

# DIGITAL PROJECT : DARUA DABOCHI

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## 1 IDEA DESCRIPTION :

Drunken driving is one of the major problems today, this causes several deaths every year across the world. Here is a simple method of sensing alcohol in the breath of the driver i.e. Breath Alcohol Concentration (BrAC) is used. This reading will help in locking the car ignition and sending an SMS text message to alert the authorities. It makes a normal car a smart car. The embedded system solution which is used here gave good results in the experiments conducted by us. It has very high sensitivity, fast response and long lifetime. If this system is implemented in the future cars, it can provide a cost-effective and power-efficient solution to the major social problem of drunken driving.

## 2 COMPONENTS USED :

| S. No. | Device/Material              | Quantity |
|--------|------------------------------|----------|
| 1.     | Arduino                      | 1        |
| 2.     | Servo Motor                  | 1        |
| 3.     | MQ3 Sensor(Alcohol detector) | 1        |
| 4.     | GPRS/GSM MODULE              | 1        |
| 5.     | LCD Display                  | 1        |
| 6.     | Breadboard                   | 2        |
| 7.     | Battery(9V)                  | 1        |
| 8.     | Battery Cap(connector)       | 1        |
| 9.     | Moblie Charger               | 1        |
| 10.    | Switch                       | 1        |
| 11.    | Buzzer                       | 1        |
| 12.    | RED LED                      | 1        |
| 13.    | GREEN LED                    | 1        |

## 3 DIFFICULTIES ENCOUNTERED :

The most difficult thing was to send message via GSM Module when there was network problem. Sometime the enviromental air also affects the working of MQ3 sensor , to overcome this problem we had to give breath test multiple times.

## 4 ASSOCIATED IMAGES :

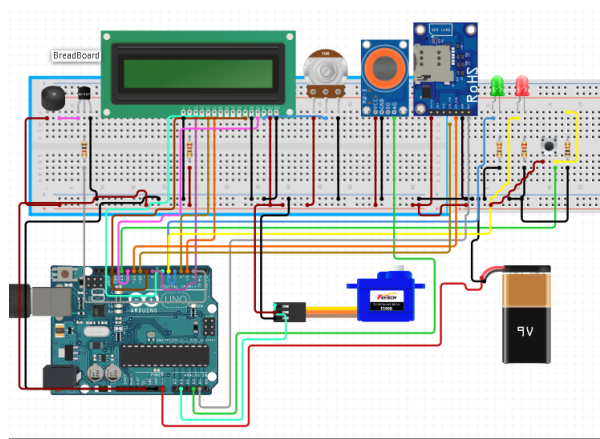


Figure 1: Circuit Diagram

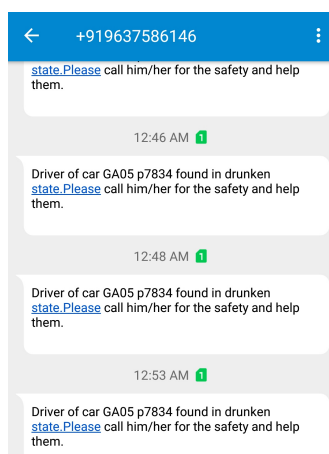


Figure 2: Received Message

## 5 CONCLUSION :

The prototype of the drunken driving detection with car ignition locking and alerting through SMS has given the results for which it is made. The results are satisfactory as it gives a very fast response to the alcohol content.

## 6 EXPERIENCE AND CREDENTIALS :

We enjoyed a lot during the making of this project , learnt a lot from this work . Thanks to NANDKUMAR SIR for giving this task which was the reason to make this creative as well as innovative project.