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MOBILE TO WEB CROSS LOGIN AND FILE TRANSMIT USING QR CODE

[1]M Mercy, [2]Akash K, [3]Purushothaman D V, [4]Kirubakaran V V

[1]Assitant Professor, [2]Student, [3]Student, [4]Student

[1 2 3 4]Department of Information Technology ,

[1]Anand Institute Of Higher Technology, Chennai, India

Abstract: People are afraid to share their contact information with others. In case If the public wants a hard copy of the document stored on a drive or in the cloud, they need to visit the nearest stationery shop. The public needs to share their documents with the shopkeeper via email or WhatsApp, where their contact details get exposed. This project, if done well, will help the customer share their documents with the shopkeeper without knowing or saving their shopkeeper's mobile numbers, which leads to not sharing their contact details. The project objective is to create a complete and working piece of software or application to share the documents with the shopkeeper by initially scanning the QR code.

I. INTRODUCTION

The development of technology has made people face many cyber problems. One of them is sharing their contact details so people can share the soft copy of the document and get their hard copies of the required documents without their knowledge or in emergency situations. When the contact details of both the customer (general) and the shopper are shared with each other, people should share their soft copy with the shopper through email or WhatsApp to get the hard copy of the required documents. To overcome this problem, the customer needs to scan the QR code with the help of the QR code scanner on their mobile. The QR code takes the customer to the website, where the web interface asks for the unique code provided to the store, and the unique code is displayed along with the QR code. After entering the unique code, it will lead to a web page displaying the service provided by the shopper. Some of the services provided by the shopper are: [1] File Upload [2] Bill [3] Payments. To get a hard copy of the customer document, they need to select the "Upload file" option to share the document with the shopper. A website is created with a database or cloud running in the background. Each store will be provided with some storage space reserved for the customer to upload their document. At the shopper's end, the files will be retrieved from the database or cloud to print the document. The files are stored on a timed basis, which makes it easy for the shopper to access and print them. The files are stored in reverse chronological order, so the latest file will be displayed first. The files uploaded by the various customers will be deleted automatically after 24 hours from the storage space, which helps the shopper not get confused with the unwanted documents.

II. LITERATURE SURVEY

Zhang Heng.et.al. [1] The author proposed a system that a multiple transmission strategy to ameliorate the success rate of transmission of file, and designs experimental analysis to corroborate them. The experimental results show that the accurate and fast transmission of large files can be achieved by opting the applicable QR code capacity and adopting the applicable multiple transmission strategy.

Ramesh Velumani.et.al. [2] For the secure transfer of QR codes as numerous shares and their reconstruction with a regularised Super Resolution Convolutional Neural Network (SRCNN), the author presented a secret-sharing strategy based on Nonnegative Matrix Factorization (NMF). This plan offers an alternative to the current polynomial- and visual-based NMF is used in part-based data representation techniques, while structural regularised SRCNN is used to capture the structural components of the QR code in the super-resolved image. Theoretical analysis and practical findings support the idea that the suggested approach might be used to secure the exchange of QR codes with various levels of error correction. The difficulty of conducting security attacks to locate and decode the hidden QR code is used to assess the proposed method's security.

Simon Soele Madson.et.al. [3] The author suggested a method that would retrofit existing medium- and large-sized buildings with IoT sensor networks to give energy management capabilities in an affordable manner. It was created an IoT network autoconfiguration platform for managing building energy. To effectively manage location and device-related metadata,a database using dynamic QR codes was created. Furthermore, we discuss the potential and shortcomings of different sensor gateway pairing strategies that are applicable to an auto-configuring system. Lastly, we share our implementation of these concepts and demonstrate their use in a medium-sized building case study. The results show a trade-off between optimal configuration and total configuration time with a focus on the quality of the communication signal strength. The proposal provided the necessary automation for a costeffective energy management system that can be deployed in both new constructions and existing buildings.

D. Beulah Pretty.et.al. [4] The author proposed a system that has an android mobile application is developed through which ticket for local trains can be bought online. It consists of the travel details and a QR code (Quick Response).

Ashish Guwalani, Surbhi Singh & Manali Chandnani.et.al. [5] The author proposed a system that the customer can place his order by scanning QR code of products and a smart trolley will automatically collect products from their respective place, after that customer will pay bill at billing counter and collect his products. This simple optimization method was given to design and enable the shopping system to run on smart phones, with the help of QR code generation and recognition technology.

Nikita Dongre , Priyanka Giri , Diksha Hinge , Ankita Kashid & Pavan Sharma.et.al. [6] The author suggested a system that may display accurate and real-time shopping destinations, assisting malls in more precisely and scientifically mining user data. In our paper, we're going to use QR codes for every product using QR code generator. When a customer is out shopping and decides to buy a product, he will pass it by and scan the QR code of the product using a QR code scanner on an Android device to get a list of all the comparable products in that range as well as any offers and discounts related to that product. Searching and sorting algorithms is used..

Nilima Jichkar & Aishwarya Deulkar.et.al. [7] The solution that the author proposes uses a QR code, a sort of matrix barcode that has gained popularity outside of the automobile industry due to its quick readability and larger storage capacity than conventional Universal Product Code (UPC) barcodes. The electronic transformation of pictures of text using optical character recognition (OCR)machine-encoded text from written or printed text.This work takes into account QR codes and OCR. At the front end, an Android application is created with which traffic police can scan a QR code or a number plate using a QR code scanner or an OCR scanner on the officer's phone, respectively. All the information about the owner of the vehicle will be displayed on the phone, and an EChallan will be generated and sent to the owner of the vehicle via SMS.Song.

Wan & Guozheng Yang.et.al. [8] The author presented a system dubbed the VSSQR scheme, which can significantly increase the security of QR code payments, based on a novel technique for visual secret sharing (VSS) and QR code fusion. The backdrop security anti-counterfeiting application and other factors resulting from various application scenarios For QR code payment authentication, the potential security anti-counterfeit application are displayed. The two applications' fundamental concepts can be summarised as follows. First, using the VSSQR scheme and an original secret image, two QR code shares containing the merchant's information can be created. Second, by stacking two QR code shares to get the original data, the hidden image can be exposed. Finally, the validity of a QR code sharing used for payment can be determined by examining whether the stacking result matches the original secret image or not.

Robinson Situmorang & Jhoni Lagun Siang.et.al. [9] According to the system put out by the author, the goal of this study is to create collaborative learning resources based on QR Codes to aid in learning. This is appropriate for use in individual learning. The research and development technique was employed. Testing expertise for learning design, media, and materials comes first in the product testing phase. The product was then evaluated with a variety of students, including three students for an evaluation in oneon-one interaction, eight students for an evaluation in a small group setting, and twenty students for an evaluation in the field. The findings of this study demonstrated the high value of specialists in learning design, media, and content.

Athma B Nath & Titto Varghese.et.al. [10] The author put forth a system in which QR codes—quick response codes—replace traditional methods of reading, entertainment, marketing, education, and many other things. QR codes are an emerging technology that can be used in many different disciplines. Print material now frequently includes QR codes, which helps it get beyond the format's constraints. Acting as a link between the physical and digital worlds.In order to provide supplemental information, amusement, reading assistance, audio-visual content, interactive features, etc., QR codes have now been incorporated into a variety of print-based items. The study focuses on how readers use this technology and how gender differences in usage affect reader behaviour. The study will also examine the variables that affect the use of this technology as well as the variables that discourage readers from using it.

Jimil Shah & Rushikesh Sonawane.et.al. [11] An open source idea validation framework that uses two-factor authentication by combining a secret key and a camera-equipped cell phone, serving as a verification token, was proposed by the author as a system that the work contributes to in terms of design and usage of an inventive secure verification technique that uses a QR code. The sensitive information stored and transferred using QR codes is scrambled, making them extremely secure yet also convenient to use and reasonably priced.

Adarsh Singh.et.al. [12] Because libraries continue to be the main source of knowledge for thousands of people even today, the author recommended a system for the advancement of library technologies. The project's goal is to provide an intuitive and straightforward system for using QR codes to manage libraries. The majority of currently in use library management systems either demand a lot of finance and resources, or substantial quantities of human labour and supervision. A portion of the human labour that would otherwise be necessary is reduced by this QR code management system, which scarcely uses any money or other resources.Users of the libraries can directly access one application that powers this management system. Users can issue, return, and manage books using the programme with little to no help from employees thanks to the QR code feature. This system will streamline library operations, keep track of all documents, and increase user accessibility to the library.

ZHAO Guang-hui, KANG Yan-ping.et.al. [13] The author presented a system that consists mostly of hardware and software and is an electric two-wheeled vehicle charging management device based on STM32 single-chip and two-dimensional code payment. The STM32F103RCT6 main controller and the power supply circuit make up the bulk of the hardware.Mutual inductance and the control circuit for the power supply. The main operations of the two-dimensional code payment electric two-wheeled charging pile are realised using the current detecting circuit, the two-dimensional code scanning circuit, etc.The software component, which includes the main programme, scan code payment programme, power supply control programme, current detection programme, and others, is created using MDK Version 5 programming software and the C language. The primary functions made possible by the design are the ability to power an electric two-wheeled vehicle charger, as well as the charging management device's overload detection, no-load detection, timed charging, and ability to start charging by using the twodimensional code on the charging device that is used for Alipay or WeChat scanning in order to complete the transaction.

III. EXISTING SYSTEM

The current system is that the customer needs to ask for the contact details of the shopkeeper to share the documents in order to get a hard copy of the shared documents. However, this method will expose the contact details and information of both the customer and the shopkeeper. The shopkeeper will get confused with a lot of files that are shared by the various customers. The disadvantage of the existing system is that the contact details got exposed, which has the possibility of being misused.

IV. PROPOSED SYSTEM

This proposed system overcomes the disadvantages of the existing system, namely that the customer needs to scan the QR code with the help of the QR code scanner on their mobile. The QR code takes the customer to the website, where the web interface asks for the unique code provided to the store, and the unique code is displayed along with the QR code. After entering the unique code, it will lead to a web page displaying the service provided by the shopper. Some of the services provided by the shopper are: [1] File Transfer [2] Bill [3] Payments. To get a hard copy of the customer document, they need to select the "Upload file" option to share the document with the shopper. A website is created with a database running in the background. Each store has some storage space reserved for the customer to upload their document. The files are stored on a timed basis, which makes it easy for the shopper to access and print them. The files uploaded by the various customers will be deleted automatically after 24 hours from the storage space, which helps the shopper not get confused with the unwanted documents. This application or software is not only developed for a single store; it is developed by an individual or an organisation and maintained by an administrator. This application or software service is available at the store only when the shopkeeper requests it. Then the administrator contacts the shopper and provides the service to the shopper. By developing this idea, a file can be shared with unknown people without revealing their contact details to each other. The uploaded file will be stored in the Firebase Realtime Database by Google, which is running in the background to store the file, and the file in the database will be retrieved using the API key at the shopper's end to print the document.

Features

- The reverse chronological order is used to list the latest file at the top in order to avoid confusion over the various files uploaded by the various customers.
- In order to ensure the security of the files uploaded by the various customers, the RSA algorithm is used to provide end-toend encryption.
- The customer's information will not be exposed to strangers.

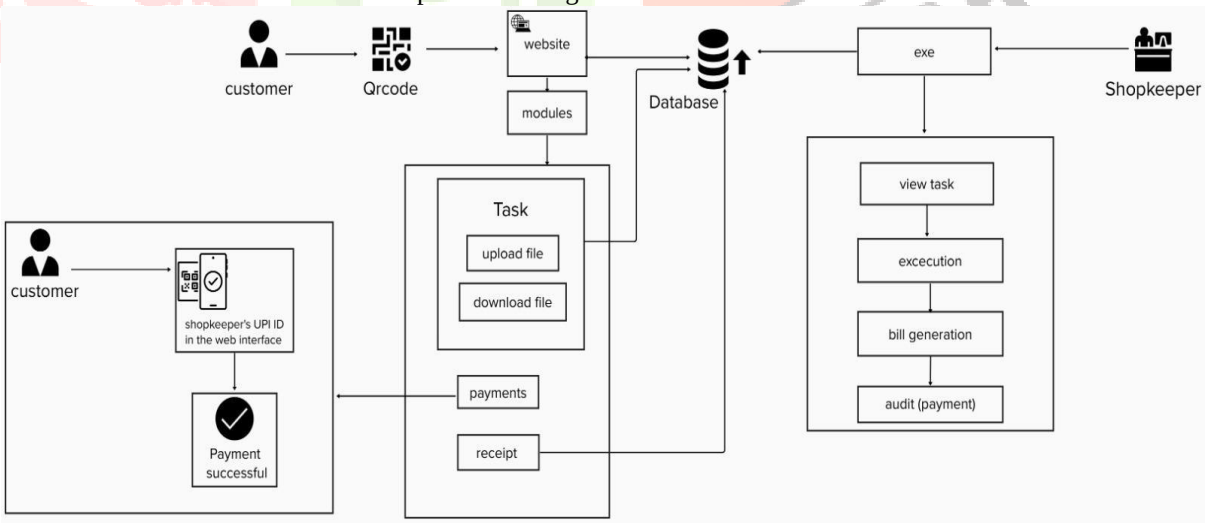

Fig. 1 : Overall System Architecture of the proposed system

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IV. RESULTS AND DISCUSSION

The modules have been implemented and evaluated. Along with the screenshots, the findings are addressed. At first, the user needs to scan the QR code placed in the shop. After scanning the QR code, the customer will be redirected to the website. Fig. 2 shows how the web interface will be. The web interface will ask for the shop's unique code for further processing. Then the customer needs to upload the file. Fig. 3 shows the file upload page. Fig. 3 shows the multiple files that are ready to upload and will be stored in the database or cloud, and Fig. 4 shows how the screen will be displayed after the file is uploaded.

Fig 2 : Web Interface

Fig 3 : Multiple files to Upload

Fig 4 : Uploaded Successfully

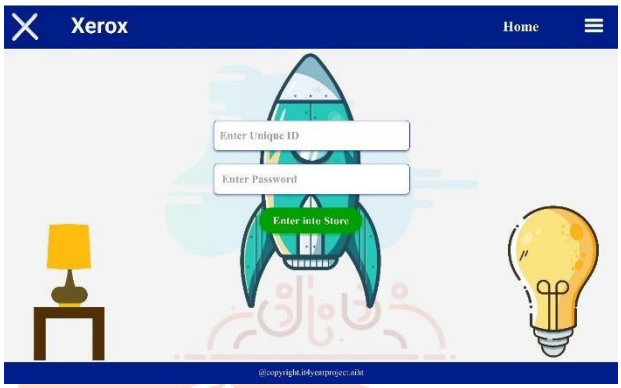

Fig 5 : Shopkeeper's Interface

Fig. 5 shows the homepage or interface of the shopkeeper in the shop, and the shopper needs to enter the login credentials for further processing. Fig. 6 shows how the interface will look after entering the shoppers homepage and also shows how to search the file uploaded in the cloud or database. Fig. 7 shows the multiple files retrieved from the database and ready to print.

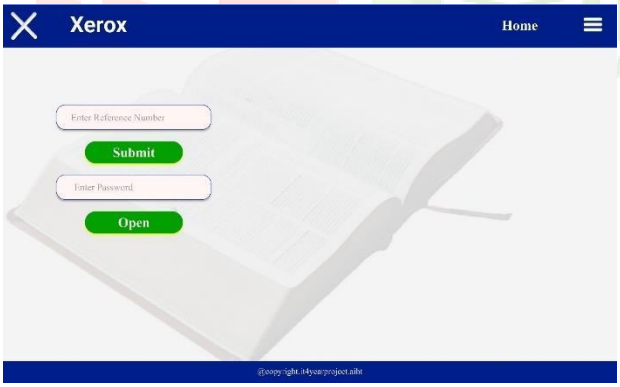

Fig 6 : Search for the file

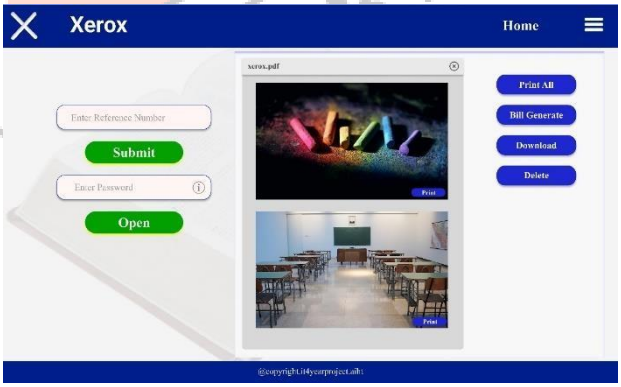

Fig 7 : Multiple Files to Print

V. CONCLUSION

This project was successfully implemented to share the files to be printed with the unknown or stranger stationery shopkeeper without exposing their contact details. The uploaded files in the database will be deleted automatically after 24 hours from the upload time, whether they are downloaded by the shopkeeper or not. It is also successfully implemented for the shopkeeper's easy maintenance of the files stored in the database. It also ensures the privacy, security, and confidentiality of the customer's file uploaded in the database, which can be misused in the event of a data breach in the database by intruders.

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