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# **Enforcement of Motor Vehicle Legislation for Traffic Offence**

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**ABSTRACT**: As we can see the numbers of vehicles are increasing day by day and this increase in number of vehicles comes with much kind of problems. The main problem among them is observed that illegal driving i.e. driving without proper documents like license, RC book, insurance and PUC. Due to this problem recently the charges of breaking such rules are hiked. This rule known as MOTOR VEHICLE AMENDMENT act which comes under SECTION 115. To overcome this kind of vehicle problems we are proposing the system with the objective of MOTOR VEHICLE LEGISLATION for public. Our system makes sure and confirms that the owner of vehicle is having all the mandatory documents which are required for driving a bike/car.

**KEYWORDS**: Legislation, Amendment.

#### I. INTRODUCTION

Today, most vehicles are equipped with high technology. Some people have their documents stored in digital locker application. The problem of this is that when there will be no network present at your location you will not be able to show your documents. Therefore with the help of this module you would not have to face any problem regarding the vehicle documents.

Furthermore consequently, the aim of the project is to design and implementation of a microcontroller based smart card license vehicle system with biometric authentication capability. Entire propose system block diagram where the PIC16F877A microcontroller stores the right fingerprint identification, license and RC book reader. Today the government and RTO has enacted revised laws which include not having a license, RC book issue, underage driving and many more. Keeping all these laws and the problems in mind we have propose a system for enforcement of these laws. In our system we include a module in the vehicle itself which includes RC book, license and all the information related to owner. It will provide high security to the vehicle as it is a lock less system. As much as RC book and license is required by the vehicle holder, insurance and PUC are also important. Therefore during the expiration date of the PUC and insurance this module will send a notification to the vehicle holder.

### II. RELATED WORK

In vehicle security system, the objective is to prevent the theft of vehicle and ensure safe driving. One level of ensuring authentication of driving is through finger print recognition system that authenticates a user being an authorized person to have access to the ignition system. In this work we propose a multi level authentication for vehicles. In this system, the finger print image of the eligible driver will be programmed into a smart card and this card along with real time finger print scanner is employed to authenticate the driver.[1] Fingerprint identification is one of the most popular and reliable personal biometric identification methods. By using this biometric authentication, we can prevent non-licensees from driving and therefore causing accidents. The proposed system consists of a smart card capable of storing the fingerprint of particular person. [2]

Unlicensed driving is a matter of concern for several reasons. It is possible that drivers who have not undergone appropriate training and testing may be deficient in some aspect of the knowledge and skills required to drive safely and efficiently. [3]



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#### III. METHODOLOGY

This project solves the problem of underage, unauthorized, illegal all such acts of driving. This project gives access to only the authorized person to access the vehicle by giving him/her. The authorization will be based on the laws enacted by the government for motor vehicle. After implementation of system we can consider that if vehicle is running on road means that vehicle has authorized documents and there is no need of checking all documents every time. Here in our system we first create a data base stores the scan copy of both license and RC book and then we scan fingerprint of the owner which compares with the information stored with and if both matches then it ignites the engine on thumb impression of the owner. The other applications of our system are it will provide lock less vehicle facility as it is authenticated based on thumb also time consumption for checking the documents/storing in Digital locker even carrying of documents is not necessary as implementation of this kit into your vehicle makes sense that you have all valid documents in deed. Like we use RFID tags in the previous ideas that were brought in the ideas.

#### IV. EXPERIMENTAL RESULTS

Figures show the results of detection of authorized finger impression and document which contains information of user .Figs. (a) Shows the initial condition. (b) Finger print module is connected to PIC18F4k22 as input and it can register up to 1000 finger impressions. Image shows that status of searing finger. (c) Registered finger impression and giving finger print output get matched if it doesn't match it will display that "finger not matched"











(c)

(b)

Fig. (d) Smart card reader is connected to PIC18F as input. Card is inserted into reader to read and compare previous input and to verify documents. (e)If card and previous registered finger print is not matched then it will display result as unauthorized user. This will result in failure to start of bike.

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#### V. CONCLUSION

The developed system ensures that only authorized drivers can drive the vehicle and misuse of vehicles by others can be prevented. The system makes sure that vehicle's access is given to only authorize personal and thus accidents can also be averted. In this method, the system will also alert the user about the validity period of the PUC and insurance.

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