CAR LOCKING ALCOHOL DETECTION MODEL

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Abstract
Car locking system using alcohol detection is a model embedded in car only and is in the driver area to take drivers smell, it has various achievements in various fields.

- **Project for reducing daily traffic accidents.**
- **Project for solving drunk driving cases.**
- **Project for helping traffic management.**
- **Project for saving human life.**

Introduction

Drunk driving is one of the worst scenario now a days occouring on a massive scale leading to biggest destructions in many families and also is a big problem for government to establish a good traffic system.

Due to drunk driving only about 10,000,00 people lost there life in delhi and uttar pradesh last year which is a large number and will increase if no actions have been taken.

Government is taking several steps introducing several rules and restrictions in managing the traffic system,but cannot play with the mindset of drivers and is unable to reach on a particular goal.

To reduce this problem i myself take the initiative and tried my best to solve this what i am introducing is car locking system by alcohol detection.

- Car locking system is basically embedded in car system and is connected to engine of car directly.
- This technology also sends message of your location by gps calculation to your relatives when it detect alcohol.

Literature Study

Previously nissan a reputed company having a good market had tried to place a system in there newly designed cars.

A sytem which is using alcohol detector manully. it was like when a person sits in a car then he or she has to take the alcohol detector in his hand after rotating the keys and take that device in his mouth and breath with a good pressure for three times then it use to check the value of ethanol level on the breath and gave the readings.

- If the reading is above the set point then the car will not start.
- If the reading is below then its ok and car will start quickly and you can drive.

Now from here the main problem starts or we can say the drawback of the system comes into existence the problem is that if one of my friend is travelling with me and I am dunked then at the time of ignition what if my friend pass out the alcohol detection process and then after starting the car i sit on the drivers seat and drive the car.

So in this manner there is no use of this particular project and the system fails completely.

The biggest problem was that we are using the system manually due to which car system can be fooled.

And one more problem was that if the alcohol detected then the car will not start so there is no way for that person to reach his way.

Solution

The solution is that what if we place an intoxilizer near to our steering wheel in car which covers only about driver area and it basically starts when the engine start and stops when the engine stops directly connected to engine system.

and for drunk person to reach to his destination the solution is that we going to use GPS system system and GSM model in this project connected to this alcohol model then whenever the system detects the alcohol intensity higher than the GPS model will calculate the latitude and longitude and then using GSM model it send message to that number which we had saved in our GSM sim so in this way the drivers problem to reach to his destination got solved and the relative will be also aware of his or her person.
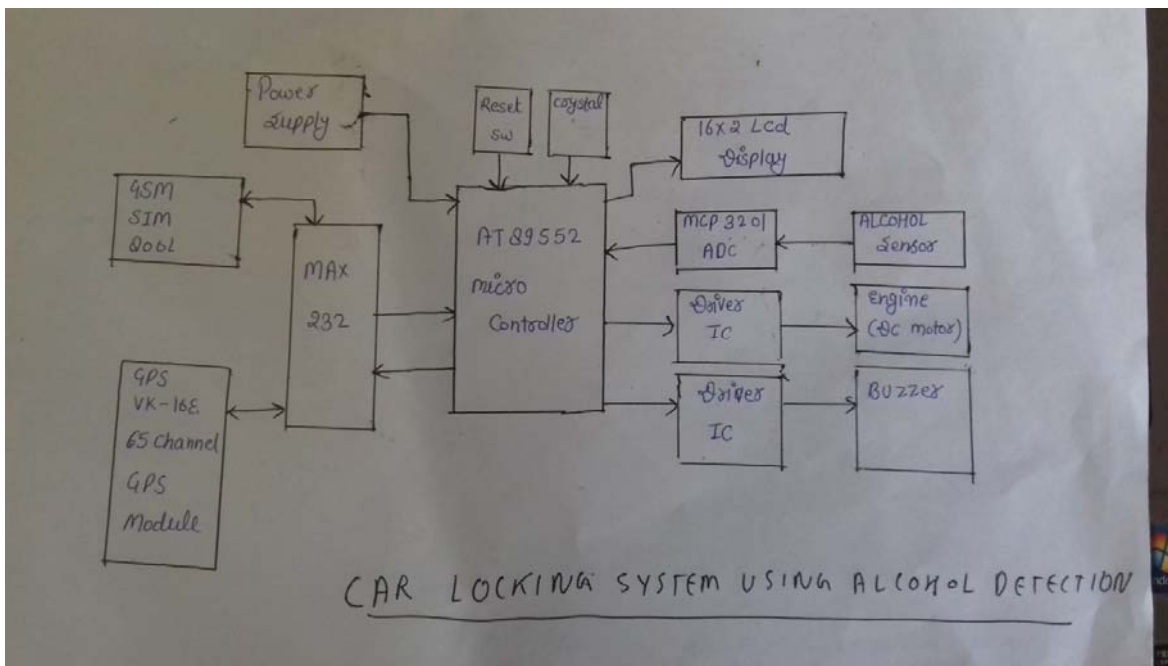
Design of project

For designing this project we need various devices and by connecting them logically and by programming well we can only be able to run this system.

The various devices to be used in this system are-

* Power supply(transformer)
* gsm sim model
* gps vk-16e 66 channel gps model
* alcohol sensor
* buzzer
* two driver ic
* at89552 microcontroller
* reset button
* crystal
* mcp3201adc

The design of the project will work accordingly to programming that we going to burn in the microcontroller.

The microcontroller is in between which basically gives the instruction to various devices to work and stop and perform at the time of there need arise.

Functionality of project

First we have to give supply to gsm modle because to have network signals from the tower and to activate the sim, then just check the signals by calling on that particular number. Now give power supply to the transformer or to the main project now after giving power supply to the lcd will display that gsm model detected so when the power is on so-

* If there is no alcohol detection in the alcohol sensor then "no alcohol detected" is displayed on the lcd and the engine starts and process goes on.
* If the alcohol is detected then using gsm gps it will calculate the latitude and longitude and using gsm model it send sms to the predefined number that "alcohol detected at this latitude and longitude" but before sending the sms the engine will stop down and the buzzer will on and then the gps model comes into action.

Conclusion

Conclusion made out from this project is that it is effective in many ways-

* Helps tp built a safe traffic system

- Make us aware before having a drink that you cannot drive
- Saving many lives
- Keeping your family aware of your location and the state in which you are
- Booning technology to a greater extent

Future scope

As every year the number of cars increases to double so there is a great demand of these transport system in future like in bus, school van, trains and in various means so to avoid the accidents we have to try this technology so to have a good and safe life.

Basically Nissan had tried to implement this idea before but got failed due to various reasons.
so by keeping the emerge of transport system and rush on the roads in mind we have to try this and previously when air bags got introduced who knows that one day they will be mandatory in all the cars for safety.

Refrence

From Nissan Model
Name-Kriti Singh Kushwah
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