or password is incorrect.

##### (1)The intellectual property data statistics

Its process is: after a user selects the month and year in the down-drop list, and the system lists all the eligible information below.

##### (2)Intellectual property inquiry

Its process is: after a user inputs the inquiry information (one or more, the more conditions there are, the more precise the result is) as the inquiry condition, and the system lists all the eligible information below.

### (3) Intellectual property editing

Its process is: the system firstly finds the eligible data according to the inquiry conditions set by a user and displays them on the list box of the page, and inputs the new value in the corresponding table and prompts that the record has been changed successfully after the user selects a list box to input the new value and selects "Save".

### (4) Intellectual property export

Its process is: after a user selects the month and year in the down-drop list on the page, and the system lists all the eligible information on the below list.

## 4. Conclusion

In the import function of intellectual property management, as the corresponding items and required ones are selected in the drop-draw list, the mouse cursor shall be put in the corresponding position of the required item to reduce the users' workload and then reduce the error probability.

This work is supported the following fund :

2016 The project of improving the basic ability of young teachers in Colleges and universities in Guangxi: "Design and development of electronic commerce platform of agricultural products based on Semantic Technology" (No, KY2016YB455).

2015 college students' innovative training program: "Research on the application of value added travel experience in the mobile terminal of the 'ethnic custom travel' in Guangxi" (No 201511838070); && "The design and development HeYuanTong Campus Mobile Phone APP based on Android" (No 201511838034).

2015 Teaching case project construction project of hezhou university: "Tourist positioning and guiding system project of Huangyao scenic"; && "Development and application of the information management system of 'Huang Yao Tong'".

Project of scientific research and technology development project of Hezhou: "Design and implementation of agricultural products e-commerce platform based on Semantic Technology" (No, Hekeneng 1506006)

Scientific research project of hezhou university: "Research and development of E-government platform based on mobile terminal" (No 2015ZZZK03);

Reform in Education project of hezhou university: "Internet of things" (No hzxytszy201501); "Research on application personnel training model of Communications for SMEs" (No hzxyjg201525);

Master degree discipline construction scientific research and Cultivation Project: "Research on the social work service of the teenagers' Network Addiction" (No 2015SHGZ005) && "Research on the intelligent development of rural tourism in Guangxi based on the Internet of things" (No 2015MTA16);

## 5. Reference

[1]. Zheng SQ, DZ; Qiang, Z ; Li, BQ. Design and Implementation of Supermarket

Personnel Management System Based On Java. In: Chen PZ, S, editor. 2nd International Conference on Education, Management and Computing Technology (ICEMCT); Tianjin, PEOPLES R CHINA: ATLANTIS PRESS; 2015. p. 1724-7.

[2].Li BG, WL; Zheng, SY ; Yue, XG. OPTIMISATION DESIGN OF CORN PRECISION SEEDER BASED ON MULTI-ROUTE AND MULTI-CHANNEL CONTROL[J]. JOURNAL OF THE BALKAN TRIBOLOGICAL ASSOCIATION. 2015,21(4A): 1215-23.

[3].Zheng SG, Weili; Li, Biqing;. Social Work in Teen Addiction Correction Services Research Under the New Situation. In: Wang JX, P, editor. 4th National Conference on Electrical, Electronics and Computer Engineering (NCEECE); Xian, PEOPLES R CHINA: ATLANTIS PRESS; 2016. p. 252-5.

[4].Zheng SG, WL ; Li, BQ. Digital Display Design of Ethnic Clothing of Nanling. In: Liang ZL, X, editor. 4th International Conference on Mechatronics, Materials, Chemistry and Computer Engineering (ICMMCCE); Xian, PEOPLES R CHINA: ATLANTIS PRESS; 2015. p. 2805-8.

[5].Shiyong Zheng WG, Jing Wang,Biqing Li,Deze QIN. Analysis of Internet of Things Talent Training and Curriculum System Innovation. 3th International Conference on Education,Management and Computing Technology; HangZhou,China: ATLANTIS PRESS; 2016. p. 957-60.