

Online file sharing system for industry and general user usage

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Abstract—

File sharing is one of the oldest applications of the internet. One way of sharing files online is for a user to upload files to a common space on the web and others users can download the files from the common web space.

The objective of this project was to design an online file sharing website where industry can upload files and other industry can download them and also useful for general user. To attain this objective an AJAX enabled interactive user interface involving features like versioning control, RSS syndication and extensive search capabilities was developed. To make the website more user friendly, users were given two space-constrained visualizations of their file system to view space occupied by the files and folders, and three AJAX based file management system that works like browsing files on a desktop computer with drag and drop, context menu functionalities

Index Terms — AJAX, File Sharing, RSS, Web space

I. INTRODUCTION

Online file sharing system is document management system. We are going to implement partial SAAS module. Here lots of new functionality will be added. Here separate company or groups will be involved. We will develop separate interface for each company, from there they can track their data.

Below is the list of new modules and new features which we are going to add in existing system.

- I. Separate Admin Panel for company - We have to create separate admin panel for each company. From this panel company can create registration for employee or customers. They can use bulk registration technique to create profile. Company admin can view only company's users and data. They can view only company documents usage. And how much space is utilized by company. Company can view customer list and can upload folder or files to particular user account. Company will decide user type like customer and/or employee
- II. Company Registration - Each company will register on this application, admin will receive notification and then admin will approve the company. Each company

will select their domain. And also they select the purpose for use like

- Employee only
- Customer only
- Employee and Customer only

We will show them terms and conditions. Registration is only from website. Only approved company will move to main database.

- III. Bulk User Registration - Assume there is one insurance company A, company client list is approximate 50 thousand. They will maintain list in excel file and import all list in from admin panel. After successful login of particular user, that register client will move to company user list. Each user will get one email with welcome link, after clicking on that link user will have 3 options to select. Company will decide user type like customer or employee.

a) Already Member/Registered user Will show only welcome message and user will accept or give access to company to view folder structure/share documents and folders with user.

b) Not on file sharing system – they accept or I am already an file sharing system user but I use a different email address

OK

They can use website to manage documents.

Or company must change the email address on their side

OK

c) Not interested to join - Only feedback will be captured from customer and we will generate report using this feedback.

- IV. Share from Website Front End (User Panel) - We would add share functionality in website also. Where user can share files to other users.

- V. Pricing - We will finalize on pricing as per your requirement, we are waiting for final structure. I think we should only show our pricing structure to user (company) on website, for this phase we will give plan binding to company from admin side. Means company and administrator manually decide which company need which plan. We can use PayPal to transfer money from company to file sharing system account.

- VI. Bulk File Upload - We can give separate upload for each user to company. Means any company admin can upload document to their employee and/or customer from admin panel.

We will give bulk upload using FTP[6], this facility is only for new company. When any company sign up we have to create new FTP manually, we will give them option to upload files to their own company basket, by program we will fetch documents from that folder and send to particular user. Assume if any company want to send salary slip to all 5,000 employees. Then Company administrator will create 5,000 PDF. He will rename each PDF by email id or customer id or employee id. He will upload all 5000 salary slip in given basket using FTP. Email is the unique ID in this case, how will he link a user based on customer ID or employee ID? Company must know email address of customer and then he can send any file using email address.

After that he will schedule job from admin website. Each job has separate name, date and time. After that time delivering of salary slip will start by our automatic window program .Need a bit more info here we are going to do one window service that is running on web server in background. Those services will continuously checking for work job from database. If they find any job in database then it will start transferring file from company basket to users.

We will create some category of document per company wise like salary slip, insurance payment receipt, appraisal letter etc. Can't we also provide simple API for upload if company decides to use API? We are searching on API; we will get back to you on this point, API means you want to develop an application which you want to install on our/user computer and use? Do you want to develop same like FTP software? Please explain so we can understand.

- VII Category Folders – Every time company will select particular category to upload documents. i.e. document will be send to selected users received folder. Not to particular folder.

II. RELATED WORK

AndriLareida,Thomas Bocek,Sebastian Golaszewski,, Christian L'uthold, Marc Weber [1] the related work simply shows the overall description about the existing working system. The existing system is working on the P2P-basedApproach. The advantages of this is to improve the accuracy of data sharing. The Disadvantages of this system it is costly.

Parziale, L., Britt, D.T., Davis, C., Forrester, J., Liu, W., Matthews,C., and Rosselot, N. [2] FTP or file transfer protocol is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet) [5]. The FTP server, running FTP server software, listens on the network for connection requests from other computers. The client computer, running FTP client software, initiates a connection to the

server. Once connected, the client can do a number of file manipulation operations such as uploading files to the server, download files from the server, rename or delete files on the server and so on [8]. Most of the browsers present now can act as a FTP client. Common FTP client software's are CuteFTP, SmartFTP and DirectFTP etc. FTP is a common standard for file sharing and is used by a lot of people today.

ZihuiGe, Daniel R. Figueiredo, SharadJaiswal, Jim Kurose, Don Towsley [3] P2P or Peer-to-Peer network is a type of network in which each workstation has equivalent capabilities and responsibilities. P2P file sharing network is usually used for sharing content files containing audio, video, data or anything in digital format and realtime data. BitTorrent is a famous peer-to-peer file distribution client application. P2P is best known for sharing files online and is more popular than the others methods available.

This online file sharing system is an AJAX enabled website [7]with a lot of cool features and is also veryinteractive. All the websites which serves the purpose of online file storage/sharing usually have a size limit to upload files and some have size limit to download files perhour due to space and bandwidth constraints.

III. COMPARISON

Performance

When a file is stored in the file system and direct access to the file is given, the time needed to download the file would surely be lesser than the time needed to download a file that is stored as in database.[4] But, if authentication is necessary before access to download is given, then the database is necessary for storing files. In that case both methods take almost the same time to download a file. while uploading a file to database or server, time taken to upload a file which is 3 MB or less takes almost the same time, since the timings recorded are in milliseconds. But for files which are 5 MB or more the server option seems to perform better. So, if files that are being stored are usually small, then both methods perform well. If the files stored are the like images that are used in the web site and are visible to all users, then the server option would perform better, because there is no need for any authentication and direct access to the file can be given while downloading. When searching a through a file, if the file is stored as a blob, full-text indexing of SQL Server can be used and the search would be faster since one query can be used to search the blob, file name, metadata etc. But if the file is stored in the server, then Microsoft's indexing service can be used to search the files, but the need to have two queries (one to search in database and another the file in server), and the time needed to combine the results of both queries would slower the search operation.

Maintenance

Taking backup of the uploaded files would be much easier if the files are stored indatabase, since it would happen in the process of taking regular backup, whereas if thefiles are stored in the file system, the backup has to be taken separately. Moreover thecopy of multiple files can be

stored in the database without coming up with some naming mechanism.

Integrity

When files are stored in database, the database's built-in referential integrity checking can be used to check the integrity of the files, whereas if the files are stored in the file system, then the integrity should be checked manually. Similarly when performing backup of the database, where files are stored in the file system and its location in the database, extra care should be taken to preserve integrity between the file and the associated database record.

Security

Files stored in database are more secure than files stored in file system. If users find the path of uploads directory, then they can try different names to get access to the files in that folder if there are no security restrictions for the folder. Anyway with the files stored in database users cannot do that. Moreover files stored in the database are isolated from the file system. Hence if the file system is cracked, it will not affect the files stored in database. If the files are stored in the file system then it could be a security risk. One way to overcome this risk is to store the files outside the document root of the web server.

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V. CONCLUSION

In this paper we discuss about various file sharing methods which are proposed by earlier researchers for the better development in the File sharing field. We have also noted their shortcomings. So to overcome these problems, the new file sharing can be developing which will improve accuracy as well as effectiveness.

An interactive file sharing website with very few page refreshes is implementing using ASP.NET and SQL Server 2008 as the back end. Users were given multiple views for viewing their file system. An analysis was done on where to store the uploaded files – database or file system.

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