

# SMART FINGERPRINT BASED LICENCE RETRIEVAL SYSTEM WITH CLOUD

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**Abstract:** - Our system work presents a proposed system is replaced with a current system for checking licensed drivers.it will take less time to identify registered and licensed users with the help of fingerprint. The system will contain Arduino kit, fingerprint scanner and Bluetooth module.

To store data, we use the MySQL database which is stored on cloud. The prototype of our system is displaying the information of licensed user. It will take a fingerprint of the user and it will display age, name, license id, gender on the screen.

**KEY WORDS:** *Fingerprint module, Arduino, Bluetooth module, Fingerprint, cloud.*

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## I INTRODUCTION

To implement smart fingerprint based license retrieval system with cloud: This project objective is implement the system which identify the drivers identity based on fingerprint so the user don't have any conflict if he don't have hard copy of the license.

All the process made digitally so if any driver lost the documents he can easily get the personal document as well as vehicle documents implement the system which identify the drivers identity based on fingerprint so the user don't have any conflict if he don't have hard copy of the license. Because of this system the document verification process of the driver is easy and conflict free. All the process made digitally so if any driver lost the documents, he can easily get the personal document as well as vehicle documents.

Fingerprint method is most secure as compare to the other like swipe card. The unique id will be generated to the fingerprint and it will be store in the database. When the driver will enter the fingerprint then it will be compared with the already stored fingerprint. When the fingerprint matches then it will display the data like age, name, license id, gender.

There will be 3 components will be use Fingerprint module, Arduino, Bluetooth module. Arduino Uno is a microcontroller board which is used to connect the Bluetooth module and fingerprint module. A fingerprint scanner is used to get the fingerprint of the person. There will be assign the id to the captured fingerprint and store into the database in the registration part. And the data will be sent through the Bluetooth module to the mobile screen. HC-05 Bluetooth

Module is connected with the Arduino. The Bluetooth module will send the captured fingerprint to the mobile screen.

## II EXISTING SYSTEM

In Existing system validating and checking of driver's license as well as the it's documents checking done manually by the police. And it will take more time to check. Checking the driver's license copy or document it's make a very difficult process to a police because of traffic or a any other reason. Ssometimes driver missing their license copy anywhere then its make very difficult for a driver, so much conflict is occurs in between them, otherwise driver lie police and also time is waste.

## III PROPOSED SYSTEM

This proposed system will be replaced with the existing system.it is easy to check the license user. It will take less time and also process will be less tedious to identify the licensed user using biometric. This system will be replaced with the FRSC for checking licensed user.

## IV BLOCK

### 4.1. ARDUINO

Arduino Uno is a microcontroller board which is used to connect the Bluetooth module and fingerprint module.

### 4.2. Fingerprint Module

A fingerprint scanner is used to get the fingerprint of the person .There will be assign the id to the captured fingerprint and store into the database in the registration part. And the data will be sent through the Bluetooth module to the mobile screen.

### 4.3. BLUETOOTH MODULE

HC-05 Bluetooth Module is connected with the Arduino. The Bluetooth module will send the captured fingerprint to the mobile screen.

#### DIAGRAM

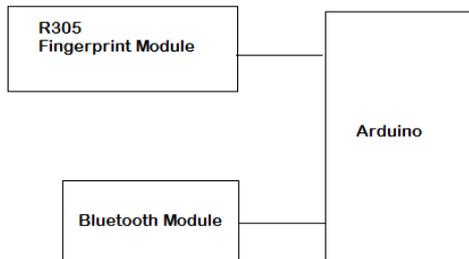


Fig. 1. Diagrammatic representation

### V RELEVANT MATHEMATICS ASSOCIATED WITH THE PROJECT-

Input:- 1. Thumb Impression 2. Aadhar card Number

Output:- 1. Name 2. Age 3. Sex 4. Issued License 5. License expiry date

### VI SCOPE OF PROJECT

Using the fingerprint-based license system we will easily find the non-licensed drivers and prevent from the doing illegally driving.

When the enrolment processes the all the data with his/her fingerprint will be stored on server. So, at anywhere they can get their license with the information. It will also help licensed person to avoid west of time.

### VII MODULES

- A) Capture module: In this module the individual fingerprint will be scan and that scan fingerprint it will assign the id to that fingerprint and store in database. And that id will be used to identify.
- B) Storage module: It will store the captured fingerprint into the database.
- C) Matching module: it will compare the scan fingerprint with the stored fingerprint and it matches level of similarity.
- D) Decision module: This module determines that level of similarity is sufficient to identify the licensed user.

### VIII LITERATURE SURVEY-

1. ( NILAV MUKHOPADHYAY ) introduces an Automation of Road Transport Department through Cellular Network, verification of the License and Vehicle documents electronically, and reduces a lot of paper work and manual efforts.

2. (SANJEEV SHELAR ) Developed Cross Verification of Driver and License for RTO”, a system that a facilitates for RTO officers to perform verification of license and vehicle documents through an android application.

3. (PRAVEEN KUMAR N.HADAPAD) QR Code in Smartphone This system, the driver goes through the verification process in a reliable and efficient manner.

4. (Fawzi M.AI-Naima, Haider S.Hatem) presented a system that combines the RFID readers and the RFID tags with the database that is centralized.

5. (Paras Goyal, Iqbal Singh) suggested the automatic vehicle identification system by using the vehicle from the database stored in the computer, a series of image processing techniques is used.

6. (Jayalakshmi J, Ambily O. A) designed a system is to operate the on road vehicle verification by the police department. Every vehicle should have a RFID Device which is connected to a vehicle. The RFID tag it will detect the card details, the owner details and other respective certificate details.

7. (Ravi Subhan & D.P.Mankame), How the biometric will be used to in a fingerprint recognition process.

8. (Woong-silk Kim), How the multistage fingerprint recognition method for payment verification system.

9. (Hoi Le, The Duy Bui), Online fingerprint identification with a fast which is stored in cloud database. It will be access from anywhere.

10. (Mary Lourde R and Dushyant Khasla), Fingerprint Identification in Biometric Security System. Taking a fingerprint and Store the numerical id into the database.

### IX CONCLUSION

The system is used to identify registered drivers and the information about the licensed user. Compare with the existing system, identification method will be easy and less time consuming. There will be a fingerprint module which will capture the fingerprint and store it to the database. And identify the licensed users.

### REFERENCE

- [1] Aamir Nizam Ansari , Mohamed Sedkyl, Neelam Sharma and Anurag Tyagil Faculty of Computing, Engineering " RFID-Based Students Attendance Management System" Vol 2, Issue 7, July 2015.
- [2] ehun-wei Tseng et.al Department of Infonnation Management Cheng Shiu University Kaohsiung County, Taiwan Design and Implementation of a RFID-based Authentication System by Using Keystroke Dynamics.
- [3] Andrey Larchikov, Sergey Panasenkov, Alexander V. Pimenov, Petr Timofeev ANCU D Ltd. Moscow, Russia

Combining RFID-Based Physical Access Control Systems with Digital Signature Systems to Increase Their Security.

[4] P. Solic, J. Radić, N. Rozic. Software defined radio based implementation of RFID tag in next generation mobiles, IEEE Transactions on Consumer Electronics, vol. 58, no. 3, pp. 1051-1055, August 2012.

[5] A. Juels, R. Pappu, B. Parno. Unidirectional Key Distribution Across Time and Space with Applications to RFID Security, Cryptology ePrint Archive: Report 2008/044. Available at <http://eprint.iacr.org/2008/044>, 2008.