

LICENSE ELIGIBILITY MEASUREMENT SYSTEM

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ABSTRACT

Now a days in current situation, test for driving license is not done before the RTO officer. it is done by the driving school, they provide certificate for driving. After the driving school given certificate they applied for driving license it was easily getting from the RTO office. During this , certification from the Driving School. some of them have a chance for fraud work, that is without drive a car or bike they will provide certificate for money ,then the person will easily get a driving license. These type of person have a 90% chance of accident on the road. By avoid these type of accident, in this paper we discuss about the driver performance measuring by a eligibility test kit. A driver performance measuring kit will helps to analyze the member who is driving the car and their driving data will be collected from the sensors to Microcontroller and the data is automatically updated to the test kit.

Finally the data will be send to the RTO office Via GSM Technology ,after completing a driving course eligible candidate only getting the driving license from the RTO office. The main aim of this project helps to avoid Accident on Road and fraud done during the driving test.

I. INTRODUCTION

Now-a-days in our country most of the existing RTO offices didnt have systematic driving license verification system. If we want to get the driving license from RTO office, it is not a difficult task now a days but maintaining the original driving license is major task to the vehicle users . On the other side vehicle users are cheating the police by maintaining fake license which was crime. Currently driving license card having details like driving license identification number and address Details of the authorized vehicle Drivers are being morphed. So now-a-days the persons who are maintaining fake driving license, they are removing the authorized vehicle driver license photo and the details and using

same license identification number . This is the major disadvantage for the authorized driving license persons and it is advantage for the persons who are maintaining fake driving license. In order to overcome these problems an authenticating driving license system is proposed and provided to RTOs. By making use of RFID reader we can maintain authenticated driving license system. The existing method at the road transport officers was we need to fill the online driving license application form and next step is the written exam, that exam issuing a driving license by taking photo and the details of the eligible person .So in that driving license as we already know there existing a license. This is the major drawback of the existing driving license issuing system.

But we face new issues while getting a new driving license test for driving license is not done before the RTO officer. it is done by the driving school, they provide certificate for driving. After the driving school given certificate they applied for driving license it was easily getting from the RTO office. During this, certification from the Driving School. some of them have a chance for fraud work, that is without drive a car or bike they will provide certificate for money ,then the person will easily get a driving license. These type of person have a 90% chance of accident on the road. By avoid these type of accident, in this paper we discuss about the driver performance measuring by a eligibility test kit. A driver performance measuring kit will helps to analyze the member who is driving the car and their driving data will be collected from the sensors to Microcontroller and the data is automatically updated to the test kit.

In this project we measure the driver performance, and analyze how he drives a car full complete report will be automatically generate and send final report via GSM technology

II. METHODOLOGY

A. Embedded System

An embedded system is a computer system—a combination of a Computer Processor, Computer Memory and Input Output Peripheral devices—that has a dedicated function within a larger mechanical or electrical system. It is embedded as part of a complete device often including electrical or electronic hardware and mechanical parts. Because an embedded system typically controls physical operations of the machine that it is embedded within, it often has real-time computing constraints.

B. Existing System

In existing system there is no proper machine system to measure the driver performance till now it is validate by an RTO Officer manually. all the time

RTO only check the driver performance not every performance will be checked. it was very long scheduled to check all the driver performance. so some of the negotiation will be there for all the driving test. So by avoiding this negotiation we made new project in proposed system.

C. Problem Statement

The problem identification in this project is, During certification process from the Driving School. some of them have a chance for fraud work, that is without drive a car they will provide certificate for money, then the person will easily get a driving license. These type of a person have a 90% chance of accident on the road. By avoid these type of accident. so the major problem issues is to solve the money bribery and accident met on the road.

D. Proposed System

A main aim of the project helps to measure the performance of a driver. in this project driver performance measuring kit will helps to analyze the member who is driving the car and their driving data will be collected from the sensors to Microcontroller and the data is automatically updated to the test kit. Finally the collecting data will be send to the RTO office Via GSM Technology ,after completing a driving course eligible candidate only getting the driving license from the RTO office.

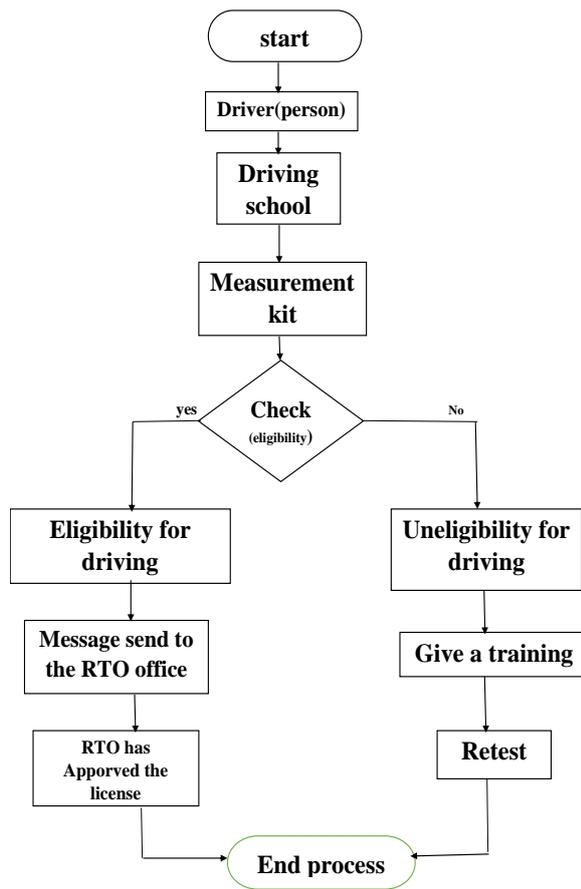
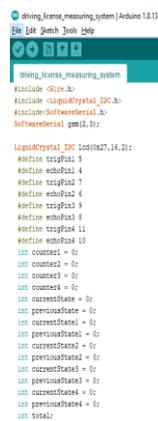


Fig. 1. FLOWCHART FOR PROPOSED METHODOLOGY

E. Software Requirements

1. Arduino IDE



SENSOR INPUTS: On the left are examples of some of the Input Devices you can connect

.ACTION OUTPUTS: On the right are examples of Output Devices you can control.

SOFTWARE BEHAVIOR: Here is where you write software (called SKETCHES in Arduino) that makes decisions about what things are sensed with Input

Devices, and what actions will be taken with the Output Devices. This may be as simple as sounding a buzzer when a switch is closed

.The Arduino IDE (Integrated Development Environment)

This is the free software you will use to create the Behavior of your project.

Here's what it includes:

An EDITOR to create and edit the text of your software Sketch. It actively highlights Keywords in the language so typing errors are more obvious.

A VERIFY system that runs through your Sketch, verifies that there are no errors, and then compiles it into the machine language program that can be

Uploaded to your Arduino board over the USB cable. (This is often called MAKE in other systems, and actually is quite complex, running system

preprocessor, compiler, linker etc. "Under the covers").

An UPLOAD system that communicates with your Arduino Board over USB, loads your program into

Arduino memory, and starts your program running.

A SERIAL MONITOR window that allows you to receive and send messages from programs running on

your Arduino board. This is often used for testing and "debugging" programs.

Many EXAMPLE software Sketches that show how to use many different devices and techniques.

A LIBRARY system containing many prewritten sections of software.

A FILE system to save and retrieve Sketches.

A HELP system that includes the entire Arduino Reference document.

F. HARDWARE REQUIREMENTS

1. ULTRASONIC SENSORS



Ultrasonic sensors are used for distance measuring applications. These gadgets regularly transmit a short burst of ultrasonic sound to a target, which reflects the sound back to the sensor. The system then measures the time for the echo to return to the sensor and computes the distance to the target using the speed of sound within the medium.

2.LCD



A liquid-crystal display (LCD) is a flat-panel display or other electronic visual display that uses the light-modulating properties of liquid crystals. Liquid crystals do not emit light directly. LCDs are available to display arbitrary images (as in a general-purpose computer display) or fixed images with low information content, which can be displayed or hidden, such as preset words, digits, and 7-segment displays, as in a digital clock. They use the same basic technology, except that arbitrary images are made up of a large number of small pixels, while other displays have larger elements.

3.GSM



GSM (Global System for Mobile communication) is a digital mobile telephony system that is widely used in Europe and other parts of the world. GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the three digital wireless telephony technologies (TDMA, GSM, and CDMA). GSM digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot. It operates at either the 900 MHz or 1800 MHz frequency band.

A GSM modem is a specialized type of modem which accepts a SIM card, and operates over a subscription to a mobile operator, just like a mobile phone. From the mobile operator perspective, a GSM modem looks just like a mobile phone.

When a GSM modem is connected to a computer, this allows the computer to use the GSM modem to communicate over the mobile network. While these GSM modems are most frequently used to provide mobile internet connectivity, many of them can also be used for sending and receiving SMS and MMS messages.

III. HARDWARE DESIGN

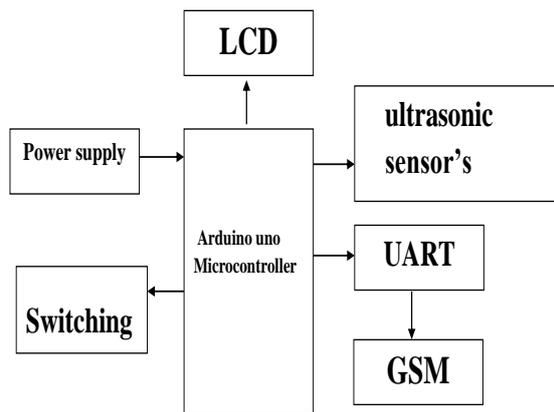


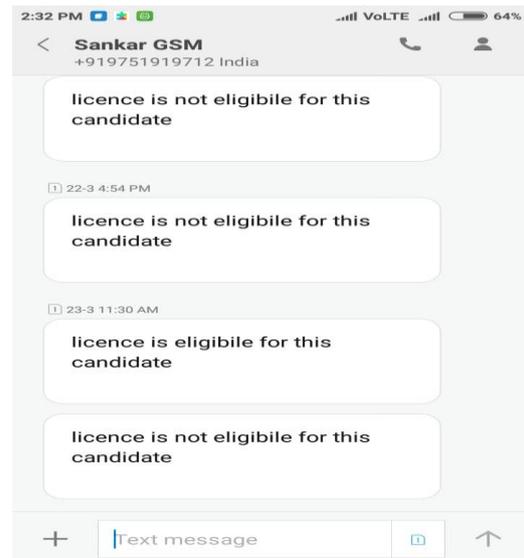
Fig. 2. HARDWARE DIAGRAM

IV. WORKING EXPLANATION

In this project the driver performance measuring kit is fitting in the vehicle. Ultrasonic sensor is fitting in the four sides of the car, when the car is moving on a road the sensor will start sense. If wrong direction will be moved, the sensor gives the wrong message in the LCD Display. Then the switch present in the Accelerator will give full race pressure switch will sense the data send to the microcontroller. After that the microcontroller will analyse the data input given. When two or more times the sensor will sense the microcontroller will collect the message will be automatically send to the information via GSM to the RTO Office.

V. RESULTS

By using this driver eligibility measuring kit certification from the Driving School doesn't have a chance for fraud work. In this paper a driver eligibility measuring kit will help to analyze the member who is driving the car and their driving data will be collected from the sensors to the microcontroller and the data is automatically updated to the test kit, the message will be sent to the candidate.



VI. CONCLUSION

By using this driver performance measuring kit certification from the Driving School doesn't have a chance for fraud work, that is without driving a car they will not provide a certificate for money, then the person will not easily get a driving license. So we avoid the chance of an accident on the road. In this paper a driver performance measuring kit will help to analyze the member who is driving the car and their driving data will be collected from the sensors to the microcontroller and the data is automatically updated to the test kit.

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