

Research and Design of School Document Management System

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ABSTRACT. *The main purpose of this paper is to study and design the school document management system, which is convenient for unified management of school documents. Campus document management has been an important task for colleges and universities, through which all kinds of documents can be sorted out and consulted. Now the computer is playing a more and more important role in management. Computer management documents can save a lot of financial and human resources, which is conducive to document induction and sorting.*

KEYWORDS: *document management, classification management, permission control*

1. Introduction

With the rapid development of information, scientific technology and computer technology have also continued to advance, and paper offices are getting farther away from people. Now, there are many school departments and the number of documents is increasing every day. Schools need to spend a lot of time every day to organize these documents. The workload of the document management center is also increasing, and it is very inconvenient for students and teachers to view various documents. The electronic management of school documents is necessary.

Previous school documents were all done by traditional methods, mainly relying on manual sorting, which has the problems of high labor intensity and low work efficiency [1-2]. A huge number of various documents are distributed on various computers, and many files cannot Sharing within the school [3], retrieving specific files from numerous files takes time and effort [4]. Furthermore, there is no unified standard and management in various departments of the school [5], to a large extent, these documents cannot be used effectively real value. With the continuous increase of school departments, these contradictions are more prominent, and the traditional management model has been unable to adapt to the new teaching management needs.

Faced with these problems, the use of advanced and reliable document management system can be solved. This makes it convenient for students and teachers to use these documents.

2. System module design

2.1 User management module

Users are divided into system super users, department administrators, teacher users and student users. There is only one super user in the system, he has all the rights, and the main role is to approve the department administrator user. The department administrator users have the authority to manage the teacher users and student users. They can not only manage and maintain teacher users, such as uploading files and modifying applications, but also view file information uploaded by all teacher users. Teacher users have the right to fill in the documents created by themselves and to query download rights. Student users only have query and download permissions.

2.2 Document management module

2.2.1 Document addition

This part is mainly for users to add document information. These information have verification rules. If the file information fails to be verified, the system will pop up an error information page for three seconds to prevent data submission. You can also upload files on this page. After users successfully add these verification rules, they will directly call back to the document list page.

2.2.2 Document list page

This part will display all the documents in the system through pagination, and will list all the information of the document, such as the document name, document format, document unit, document title, keywords, document author and document adding time. This document list page also has document download function, document content details, document modification, document deletion and other functions.

When the user clicks the name of the document he wants to view, he will jump to the page of changing the document content. When the user clicks the document he wants to download, the client will pop up the download page of changing the document. When the user clicks the modify button, the user will jump to the file modification page.

2.2.3 Document modification

This page is mainly for the document modification function. When users edit the document they want to modify, they will jump to the modification page of the modified file. The page has already displayed the file information in the text box. The corresponding information is displayed here. The user can easily modify the information. If the user does not modify it as required during the modification process, the system will also pop up an error warning to prevent submission. If the user successfully modified according to the requirements, he will return to the document list page.

2.3 Document upload module

Document uploading is the core function of this system, in which documents can be divided into private documents and public documents. The process of uploading private documents is relatively simple. Just click upload, then select the file to be uploaded and the target storage folder, without the need for review by the auditor. The public document upload process is more complicated. After the public document is uploaded, it is only temporarily stored in the temporary folder. After the document reviewer passes, the public document can be uploaded to the target folder. If the document reviewer fails to pass, the public document is temporarily deleted. The folder was removed and the document upload failed. There are also verification rules when uploading documents. The file types must be docx, rar, pdf, xlsx, txt, pptx, zip, doc, xls, and ppt. If the attachment does not meet this requirement, the system will prompt an error message and cannot upload.

3. System software design

3.1 Software structure design

The web foreground chooses bootstrap as the development framework. Bootstrap is based on HTML, CSS, JAVASCRIPT, its simple and flexible features greatly facilitate the development. The report system uses the Highchart library to display statistical results in a friendly manner. The background uses Servlet technology, runs in the Tomcat7.0 container, receives the HTTP request and responds. The database uses Mysql 6.0, and uses the MyBatis framework to implement data addition, deletion, modification, and checking through XML configuration.

3.2 Database data entity class design

User type: user ID, name, password, gender, role, group;

Document information class: document ID, file name, format, size, upload time, download times, update date, upload user ID (association);

Document classification information: document category ID, document category name, classification description, classification creation time;

Permission information class: permission ID, user ID (association), document ID (association);

Announcement information: announcement ID, announcement name, adding time, announcement source, announcement content.

4. Summary

The campus document management system designed in this paper solves the problem of low integration efficiency of traditional paper version documents. This system can realize the common use of multiple users and multiple roles. In addition, when logging in as a teacher, you can edit and modify private documents in the system. When logging in as a student, you can only view and search for documents. When logging in as a super administrator, you can set basic settings for the system. The campus document management system currently meets the needs of internal school personnel. In the future development, its functions can be further strengthened, and document sharing among multiple schools can also be achieved.

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