Automatic Driving License Test System Using Fingerprint Authentication for RTO

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Abstract -

In recent days, life technology has been developed and people are interested to do everything in shortcut. The growing technology introduces many advances in day to day life. In day to day life many modern transporting vehicles coming into market usage of these vehicles also increases in a wider market. For operating the vehicle the license is compulsory. Roadsafetyisanissueofnationalconcernasitimpactsontheeconomy, public health and general welfare of the people carried out by road, adaptability to individual needs and cost savings. The surveys conducted by international finance corporation imply that most of the road accidents on road are happened because of improper knowledge about how to drive the vehicle.

So the concept of this project is to test the driving skills of a new driver while giving a driving test. For this we have provided a hardware and android integration. We will be able to generate the real time result. By the use of this system we can measure the result of driver in multiple parameter like reverse time, lane cutting etc.

INTRODUCTION

EXISTING SYSTEMS:

Driving license system is a very difficult task for the government to monitor. Normally now a day’s candidate have to appear along with her vehicle for test drive in front of RTO and put closed loop like a number 8. In this process RTO is necessary to monitoring the candidates. If the candidate is passed in the test then he can eligible to get license. If the candidate is failed the disqualified candidate provide some amount as corruption to RTO thus by he getting license illegally.

PROPOSED ENHANCED SYSTEM

Aim of this project is to make the clear, efficient and the transparent test of the any driver which wants the license of driving by tracking the driving of a new person while giving driving test. In real situations if any driver is not good in driving then also he got the license of driving through the agents of the driving school. By using this project we can help to our country to reduce the corruption. Then the proportion of the accidents is increasing by giving the license to the wrong person. This situation can be handled by the project which helps to giving license to the right person only. The prior concept behind this project is to test the drivers’ skills and make the report of it many times at the sharp turn drivers leave the track that causes the accident.

The proposed system consists of IR sensors on a track and fingerprint scanner placed in the vehicle itself, the entire system will be processed by a ARDUINO UNO. Before candidate has to drive the vehicle, he/she has to insert the fingerprint, when both the details are matched with the existed database, then he/she allowed to drive the vehicle. IR sensors placed on track can give the result of vehicle driving by candidate and thus we also get to know the exact RTO location where the test takes place by GPS. All the functions are done on automation basis.

Accelerometer

Fig. 1 Block diagram of the proposed system
In this paper we are going to develop a system for watching the candidate whether he/she is eligible for getting license by testing driving skills. The proximity sensors changes its output when there is vehicle change over the surface. Thus, we can detect the candidate who fails to keep his vehicle by differential output from sensor. Then, it was processed by the micro-controller and the output can be obtained and we placed the instantaneous data to the webserver.

An accelerometer is a device that measure proper acceleration.[1] Proper acceleration, being acceleration (or rate of change of velocity) of a body in its own instantaneous rest frame is not the same as coordinate acceleration, being the acceleration in a fixed coordinate system. For example, an accelerometer at rest on the surface of the Earth will measure an acceleration due to earth’s gravity, straight upwards (by definition) of \( g \approx 9.81 \, \text{m/s}^2 \). By contrast, accelerometers in free fall (falling toward the center of the Earth at a rate of about 9.81 \, \text{m/s}^2) will measure zero.

**ALGORITHM**

1. Capture the data of candidate(registration)
2. Generation of Application number
3. Apply for appointment
4. Cross verification of candidate
5. Allow candidate to use vehicle
6. Start thumb of that candidate
7. Provision of path
8. Path detection sensors
9. Distance measurements and intermediate thumb
10. Stop thumb
11. Detection of location by GPS
12. Remark by RTO and hardware
13. Declaration of Result
14. All the content is available at web page generated by system
15. Issue and deliver the license by post

**REFERENCES**