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IDENTITY QR

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ABSTRACT: License, Insurance Certificate, RC Book, Pollution Certificate all these things are required for every individual so that we need to submit these documents when it is needed. So, we decided to create the QR-Code and dump all these in QR code so that whenever we need to access these, we can do it in an easier way.
We are living in a world where everything is digitalized to keep the human effort to minimum. In such a world we are still using the hard copies of RC book, Pollution certificate etc. By carrying these there may be a possibility of damage to the certificate and we may not carry them with us sometimes.
Authenticating these proofs by a traffic police may take some time and sometimes we may be in a hurry. In order to simplify this problem, we are proposing a solution which is to store the soft copies of all the required documents in a QR. By providing a QR which contains all the required documents we can easily carry them and it is to use them when it is needed.

KEYWORDS: QR code, Documents, Website, Traffic Police, Citizens.

INTRODUCTION

In order to simplify this problem, we are proposing a solution which is to store the soft copies of all the required documents in a QR. By providing a QR which contains all the required documents we can easily carry them and it is to use them when it is needed.

EXISTING SYSTEM

Traffic police checking every Individual's hard copies

PROBLEMS OF THE EXISTING SYSTEM

- E Challan is a pretty good idea but not that active these years because as per statistics total backed data is more than paid back and pending data is more as compared to paid.
- Traffic Police Checking every individual data takes much time.
- Others Waiting till the person In Front of him get checked
- May be the person who caught can be in emergency.

PROPOSED SYSTEM

BENEFITS OF THE PROPOSED SYSTEM

- People need not to carry their license along with them. So, they are no need to pay traffic fines.
- People are mandatory to use Helmet, so there is no risk to their lives.
- The checking status of the license and additional certificates become easy.
- If there is any damage to the QR, then there is chance for immediate replacement. And also available in internet.

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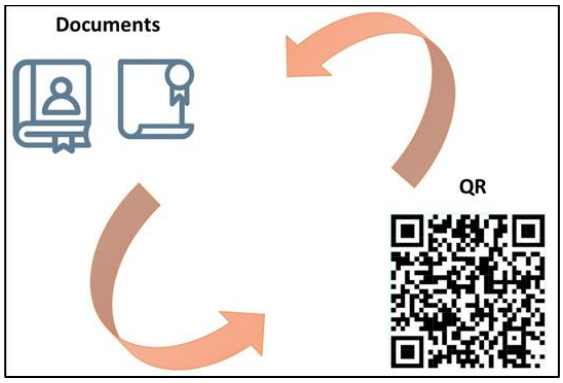
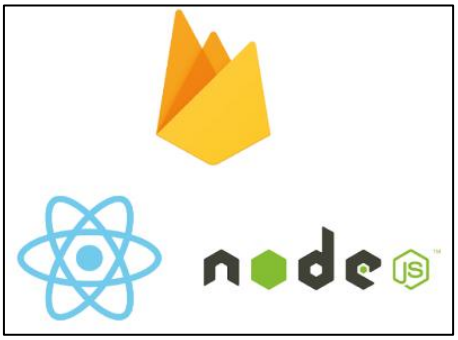


METHODS

Software Requirements: Front-End: React JS, Back-End: Node JS and Fire Base. Windows 10 or windows 8.
Hardware Requirements: Computer or Laptop, 32- or 64-bit operating system, x-64-bit processor, 4 or 8 GB RAM, Processor: Intel i3 or i5 or i7.



LITERATURE SURVEY

Md. Salahuddin Ahamed Software Team Lead A Secure QR Code System for Sharing Personal Confidential Information [1] Securing and hiding personal confidential information has become a challenge in these modern days. Due to the lack of security and confidentiality, forgery of confidential information can cause a big margin loss to a person. Personal confidential information needs to be securely shared and hidden with the expected recipient and he should be able to verify the information by checking its authenticity. QR codes are being used increasingly to share data for different purposes. In information communication, QR code is important because of its high data capacity. However, most existing QR code systems use insecure data format and encryption is rarely used. A user can use Secure QR Code (SQRC) technology to keep information secured and hidden. In this paper, we propose a novel SQRC system which will allow sharing authentic personal confidential information by means of QR code verification using RSA digital signature algorithm and also allow authorizing the information by means of QR code validation using RSA public key cryptographic algorithm. We implemented the proposed SQRC system and showed that the system is effective for sharing personal confidential information securely.

Lucas F. Freitas Data Validation System Using QR Code and Meaningless Reversible Degradation [2] QR Codes are used as information channel on several cryptographic architectures due to their technical properties, such as data capacity and retrieval reliability. This paper presents a novel string data validation system using QR Codes and meaningless reversible degradation. The proposed scheme exploits reversible degradation properties, using the systematic Berlekamp Reed-Solomon error correction algorithm QR and the Code. This new mechanism encodes up to 388 characters in two information channels: a dynamic version QR Code (channel 1) and a wireless network (channel 2). A byte mode QR Code stores partial corrupted and masked data input bits. Its version size varies between 1 and 11 according the stored data quantity. The wireless channel downloads a previous generated Reed-Solomon redundancy file to correct the QR Code retrieved information and decode the secret message. The QR Code information is meaningless when scanned by a standard QR Code reader. Compared to real-time retransmission data validation systems, the proposed scheme reduces the download data (channel 2) up to 50%.

Jiahe Zhang Protection and Hiding Algorithm of QR Code Based on Multi-channel Visual Masking [3] Quick Response (QR) Code is extensively used due to its advantages in fast readability as well as large capacity. However, when using QR codes, users may suffer from loss of private information because of peeping and scanning by unauthorized

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attackers. In this paper, we propose a novel algorithm to hide and protect the QR code based on multichannel visual masking. With our algorithm, the appearance of the QR code is dramatically changed while it maintains the original secret information. Unauthorized users cannot extract any information from the protected QR code with the standard QR code reader. For authorized users, we design a truth table-based decoder that works with the standard QR code reader. Extensive experiments are performed to evaluate the robustness and effectiveness of our method. The codes of this paper are published.

Sumit Tiwari Dept. of Technical Education An Introduction To QR Code Technology [4] QR i.e. "Quick Response" code is a 2D matrix code that is designed by keeping two points under consideration, i.e. it must store large amount of data as compared to 1D barcodes and it must be decoded at high speed using any handheld device like phones. QR code provides high data storage capacity, fast scanning, Omni directional readability, and many other advantages including, error-correction (so that damaged code can also be read successfully) and different type of versions. Different varieties of QR code symbols like logo QR code, encrypted QR code, iQR Code are also available so that user can choose among them according to their need. Now these days, a QR code is applied in different application streams related to marketing, security, academics etc. and gain popularity at a really high pace. Day by day more people are getting aware of this technology and use it accordingly. The popularity of QR code grows rapidly with the growth of smart phone users and thus the QR code is rapidly arriving at high levels of acceptance worldwide.

MODULE SPECIFICATION

We have divided our project into 3 modules. They are:

1. Register or Login Module
2. User Account Module
3. QR or Output Module

Register or Login Module

In order to access the website for the first time the user should sign up by submitting all the required and specified details. If the user has already an account, then he/she needs to submit their id and password to login.

User Account Module

In this module the user submits required documents (license, RC book, pollution certificate) into the website. After submitting the document, it gets uploaded into the database.

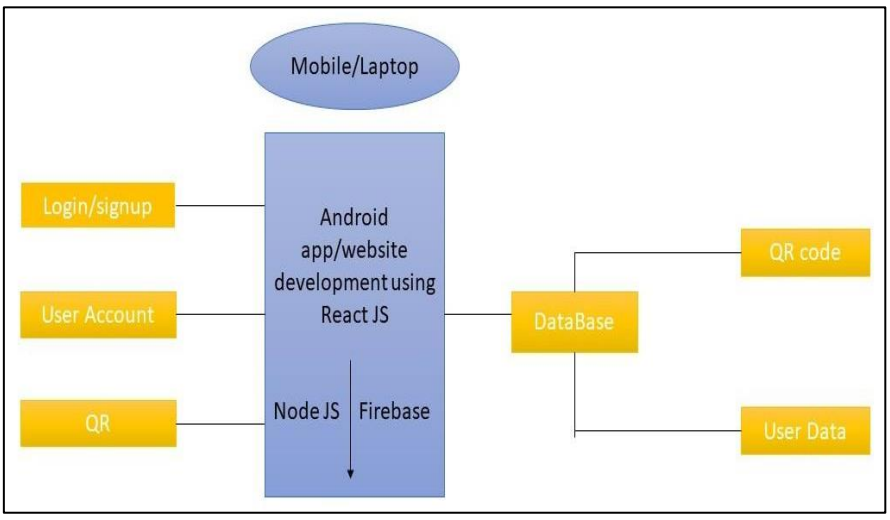
QR or Output Module

The user can access this module all the documents submitted by the user will be coded into a QR. This QR is made available to the user as output in this module.

ARCHITECTURAL DESIGN

Here in the below figure, the architectural view of the entire application is shown

We are developing the application using React JS, Node JS and Fire Base using Visual Studio. The application when launched, works accordingly as developed using the VS. All the screens are displayed according to the modules specified All the user's data is retrieved into the application using the database and this database will be secured under the control of the administrator.



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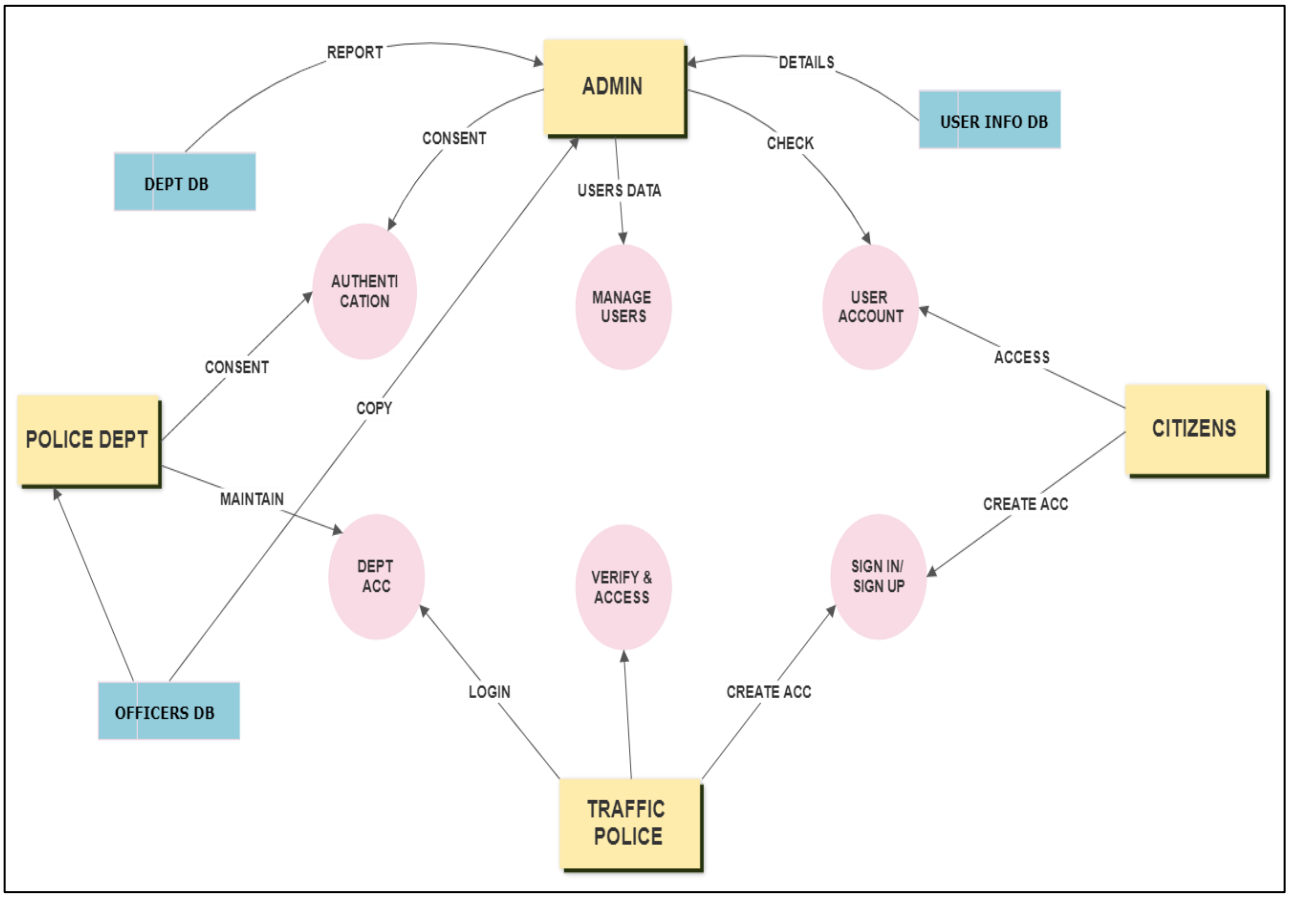
Design Concepts for Our Project:

- Abstraction: As the user's data is hidden with the password protected only, he/she can be seen when it opened.
- Modularity: As the project is divided into different modules, it is a modular design approach that we follow to develop.
- Information Hiding: As the user data is protected with a password i.e., the file is only seen by user.
- Architecture: As the project following program modules and providing conceptual integrity of the system.

ALGORITHM DESIGN

Step 1: Start
Step 2: Open the Website
Step 3: The user should first sign-up into the website in order to use the services offered.
Step 4: After successful signing the user need to upload the required documents into website.
Step 5: After the submission of documents the output will be generated as QR
Step 6: Stop

DATA FLOW PROCESS



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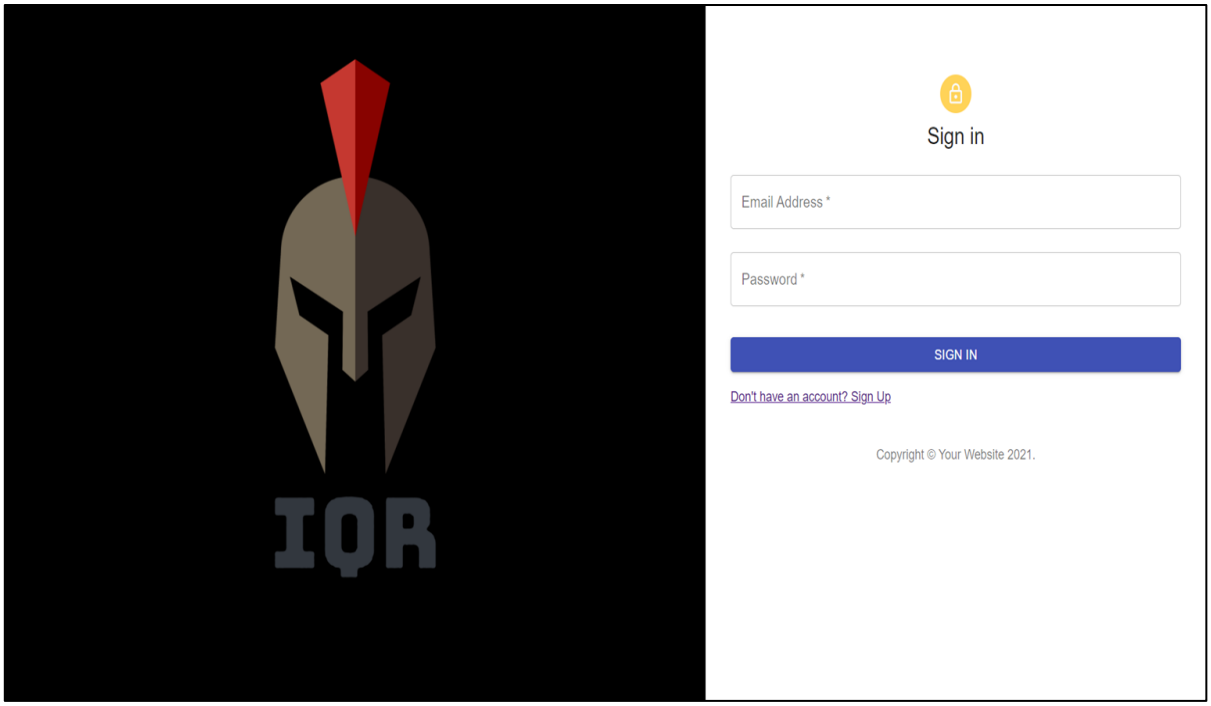
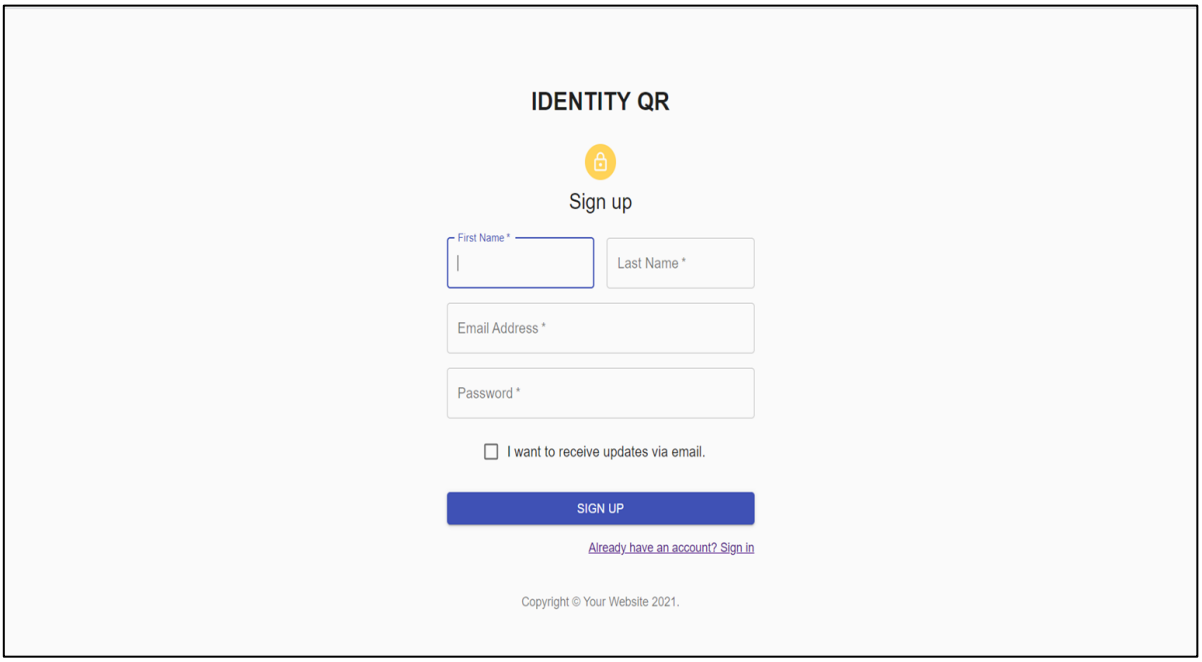
RESULTS

SIGN IN PAGE



SIGN UP PAGE



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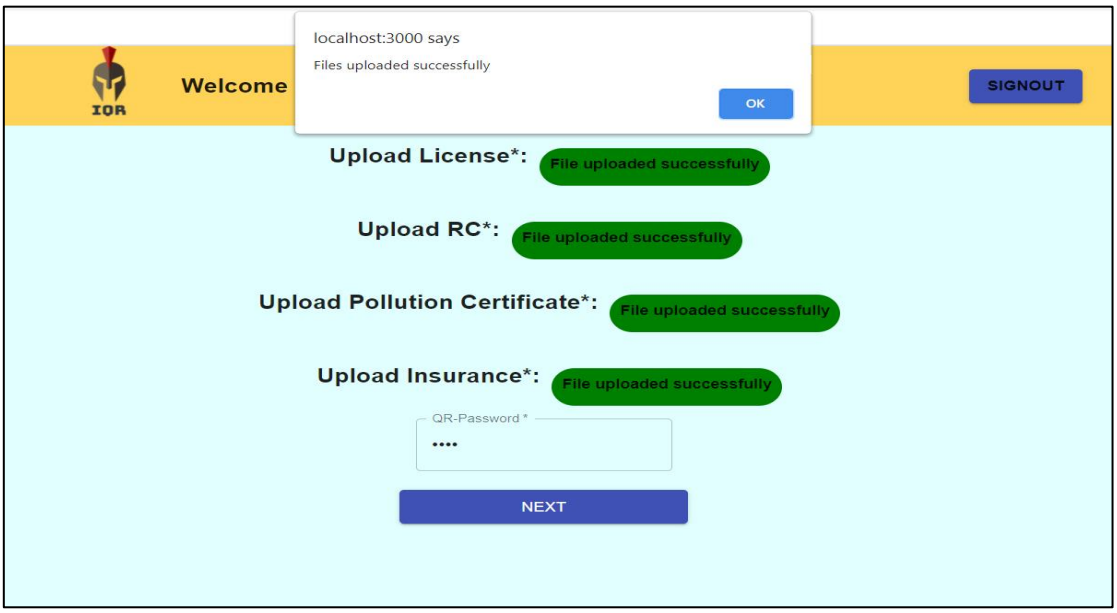
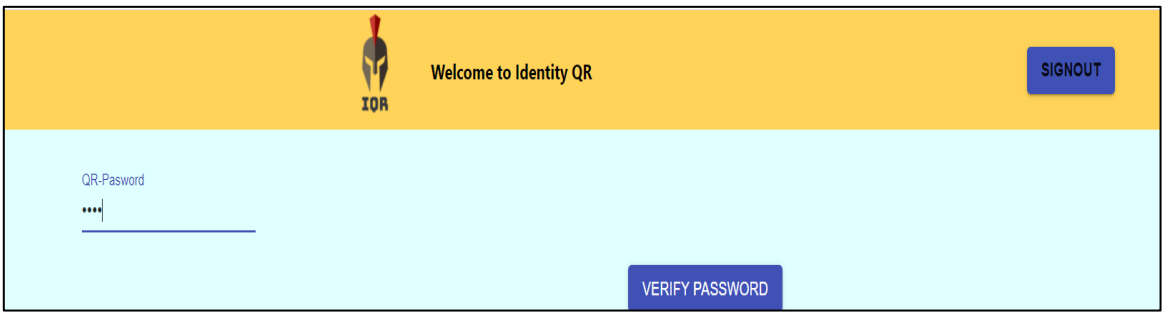
DOCUMENTS UPLOADING PAGE



QR GENERATION PAGE

USER QR VERIFICATION PAGE



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USER MANUAL

- There are several steps to be followed for using this:
- Initially users have to download and register into the application and then log into the application using the given credentials.
- After logging in we have the different fields of uploading of our documents like license, RC, pollution certificate and insurance.
- On successfully uploading the documents we have to provide a QR password which acts as the authentication pin to protect our documents.
- Then we will be prompted with a confirmation message that our documents are uploaded successfully.
- Followed by the generation of QR code for the files is provided to the user so that he can save the QR code and can access them anywhere and anytime by simply scanning it.
- Later when the police ask for the documents, they have an online scanner to scan the QR code, the user has to provide his QR code.
- On successfully scanning the QR code an appropriate link is generated which navigates to our website i.e., Identity QR then asks for the authentication pin which we have provided while uploading the documents.
- After the successful authentication is provided, we are able to view our documents.
-

CONCLUSION

By using our website, we can reduce the time and effort spent by any person who will be waiting to get the proofs verified by the traffic police in order to continue their travel. Our website provides a safe and secure QR code which will ask for a password to verify whether it is a right person or not who is scanning the QR for the document. Our website accepts the individual proofs and combines them into a single document for easy access. Our website can be used in a laptop or pc and even in Android and IOS. This website has been successfully computed and was also tested successfully by taking "test cases". The website is developed using ReactJS, NodeJS and Firebase.

With the system we proposed, we are trying to extend this to the maximum. The scope of the project can further be improved in many ways. The first step we are planning to improvise is to provide a single account for the police department for authenticating the drivers for their proofs. The second enhancement we would like to do is to design software within our website to verify the documents provided by the user and to display a single valid message for the correct proofs when we scan the QR instead of displaying the entire document.

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