Alcohol Detection System by using IoT and Ignition Car Lock

Abstract by-

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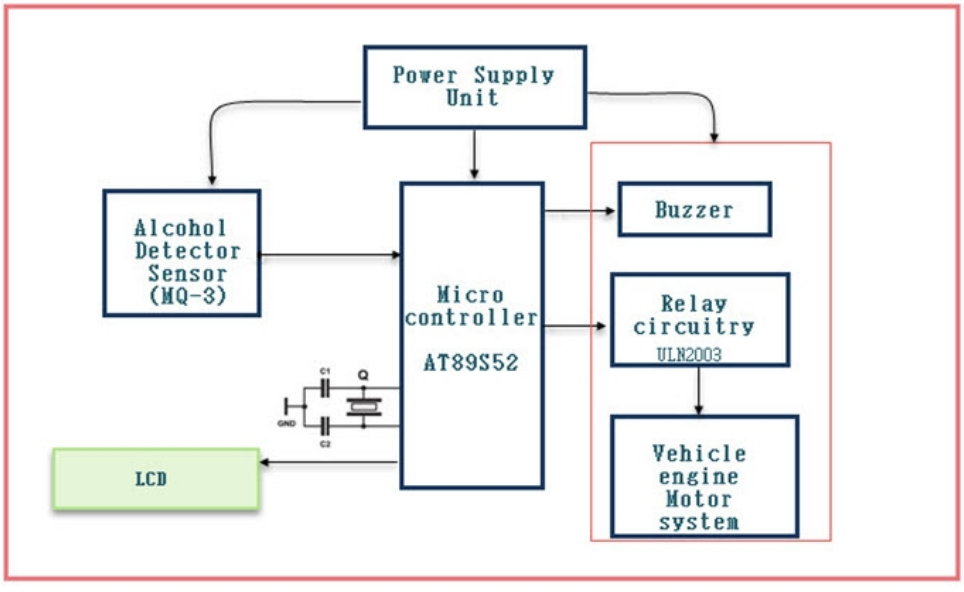
Drunk driving is the reason behind most of the deaths we see around the world today. Using Drunk Driving Detection and Car Ignition Locking Using Raspberry Pi aims to change that with automated, transparent, noninvasive alcohol safety checking vehicles. This system is aimed at making vehicle driving safer than before and protect the accidents from ever happening. The person when inside the vehicle, we have to derive the driver's condition in real time environment and here we proposed the detection of alcohol using alcohol sensor connected to raspberry. This MQ3 sensor is embedded on the steering of the car, such that when the level of alcohol crosses a permissible limit, where the ignition of vehicle will turn off and the engine will stop. By using WiFi module his details will be sent to the family members directly. The raspberry pi processor constantly processes the alcohol sensor data to check drunk driving and operates a lock on the vehicle engine accordingly.



Block Diagram of Alcohol Detection System

Proposed System

Here we propose a system where the person is detected for alcohol level in his body to avoid accidents. Drivers will be sensed before they even start their vehicle. Sensor is placed in the steering to monitor the breath level if the alcohol content in breath is more than the permissible limit. This process is implemented exactly the same in all vehicle where the car engine will be connected to the sensor, and once the sensor senses its output, it will be sent to the motor by referring the range engine which will stop its execution. While implementing this proposed system we can reduce the accidents by 75% and reduce the loss of property and lives.

Conclusion

An effective solution is provided to develop the intelligent system for vehicles which will monitor various parameters of vehicle in between constant time period and will sent data to the concerned persons. this is done by using platforms like raspberry pi, sensor, dc motor, LCD display. The whole system has the advantage of small volume and high reliability. Future scope of this system is to control the accidents and reducing the rate of the accidents. This system brings innovation to the existing technology in the vehicles and also improves the safety features, hence proving to be an effective development in the automobile industry.