

Traffic Police Management using QR Code

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Abstract— This project aims at implementing a vehicle document check system where databases and documents are Retrieved by the traffic police by their smartphones and the physical documents are not needed to be carried along by saving time in document verification Initially we assign them unique identity numbers and scan their RC, Insurance, Emission paper, vehicle name, and number and store it in the database at the back end. Using the above information, we create a QR code and stick it on an irreplaceable part of the vehicle. At the front end we create an application with which traffic police can scan the QR code on his phone and all the details about the owner of the vehicle and all the documents earlier stored will be shown on the phone. We can make the driver’s license as unique identification if needed for the application query search in case scanner fails to work. In this project, Systems main focus is to no need to carry the documents of the vehicle for authorization and identification of the respective vehicles. Here, System Use QR code technique for the documentary purpose. In this system, the main actor is retailer, traffic police, department police. Through this actor our system become very helpful to user also and government also.

Key words: QR Code, POS Tagging, Internet of Things, Tagging, QR Code Scanning

I. INTRODUCTION

We are proposing an application that replaces the current manual processes for checking the vehicle documentary through police. User side suitable to carry documents. We are designing an Android + web application named Traffic Police Management which will be beneficial for peoples to help for do not carry documents of vehicle and maintained the document.

Retailer form of all the documentation regarding the authentication of users and the vehicle. Here, retailers generate the QR code of vehicle documentary. Traffic police, Scan that QR code and retrieve the information in the form of text file. Department police can apply tagging algorithm which is used for the extraction purpose for the documentation and then they send the verification result to traffic police department for further checking and authorization.

II. PROPOSED SYSTEM

In the proposed system, there are three domains like Retailer, Traffic police and the Police department. Here, Retailer gathers form of all technical documentaries related to the user vehicle. Here, retailer generates the QR code of vehicle documentary. Police department then scans that QR code for retrieving information of the users vehicle in the form of text file. Department of police then applies tagging algorithm for the extraction purpose and send the verification result to traffic police for further checking.

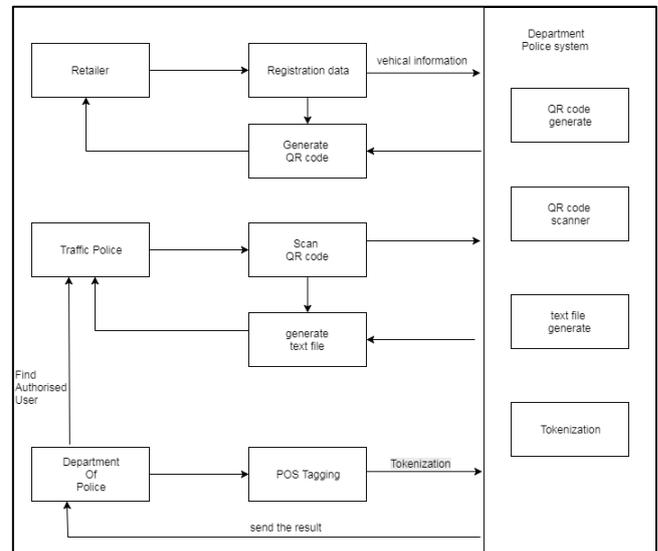


Fig. 1: System Architecture

A. Advantages:

- 1) QR code technology makes the task easy for both the User and Police department.
- 2) Efficiency is very high as QR code has been used for storing and retrieving data.
- 3) More user friendly as this system requires only scanning the documents and storing it in the form of the QR code.
- 4) Time complexity is very low

B. Requirements

1) Software Requirement

- 1) Operating system: Windows 7 and above.
- 2) Coding Language : Java/J2EE, Android
- 3) IDE: Eclipse
- 4) Database : SQLOG/XAMPP Server
- 5) Web Server : Apache Tomcat

2) Hardware Requirement

- 1) System : Intel I3 Processor and above.
- 2) Hard Disk: 40 GB.
- 3) Monitor : 15 VGA Color.
- 4) Ram : 4 GB.

III. CONCLUSION

This application, allows every user to not carry all the documents and license every time. Simply you have to carry QR code in your Smartphone. By using our system, the driver goes through the verification process through a reliable and efficient manner. QR code is being widely used for implanting messages such that people can easily use their Smartphone's to capture the QR code and gain relevant data from OR code reader. User can get QR code by simply registering with the system.

REFERENCES

- [1] B. Hofmann-Wellenhof, H. Lichtenegger, and J. Collins, Global Positioning System: Theory and Practice, Springer-Verlag, 4th edition, 1997.
- [2] P. Bahl and V. Padmanabhan, RADAR: An in-building RF-based user location and tracking system, in Proc. of Infocom2000, Tel Aviv, Israel, Mar. 2000, vol. 2, pp. 775584.
- [3] N. Priyantha, A. Chakraborty, and H. Balakrishnan, The cricket location-supportsystem, in Proc. of International Conference on Mobile Computing and Networking, Boston, MA, Aug. 2000, pp. 32 43.
- [4] C. Savarese, J. M. Rabaey, and J. Beutel, Locationing in distributed ad-hoc wireless sensor networks, in Proc. of ICASSP01, 2001, vol. 4, pp. 20372040.
- [5] Nasipuri and K. Li, A directionality based location discovery scheme for wireless sensor networks, in First ACM International Workshop on Wireless Sensor Networks and Applications, Atlanta, GA, Sept. 2002.
- [6] S. Capkun, Maher Hamdi, and J. P. Hubaux, GPS-free positioning in mobile ad-hoc networks, Cluster Computing, vol. 5, no. 2, April 2002.

