WELCOME TO OUR PRESENTATION <u>TOPIC</u>

Drunk Driver Detection with SMS Alert

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INTRODUCTION

"Drunk driver Detector using Arduino with SMS Alert and Sound Alarm" will be a great help in terms of preventing any danger caused by drunk driving. The purpose of this project is to detect the presence of Alcohol Detector system.

Apart from sound alarm, an SMS alert will inform the authorized person.

BACKGROUND STUDY

- This technique is very easy to apprehend and utilize. The simplicity of this technique also makes it simpler to accomplish.
- This means that for every single segment in the improvement drive
- This is a highly-restricted model and the next stage starts only after the end of the previous phase.

RELATED WORK

• The Restaurant Professional Software program is a comprehensive restaurant management tool designed for foodservice management of all types. It is simple to learn and easy to use. This system processes transaction and stores the resulting data. Reports will be generated from these data which help the manager to make appropriate business decisions for the restaurant. For example, knowing the number of customers for a particular time interval, the manager can decide whether more waiters and chefs are required. Restaurant Software Systems are essential to the successful operation of most foodservice establishments because they allow the business to track transactions in real-time.

HARDWARE & SOFTWARE REQUIREMENT

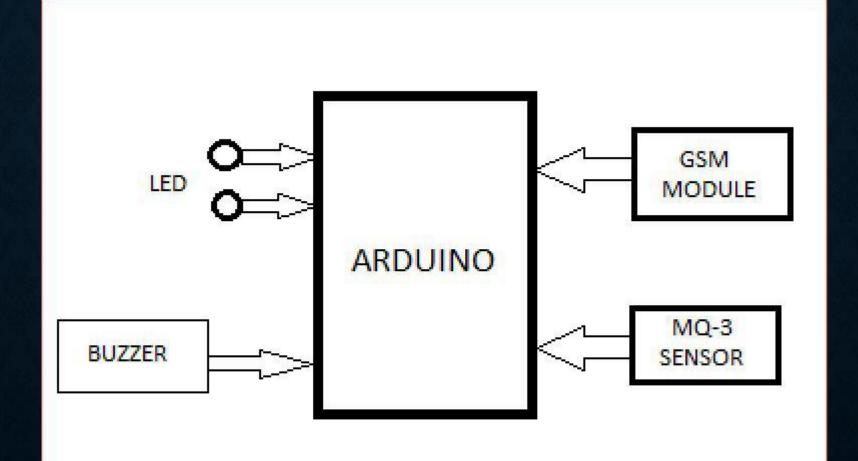
Hardware Requirement:

- ☐ Arduino uno
- ☐ GSM Module
- ☐ Alcohol Sensor
- □ Buzzer
- ☐ Breadboard
- ☐ Connecting wire
- ☐ LED bulb
- ☐ Battery

Software requirement:

- ☐ Arduino IDE
- ☐ Windows 10
- ☐ Programming Language

DESIGN



SYSTEM IMPLEMENTATION CODE

```
• const int buzzerPin = 12;
• const int alcoholPin = 11;
• int Alcohol = HIGH;
• int redled = 5;
• int greenled = 6;
• void setup()
• pinMode(buzzerPin, OUTPUT);
• pinMode(redled, OUTPUT);
• pinMode(greenled, OUTPUT);
• pinMode(alcoholPin, INPUT);
```

```
• Serial.begin(9600);
void loop()

    Alcohol = digitalRead(alcoholPin);

• if (Alcohol== LOW)

    Serial.println("ATDxxxxxxxxxxx;"); // ATDxxxxxxxxxxx; semicolon

  should be at the last; AT command that follows UART protocol;

    digitalWrite(buzzerPin, HIGH);

    digitalWrite(redled, HIGH);

    digitalWrite(greenled, LOW);

 Serial.println("AT+CMGF=1"); //Sets the GSM Module in Text
  Mode
```

- delay(1000); // Delay of 1 second
- Serial.println("AT+CMGS=\"+8801717291214\"\r"); // Replace x with mobile number
- Serial.println("DRUNK DRIVER DETECT");// The SMS text you want to send
- Serial.println((char)26);// ASCII code of CTRL+Z for saying the end of sms to the module
- //delay(100);
- }
- else
- {
- digitalWrite(buzzerPin, LOW);
- digitalWrite(greenled, HIGH);
- digitalWrite(redled, LOW);
- }
- •

REQUIREMENT ANALYSIS

- The Arduino Software which is an open source (IDE) makes it simple to create code and
- upload it to the Arduino Uno board.
- It also needs a GSM module for the purpose of SMS alert,
- Buzzer or speaker for sound alarm,
- Alcohol Sensor

ADVANTAGES

- 1. To prevent accident due to drunk and drive cases.
- 2. Easy and efficient to test the alcohol content in the body in a vehicle.
- 3. Quick and accurate results.
- 4. Helpful for Government bodies (police) and provides an automatic safety systems for cars and other vehicles as well.

FUTURE PLAN

In the coming years, such a system is going to be mandatory in vehicles and is going to play a major role in making lives secure during driving.

Drunk-driver detection in vehicles makes better fleet management with high potential to save lives. Such a system in a vehicle will help parents to avoid the kids to drink and drive.

CONCLUSION

• The system is an autonomous drunk-driver detection and alert system that detects the drunk driver situation of the vehicle with high level of certainty. The system detects drunk driver situation initially or during the driving condition and activates the alter mechanisms for local persons along with nremote indication to the authorized persons.

