



# LICENCE DETECTION USING QR CODE

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**ABSTRACT**

We proposed a system in which the work of traffic police and driver (user) is simplified. In this system the driver will register to RTO services and the license will be issued to the user. The RTO officer will generate a QR code attached to the license card for user. The QR code in the driving license can be used by the traffic control authorities in case of a default. The QR code has all the details about you which can be seen via scanner app which the traffic control authorities have. It has the details like your name, address, age, phone number, fingerprint, digitizing, photo etc. Number, fingerprint, digital sign, photo etc.

**. INTRODUCTION**

## 1.1 Introduction

We have seen that the introduction of Internet has revolutionized many fields. Internet has made life of people so easy that people today have access to any information they want easily. Communication is one of the main fields highly changed by Internet.

**INTRODUCTION**

## 1.2 Introduction

In this project we have different modules in which they store different information and having different service. In RTO it has process for registration of vehicle, their documents data all are stored in database in which they access from here. They provide QR code foreach and every

new license with respect to the age of the customer. Now a days people who are below 18 are making the use of fake license by editing their details with the original license details, this is the most offensive crime going in the cities and leads to accidents and also violating traffic rules. Here comes the QR code provided on the license in to play, the traffic police should have a scanner app so,that he can scan the QR code then immediately he will be able to see the details of the user and make sure to match the both details, if the details are not matching then the user is using a fake license and he will be charged and also gives them counselling along with their parents.

## 2. LITERATURE SURVEY

Komal chorhgade, Piyush Dahiwele, Prof. Prajakta pise (2018) [6] has developed RTO AUTOMATION USING QR CODE, in which there were different modules in which they store the information. In RTO it had process of registration of driving license, their documents data to be stored in the database in which they access from that database whenever required. This system also provides feature for detecting the fake user. Administrator had rights to enter and process the data of applicants. Any person who has been authorized by the administrator can utilize the services of his system. An authorized user should have a user name and a password..

Manjunath S.Patil, Basavaraj K. Madagouda, Vinodh C Desai (2013) has developed E-RTO MANAGEMENT SYSTEM. [7] The author developed a system which provides services driving licenses. Administrator is the power user, he has power to verify the data entered and also

process the data and he can provide access for the authorized users to utilize the services of the system.

In [4], it showed the authentication of vehicle using RFID which was an advanced “ERTO Management System”. It was designed keeping in view to make the existing registration and insurance system easier and faster. It included the entire registration and insurance procedure starting from the initial phase of entering till the results. All the intermediate stages starting from receiving of the application form to revealing the applicant number along with the expiry date of the license were dealt. This technology enabled the traffic police to be more effective in controlling repeat violators of traffic rules. Traffic Police had the database of registration numbers as well as the history of driving license holders. When a traffic policeman would enter the details of any vehicle caught violating traffic rules, it would give the complete details of that particular vehicle including the name and address of owner and the make, model and other details of the vehicle. Not only this, the details of the driving license holder would also be available. Therefore, enhanced penalties would be imposed for repetition of violation of traffic rules. Also, the RFID tag is used to identify the vehicle independently.

In “E-RTO management system” [3] describes E-RTO is an advanced “E-RTO management System” which is design keeping in a view to make the existing registration and insurance system easier and faster. It included the entire registration and insurance procedure starting from the initial phase of entering till the result. Also, security was provided in the intermediate stages

starting from the receiving of the application form to revealing the applicant number along with the expiry date of license are being dealt. Administrator was provided for authentication purpose as well as it could handle all the database of E-RTO and manage all the process. He had rights to approve learning license number, permanent license number, pass the vehicle registration number, offer insurance details to the user, etc. Facilities were provided by administrator. In [4], it showed the authentication of vehicle using RFID which was an advanced “ERTO Management System”. It was designed keeping in view to make the existing registration and insurance system easier and faster. It included the entire registration and insurance procedure starting from the initial phase of entering till the results. All the intermediate stages starting from receiving of the application form to revealing the applicant number along with the expiry date of the license were dealt. This technology enabled the traffic police to be more effective in controlling repeat violators of traffic rules. Traffic Police had the database of registration numbers as well as the history of driving license holders. When a traffic policeman would enter the details of any vehicle caught violating traffic rules, it would give the complete details of that particular vehicle including the name and address of owner and the make, model and other details of the vehicle. Not only this, the details of the driving license holder would also be available. Therefore, enhanced penalties would be imposed for repetition of violation of traffic rules. Also, the RFID tag is used to identify the vehicle independently.

### 3.OVERVIEW OF THE SYSTEM

#### 3.1 Existing System

License card with smart chip, to read this a special device called smart card reader is required. This kind of special device is available only near authorized traffic police.

In “RTO AUTOMATION SYSTEM USING NFC” [6] describes automation system is basically a digital system to overcome the manual task. The single NFC cheap need to be attached to the license of driver. The NFC chip stores a unique combination of numbers. This ID could be read by the smartphone and the NFC to web application with the underlying NFC technology and uniquely associated with the driver's master data in the web application.

#### Disadvantages:

- As population is growing the number of vehicles is increasing. Keeping the valid license and vehicle papers is mandatory. It is very tedious to keep all this documents with us always and also it is difficult and time consuming to traffic police to check and verify these documents and maintaining the challan regarding the vehicles.

#### 3.2 Proposed System:

License card with QR code which can be scanned using smart phone which is very easy so, it can be detected by anybody to reduce fake users.

. In our frame work authorized users can login by using credentials [4] provided by the administrator, after signing into the system user will produce QR code [1] and enter the data about

each applicant such as name, father's name, date of birth, address, vehicle type and the region applicant belongs to. After successful enrolment information will be transferred into database [2], we can access the data from the database [3]. For the implementation of our system, we have utilized the services provided by Flask framework which provides basic HTTP tasks. Framework is the collection of numerous modules that can be used for developing web applications. [5] Flask is one of the python's framework which provide huge library support for developers and also helps in building efficient applications. Frameworks also have capability to connect with databases. We additionally utilized the python database connectivity for moving data into the database. [5] Python DB-API (database application program interface) is standard database interface, can be used to access relational databases

#### Advantages:

- This project targets to store information related to license, personal details of the holder of the card. For every applicant new card will be issued with QR code attached with it. Now-a-days people below 18 years are editing their details and preparing fake driving license which is most offensive crime. Here comes the QR code provided on the license into play, the traffic police should have a scanner app to scan the QR code, immediately he will be able to see the details of user and if he finds any mismatch in details then the user is a fake user and he will be called for counselling along with their parents.

### 3.3 System Modules

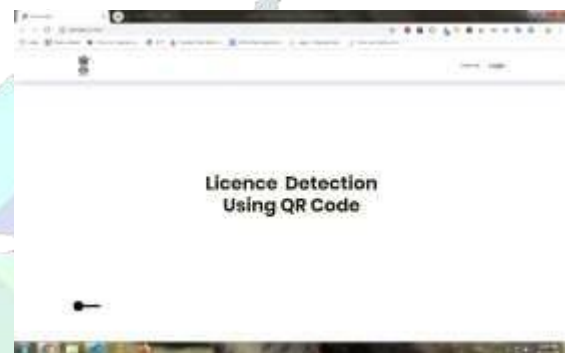
#### User:

User is the module who will register and login to application and apply for driving license and get qr code related driving license and user can scan qr code and get details.

#### Admin:

Admin who will view requests of users and generate qr code for each user and send new driving license to each applied user. Admin will maintain every user qr code related licenses in database.

## 4. RESULTS

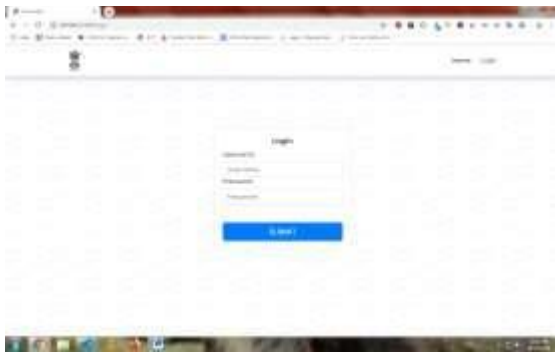


Home screen



Registration page





Login



License generated



User details

## 5. CONCLUSION

From this system we can conclude that scanning the QR code for obtaining details will be faster than reading from a smart chip. With this system we can also conclude that there is no need of special device like magnetic card readers which may cost around 1500, a smart phone is enough for scanning that QR code and the user can utilize the QR code as a default. The requirements of user keep on changing as the system is being used so it is impossible to develop the system such that it meets all the requirements of the user.

## Future Enhancements:

Some of the future improvements that can be done to this system are: 1. We can update the system by adding new features such as vehicle registration, viewing challan history and we can design the system as desired with the help of technologies available. 2. Security of the system can be increased by SSO (single sign on) which is one of the emerging technologies. It helps user to login once and have access to various applications. 3. We can integrate the system with Aadhar card.

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