AutomaticDriving LicenseTest System Using Fingerprint Authentication forRTO

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Abstract -

Inrecentdayslifetechnologyhasbeendevelopedandpeopleareinterestedtodoeverythinginshortcut.Thegrowingtechnology 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 iscompulsory.Roadsafetyisanissueofnationalconcernasitimpactsontheeconomy,publichealthandgeneralwelfareofthepeoplecarried 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 thevehicle.

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 monitoringthecandidates.Ifthecandidateispassedinthistestthenhecaneligibletogetlicense.Ifthecandidateisfailthenthe 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 to trackingthedrivingofanewpersonwhilegivingdrivingtest.Inrealsituationsifanydriverisnotgoodindrivingthenalsohegot 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.Thentheproportionoftheaccidentisincreasingbygivingthelicensetothewrongperson.Thissituationcanbehandled 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 courses 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 processedbyaARDUINOUNO.Beforecandidatehastodrivethevehicle,he/shehastoinsertthefingerprint,whenboththedetails arematchedwiththeexisteddatabase,thenhe/sheallowtodrivethevehicle.IRsensorsplacedontrackcangiveresultsofvehicle drivingbycandidateandthuswealsogettoknowtheexactRTOlocationwherethetestistakeplacebyGPS.Allthefunctionsare done on automation basis

Accelerometer

Fig. 1 Block diagram of the proposed system

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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 ≈ 9.81 m/s^2. By contrast, accelerometers in free fall (falling toward the center of the Earth at a rate of about 9.81 m/s^2) will measurezero.

ALGORITHM

1. Capture the data ofcandidate(registration)
2. Generation of Applicationnumber
3. Apply forappointment
4. Cross verification ofcandidate
5. Allow candidate to usevehicle
6. Start thumb of thatcandidate
7. Provision ofpath
8. Path detectionsensors
9. Distance measurements and intermediatethumb
10. Stop thumb
11. Detection of location byGPS
12. Remark by RTO andhardware
13. Declaration ofResult
14. All the content is available at web page generated bysystem
15. Issue and deliver the license by post

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