

Vehicle document verification using qr code

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Abstract : *Now a days Vehicle document verification is mandatory everywhere. People have to carry the Driving License, Insurance and RC book etc., at any time while driving. In this case there may be a chance to forget or missing or faked documents submission. This Web Application tries to rectify the difficulty of this situation by providing QR CODE. The Authenticated persons are using this application to verify the documents by using QR CODE SCANNER. It is an easy way to verify the documents of the vehicles using QR scanner. Driving License, Insurance and RC book details can be checked by the Authenticated persons like Traffic police. There is no need to carry a Hard copy of the documents. A QR code is attached with the number plate during registration. While scanning the QR code it gives the details about the vehicle holder's details such as Driving license, RC book. Mainly helps the traffic police to give the penalty for those who violate the traffic rules and can retrieve the previous data about that person. Overall documents are handled by authorized persons only.*

Keywords: QR, RC, Traffic

1. INTRODUCTION

This is a Web Application used to verify the details of the vehicle with RC Book, Driving License and Insurance. It is an easy way to verify the documents of the vehicles using QR scanner. Driving License, Insurance and RC book details can be checked by the Authenticated persons like Traffic police. There is no need to carry a Hard copy of the documents by an individual person. The application shows the full details about the vehicle with their RC Book, Driving License, and Insurance. It is more user friendly. The sections such as, registration, license, etc. are combined together in a single window.

2. EXISTING SYSTEM

Disrupting traffic guidelines on street is a significant issue these days. Because of huge population and traffic blockage it is hard to distinguish which vehicle has defied traffic norms. To screen offender vehicle physically is troublesome. The current framework is monotonous and tedious, it requires halting the vehicle, gathering the proprietor data, checking his permit and gathering Fine, giving the affirmation and afterwards enabling the vehicle to cruise by.

DISADVANTAGES

- Ashugetime is required for physically checking the traffic violators, Traffic Police officials don't give sufficient time for traffic guideline and clearing congested driving conditions.

- Manual arrangement of booking of petty criminal offense case isn't straightforward. It encourages degenerate practices.
- In manual framework, there is no record of past criminal traffic offenses by the vehicle. Because of this, recurrent wrongdoers escape higher punishments.
- There is an extent of pilferage and misappropriation of fine sum gathered by Traffic Police. Numerous multiple times, corrupt cops utilize copy receipt books. The current framework is dull and tedious.

3. PROPOSED SYSTEM

The main objective of the operating system is to provide efficient use of resources.

ADVANTAGES

- Our objective of traffic police framework is to discover approved clients.
- Reduce the traffic police work to getting data about the vehicle.
- User doesn't have to convey their vehicle archive without fail.

4. PROBLEM DEFINITION

In day to day life there is lots of increment in population. Now a day's most of the people are using their own vehicles. Due to that road traffic has been increased tremendously.

Due to this traffic Police work has been increased. Regional Transport office (RTO) responsible for the registration of all vehicle related documents. RTO management has lots of work related to registration of vehicle documentation. Regularly we observe that people have to stop their vehicles on the road or toll booth to show their documents for their vehicles. This is a waste of time for the driver and also for the police who take time in checking the documents and return them back again.

5. OVERVIEW OF THE PROJECT

The project "vehicle document verification using QR code" application will be a way to verify the documents of the vehicles using QR scanner. Driving License, Insurance and RC book details can be checked by the authenticated person like traffic police. There is no need to carry a hard copy of the documents.

MODULE DESCRIPTION

There are two modules for admin and documents verify.

6. MODULES USED

- admin
- Documents verify

ADMIN

Login module is for traffic police and admin to log in with registered information.

DOCUMENTS VERIFY

Vehicle documents verify module defined to full detailed information about the vehicle as well

as vehicle's owner. It shows the full details such as RC Book, Driving License, Insurance.

DATAFLOW DIAGRAM

Data flow diagram informs the flow of components of a software or project. The process flow will be represented in the format of graph.

Dataflow Symbols

Data flow diagram includes four properties such as

- Entity
- Processing
- Storage
- Flow of data

7. SYSTEM TESTING

System testing is a testing of hardware and software. Knowledge of logic is unnecessary for system testing.

UNIT TESTING

Unit testing deals with components of a software. It is a small part of testing. Developers are involved in unit testing. It includes functions, interfaces, and classes as a part of software for unit testing.

VALIDATION TESTING

Validation testing is the process of checking whether the software specifications satisfy the customer need.

USER ACCEPTANCE TESTING

User acceptance testing is a client side testing. The user validates the software whether it meets their requirements. This is a final testing performed before the deployment of the software.

BLACKBOX TESTING

Black-box testing is a high level testing and it is a method of testing that the internal structure of the software is not known to the tester.

WHITEBOX TESTING

White-box testing is a lower level of testing method, whereas the internal structure of the software must be known to the user.

8. SYSTEM IMPLEMENTATION

Implementation is the stage of the project where the theoretical design is sent into a working system. If the implementation access is not carefully planned and controlled. Implementation includes all those activities that take place to convert from old system to new one. The new system may be totally new, replacing a testing manual or automated system or may be a major modification to an existing system. Proper implementation is essential to provide a reliable system to meet the organization requirement. Successful implementation may not guarantee the improvement of the organization using the new system, but improper installation will prevent. The system can be implemented only after thorough testing is done and found to be working according to the specifications. The system will be checked by personnel for the feasibility of the system.

9. CONCLUSION

Regularly people have to stop their vehicles on the road or toll booth to show their documents for their vehicles. This is waste of time for the driver and also for the police who take time in checking the documents and return them back again. This system will be the approach to solve such problems that replaces the current manual process for checking the vehicle document and user detail by using QR code. Android app with which traffic police can scan the QR code on his phone and all the details (Driving licenses, Insurance) about the user will be verified. The public are in a need to maintain the entire document and update them regularly by keeping track of renewal/expiry date.

10. FUTURE ENHANCEMENT

In future, this system can be implemented to see the sensitive areas where most of the rule violations occur. The speed violation can be implemented in such a way that if the driver exceeds the speed limit of particular road then automatically the fine will be applied to him.

11. REFERENCES

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