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E-TOLLING AND CRIME DETECTION SYSTEM USING QR-TOKEN

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ABSTRACT: *E-Tolling and Crime Detection System using QR-Token are based on QR (QUICK RESPONSE Token) with the help of Cam recognize it. When Cam capturing the QR-Token will automatically the QR-rier will open automatically. QR-rier opened means QR-Token is correct and persons number plate is authenticate after matching string from QR-Token it will perform the task of the transaction. Whatever amount of toll tax is there will be reduced from persons account. If the vehicle is unauthorized then the time message is directly send to RTO. When QR-token will scanned, if that vehicle found in any crime then notification goes to Police Sever and Also to Owner.*

KEYWORDS: *E- tolling system, QR-Token, Embedded Cam, Tollbooth, One time password.*

INTRODUCTION

QR-Token is the type of two dimensional base Token designed for automatic industry. The QR-Token gives the machine readable that contains information about item which is attached. There are four standardized encoding modes. And they are numeric, alpha numeric byte. The sample image of QR-Token marked then the input image divided into block. The devisor could divide the real time image for real time identification and the output are classified in the blocks. Two Dimensional Token were combined into Tokens to conform the blocks. QR-Token in the embedded Cam device has been used as new input interfaces with the help of mobile applications. The extracted QR-Token an image does not consider a non-uniform background but now we are going to implement the QR-Token by proposing an efficient algorithm to extract the QR form no uniform background also. Compare to prior work this approach will be having higher accuracy for QR recognition and practical use in a mobile environment. Read Solomon is a Token which has a unique function of error correction so if we put some appropriate positions of the Token without damaging the information, it is hard to far word that kind appropriate position because it relied on QR-Token image and instances.

Now a days QR-Tokens appear everywhere like posters machines and embedded sites and products packaging etc. QR-Token are digitally connected to consumer to the internet through mobile. To improve the application practically HC2D barcode are replaced by QR-Token. QR-Token investigate the coding and decoding the image. The whole image has been scanned after that all binary QR-Token can be generated.

There are number of benefits with QR-Token more than traditional H2CD code like:
Flexibility, reliability.

The few benefits of QR-Tokens:

1. It reduce the cost of implementation.
2. It provides high capacity.
3. It requires less space compare to HC2D barcode.
4. These are registered by dirt and damage.
5. It can be read from any direction.

QR Tokens are scanned to access the text messages. Both tags and QR are used in field communication technology.

EMBEDDED CAM

Embedded Camera is a video Camera. Generally it is used to capture image. Embedded Camera is connected by USB and computer “Embedded Cam” long form is Embedded Camera it is a digital Camera and it is connected to computer Embedded Camera can send live pictures from whatever it captures. Many desktop computer are coming with Camera means Camera are already in build in it. Or if not than we need to buy Camera and feet to the computer separately any time and can also remove it whenever we want.

The Embedded Camera is going to capture the QR-Tokens .The QR-Tokens is of two-dimensional QR-Tokens. Generally it used to store the small amount of test data. There are different size of error correction levels for storing different amount of data. Recent mobile phones like Android phones have ability to use the content of QR-Token URL to open in the phone embedded browser. IPhone are also used to be able to read QR-Token with the help of software nematode.

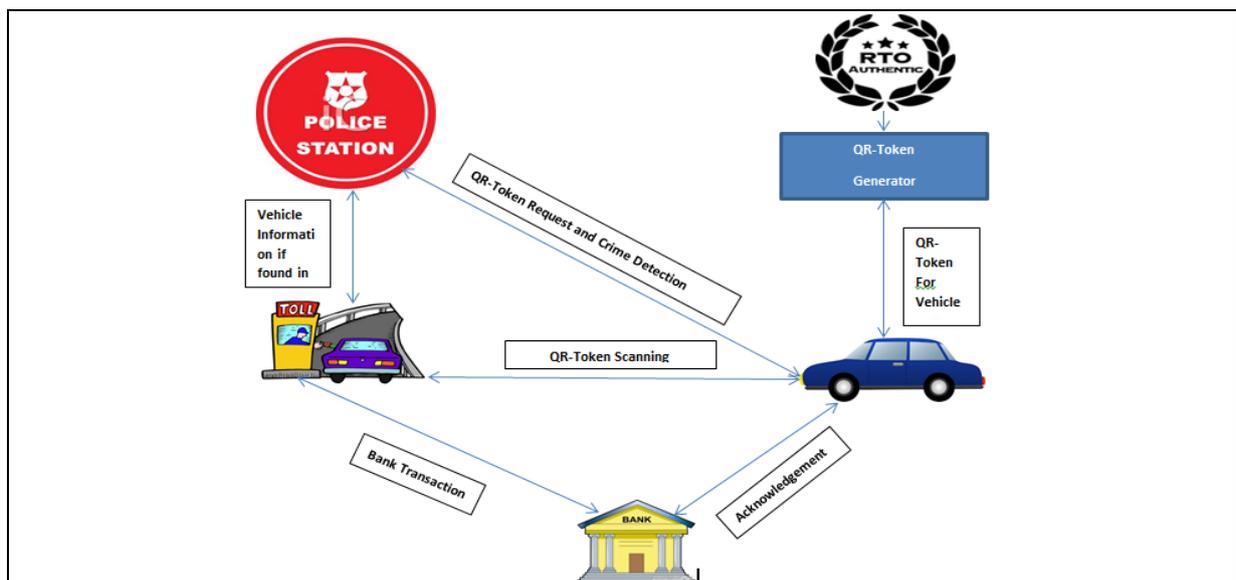
QR-Token are also used to scan text messages if human personal information if it is at the risk than near field is used for payment purpose. The QR consist of square dots that is known as black modules arranged in white background we can be captured by the Embedded Camera. These information can processed by using read Solomon error until the image is interpreted properly. Data is then extracted from the pattern in the both horizontal and vertical component of the image.

E-TOOLING SYSTEM

In this paper we have proposed for to collect the correct amount of the toll according to type of vehicle automatically on the arrival of the vehicle from the tollbooth so, we proposed the system which is build a real time application which is reliable ,safe and environment friendly. In old system of tollbooth every vehicle have to wait for the long to pay the amount. Automatic toll system helps to removing the unnecessary traffic delays. And also it keep eye on each and every can correctly register and unregistered number plate and exchange for the purpose means if the vehicle is stolen than that vehicle will be captured on the tollbooth.

E-Tolling is for automatically reducing the correct value from tollbooth and image processing technique is used for guessing the particular bike number

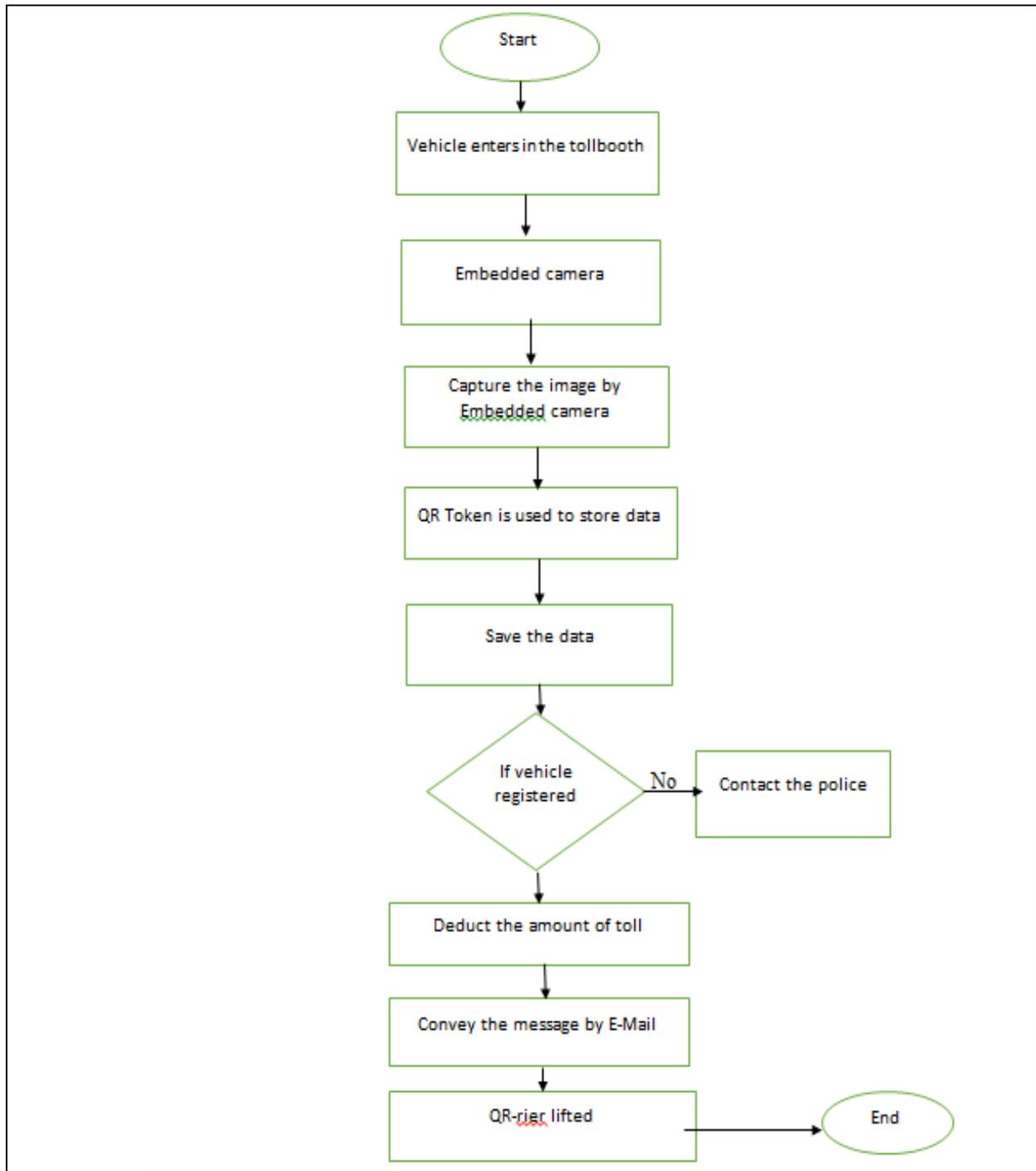
ARCHITECTURAL DIAGRAM



In Architectural diagram we have tried to explain our system in detail. So when vehicle will entered is the Toll booth Embedded Camera will captured the vehicle number plate and model number. Capturing image and the process it with the help of QR-Token. we already discussed in the above part that it will scan all the text in its format.

This system will also the check the stolen vehicle all the database which is captured by Camera gone to be matched with the police station vehicle stolen database .If any case is there than further action will be taken and if not that it will only deduct amount of money from the owner account. The Advantage of the system it will save time reduce traffic generally in toll booth and consumes fuel. And if the vehicle is registered or stolen then it will be easily identified by this proposed system.

FLOW CHART



CONCLUSION

The conclusion of this proposed paper is system it will save time reduce traffic generally in toll booth and consumes fuel and if the vehicle is registered or stolen then it will be easily identified by this proposed system. This system also used to detect, if that vehicle found in any other crime.

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