

Secure Digital Documentation

Narendra. M. Jathe

Abstract—The present era, digital documentation support the life cycle management of document based information. These systems consist of variety of technologies. Digital Documentation functions include capture, storage, classification, indexing, versioning, maintenance, use, security, and retention of documents. The Document management system is focused primarily on the storage and retrieval of self-contained electronic data resources in the document form. Generally, the DMS is designed to help the organizations to manage the creation and flow of documents through the provision of a centralized repository. The workflow of the DMS encapsulates business rules and metadata. This paper is based on security purpose of document that's why firstly login account then started. Here folder is create, delete, store, upload and download. The files in all formats uploaded and also when download the file they ask for a public key which is available in account. In this paper there is sending files and encryption-decryption concept is use, while sending file from one user to another user. If we send a file and receiver receive the file at that time they ask for 3 different type of key i.e, Public Key, Private Key and Encrypted Cipher Text, that all keys are available in Access Keys folder. While entering the keys the file which is send by sender is open.

Index Terms — CSS, Decryption, ECM, ECMA, Encryption, private, public.

1 INTRODUCTION

DIGITAL documentation refers to multi-layered, multi-dimensional reality capture, its analysis, its many uses and its preservation. Key examples are the flagship Scottish Ten and Rae digital heritage projects. Digital documentation is a rapidly moving and highly technical field. Their partnerships across academia and the public sector enable them to stay current and allow others to benefit from their work. They work with Glasgow School of Art Digital Design Studio through their limited liability partnership (Centre for Digital Documentation and Visualization) and other academic partners across the UK and globally.

A digital document is a computer system (or set of computer programs) used to track and store electronic documents and images of paper documents. The term has some overlap with the concepts of content management systems. It is often viewed as a component of enterprise content management (ECM) system and related to digital asset management, documents imaging, workflow systems and records management systems. Documents are stored in a secure cloud and are perfectly safe, yet if you wish, you can easily download the whole account or individual files/folders to your hard-drive as often as you like for your local backup. All your data is triple backed up and bank-level encrypted in the cloud document management system where it's safely stored and is sent via secure SSL layer.

In this paper, there is compulsory to login account because there are number of documents store securely. Here all type of files and document stored in some folder and if want to send that file will send it by encryption-decryption concept. All the file send by user store in the inbox of receiver.

- Easily access all document stored in it.
- Sending document from one user to another user
- When sending a document encryption-decryption concept is use for security reason

3 TECHNOLOGY

Data Encryption and Decryption

Encryption is the process of translating plain text data (plaintext) into something that appears to be random and meaningless (cipher text). Decryption is the process of converting cipher text back to plaintext.

To encrypt more than a small amount of data, symmetric encryption is used. A symmetric key is used during both the encryption and decryption processes. To decrypt a particular piece of cipher text, the key that was used to encrypt the data must be used.

The goal of every encryption algorithm is to make it as difficult as possible to decrypt the generated cipher text without using the key. If a really good encryption algorithm is used, there is no technique significantly better than methodically trying every possible key. For such an algorithm, the longer the key, the more difficult it is to decrypt a piece of cipher text without possessing the key.

It is difficult to determine the quality of an encryption algorithm. Algorithms that look promising sometimes turn out to be very easy to break, given the proper attack. When selecting an encryption algorithm, it is a good idea to choose one that has been in use for several years and has successfully resisted all attacks.

4 PROPOSED MODULE

This application has the functionality embedded in a single module. This is the main module where all operations can be performed related to the folder. In addition it performed the concept of Encryption-Decryption.

Main module functionality:

1. Secured with specific id and password
2. New folder can be easily created and deleted with

2 PROPOSED SYSTEM

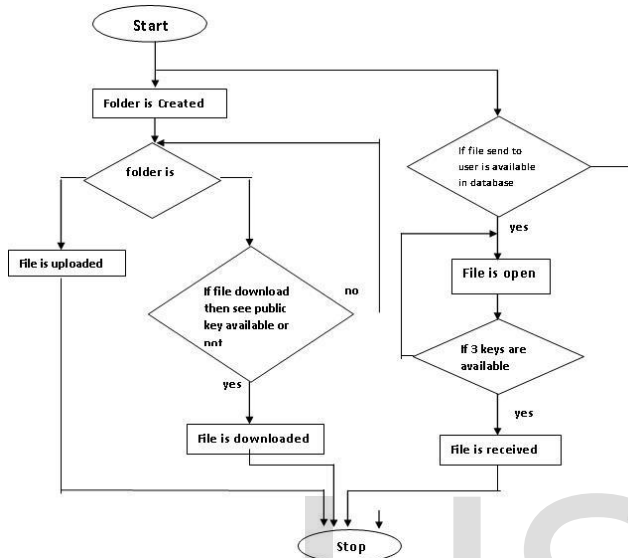
Proposed system performs the following functionality:

- Start with Login our account
- Create and delete a folder
- In this folder, document are upload, download and stored

icon.

3. User upload and also download files from folder
4. User send file to another user.
5. When receiver receive file that time they wanted public key, private key and encrypted cipher text which is available in access key
6. Easily log out after working

5 FLOW DIAGRAM



6 SOFTWARE SPECIFICATION

- **Adobe Dreamweaver CS6:**
Adobe Dreamweaver CS6 is a powerful and professional web editor which comes with a host of new design and development features.
- **XAMPP:**
XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages.

HTML(Hypertext markup language)

- HTML is the standard markup language for creating Web pages.
- HTML stands for Hyper Text Markup Language.
- HTML describes the structure of Web pages using markup.
- HTML elements are the building blocks of HTML pages.
- HTML elements are represented by tags.
- HTML tags label pieces of content such as "heading", "paragraph", "table", and soon.
- Browsers do not display the HTML tags, but use them to render the content of the page.
- All HTML documents must start with a document type declaration: <!DOCTYPEhtml>

CSS (Cascading styling sheet)

- CSS stands for Cascading Style Sheets

- CSS describes how HTML elements are to be displayed on screen, paper, or in other media.
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External Style Sheet are stored in CSS files. CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.
- The style definitions are normally saved in external .css files.
- With an external style sheet file, you can change the look of an entire website by changing just one file!

JavaScript

- JavaScript often abbreviated as JS, is a high-level, interpreted programming language that conforms to the ECMA Script specification. It is a programming language that is characterized as dynamic, weakly typed, prototype-based and multi-paradigm.
- Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web.[9]JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, [10] and major web browsers have a dedicated JavaScript engine to execute it.

PHP (Hypertext Preprocessor)

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use
- PHP files can contain text, HTML, CSS, JavaScript, and PHP code.
- PHP code are executed on the server, and the result is returned to the browser as plain HTML

Database

- phpMyAdmin can manage a whole MySQL server (needs a super-user) as well as a single database. To accomplish the latter you'll need a properly set up MySQL user who can read/write only the desired database. It's up to you to look up the appropriate part in the MySQL manual.
- browse and drop databases, tables, views, fields and indexes.
- create, copy, drop, rename and alter databases, tables, fields and indexes.
- maintenance server, databases and tables, with proposals on server configuration.

Bootstrap

- Bootstrap is free and open source front-end web framework. It contains HTML and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many earlier web frameworks, it concerns itself with front-end-development only.
- Bootstrap is a web framework that focuses on simplifying the development of informative web

pages (as opposed to web apps)

7 RESULTS

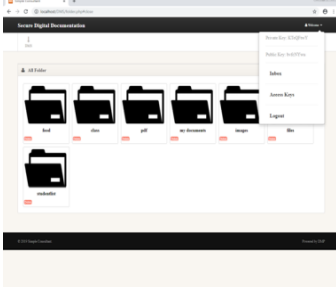
Homepage or Login



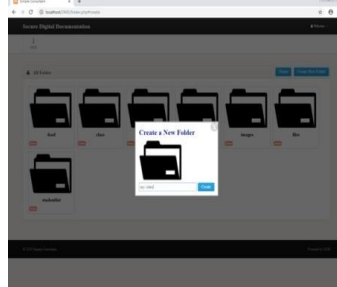
Registration page



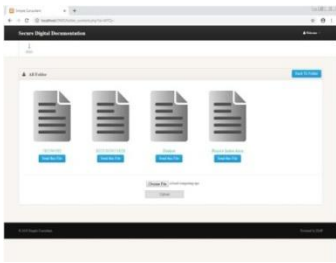
Welcome Page



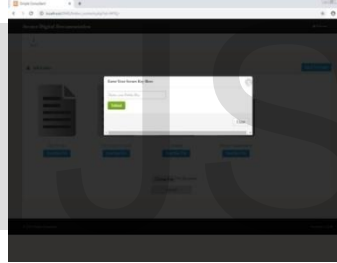
Create Folder



Upload Document



Download Document



Sending files



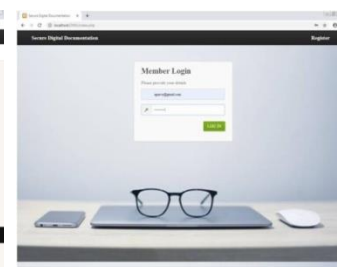
Delete Folder



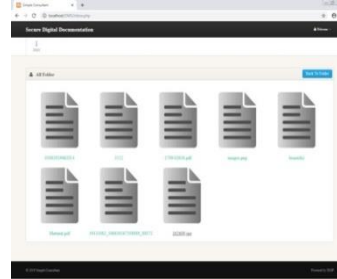
Logout



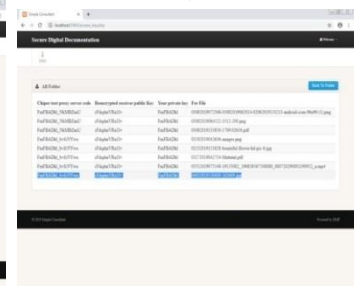
Another user



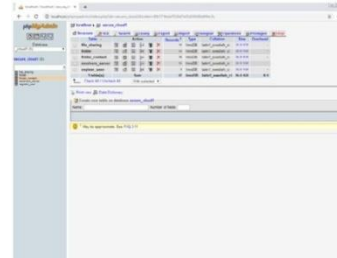
Inbox



Access Key



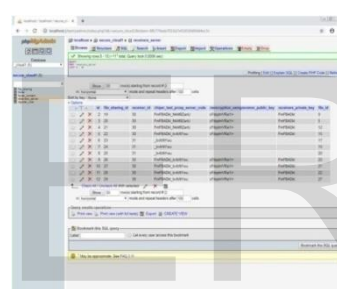
Database



Folder content



Receivers server



8 BENEFITS

- **Quick and Easy Access** – When dealing with any sort of paperwork or data, it's important to have quick, easy and efficient access to the information required. With digital document management, all aspects of finding and retrieving data are significantly improved.
- **Confidentiality** – All your information is stored in dedicated purpose built records centers. Each of our facilities operate a strict security policy.
- **Secure services** – Our delivery service guarantees complete peace of mind throughout the process with all items and all vehicles being tracked at all times.
- **Creation of a standard approach** – Ensuring that everyone is operating in the same way can often be difficult when dealing with a large of individuals, all of whom may prefer different methods of storing information.
- **Space Saving** – Creating the space needed to store large amounts of paper-based documentation can be an issue. Smaller businesses may be operating in restricted environments, whilst larger ones may be overwhelmed by the large amount of data they need to retain.

- **Reliable Backups** - It is a mandatory requirement to be able to produce original and readable copies of records and having a strong backup solution in place is important. Once your data has been digitised, you can easily create backup copies to store off-site. This also ensures that your business will survive any disaster.

9 LIMITATIONS

- Lack of space - paperwork can take up a significant amount of space, and this requirement will only get bigger as the number of document you accrue grows.
- Health Concerns - Although this is not a dollars-and-cents cost, digital file sharing means employees will be required to stare at computer screens for longer. Studies have shown that eye-strain can develop and vision can deteriorate.

10 FUTURE SCOPE

Digital Documentation will continue to embrace the cloud and mobile devices. As workforces continue to disperse, it will be critical that access to documents be simple and easy. Future document management systems will enable business both large and small to take control of information, ultimately helping user to work smarter, not harder.

11 CONCLUSION

Using this effectively within an organization ensures that data and knowledge is safe, accurate and accessible. With that comfort, employees feel more apt to reduce paper and rely on it. It is one important step to becoming a paperless office.

The features and benefits that come along with implementing a well- designed document management system can impact every part of an organization and ignoring them in today's competitive business climate is nothing short of irresponsible.

REFERENCES

- [1] Bruce Schneier: Applied Cryptography.
- [2] Ryannagelhout: Digital Era Encryption & Decryption.
- [3] Jon Duckett: Design and Build Websites
- [4] Criaggranell: The Essential Guide to CSS and HTML Web Design
- [5] Alexei white: JavaScript's Programmer's reference
- [6] Alen Forbes: The joy of PHP programming: A beginner's guide
- [7] Riwanto Meganarso: Step by step Bootstrap
- [8] Behrouz A Forouzan: "Data Communications and Networking", McGraw-Hill, 4th Edition
- [9] William Stallings, "Cryptography and network Security: Principles and Practice", Pearson Education/Prentice Hall, 5th Edition
- [10] N. Kumar and P. Chaudhary, "Performance evaluation of encryption/decryption mechanisms to enhance data security," Indian Journal of Science and Technology, vol. 9, no. 20, 2016.
- [11] Ratheesh V.R., Jogesh J., Jayamohan M., "A Visual Cryptographic Scheme For Owner Authentication Using Embedded Shares", Indian Journal of Computer Science and Engineering (IJCSE) Vol.5, No.5, Oct-Nov, 2014.[2]
- [12] Nayan A. Ardak, "Visual Cryptography Scheme for Privacy Protection", (IJCSIT) International Journal of Computer Science and

Information Technologies, Vol. 5 (2), 2014.[3]

- [13] Praveen Kumar. P, "User Authentication using Visual Cryptography", 2015 International Conference on Control, Communication & Computing India (ICCC), 19-21 Nov, 2015
- [14] Mona Sabry, Mohamed Hashem, Taymoor Nazmy, "A DNA and Amino Acids- Based Implementation of Play fair Cipher", International Journal of Computer Science and Information Security, Vol. 8, No. 3, 2010
- [15] Web Reference: <https://www.w3schools.com>

-
- Narendra M. Jathe, Assistant Professor, Department of Computer Science, Smt. Narsamma Arts, Commerce and Science College, Amravati Maharashtra (India) PH- +91 9422914960. E-mail: njathe@gmail.com