

VEHICLE THEFTING DETECTION BY USING IOT

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ABSTRACT

In order to prevent car theft in parking lots and occasionally when driving in unsafe areas, the strengthening of vehicle technology systems is gaining more study popularity and including a vehicle theft security system. The necessity for security is growing everywhere in our evolving world as scientific researchers unveil new eras of discoveries and technology advances daily. Currently, driving is a vital practice for the general public. At the same time, protecting the car from theft is equally crucial. No more input or preferences may be available to assist the vehicle's owner in recovering their vehicle once it has been filched. This method's primary goal is to locate the car without unwanted access by employing quick, simple, obvious, dependable, and affordable methods. In addition to providing surveillance and improved robbery control through profile recognition, the innovative technology will alert the vehicle holder and shock any unauthorized individuals attempting to use the car.

I.OBJECTIVE OF THE PROJECT

In the current state of affairs, women are keeping up with men in all spheres of life, but regrettably at the expense of being abused, harassed, and violently attacked in public and even in their own homes. They are unable to leave their houses at any time of day, are unable to dress however they like, and will not even choose to live in peace. Girls are subjected to a certain amount of quiet inhibition that not only robs them of their independence but also crushes their goals and confidence. It is clear that there is a need for women's security in the nation because of the aforementioned factors. It is worth noting, though, that technological advancements have opened the way for them in most spheres of life. As such, it has the ability to demonstrate intelligence by using the benefits of modern technology to address issues that affect social groups. Therefore, the goal of this project is to employ the web of things (IOT), a technological trend, to help women stop living worry-filled lives. The Internet of Things (IOT) is a network of physically connected things that can be accessed online. It refers to the ever-growing network

of physical objects that feature associate degree scientific discipline address for web property, and therefore the communication that happens between these objects and different Internet-enabled devices and systems. Typically, IOT is anticipated to supply advanced property of devices, systems, and services that goes on the far side machine-to-machine (M2M) communications and covers a range of protocols, domains, and applications. The interconnection of those embedded devices (including sensible objects), is anticipated to lead off automation in nearly all fields, whereas additionally enabling advanced applications sort of a sensible grid, and increasing to areas like sensible cities. Within the recent past, problems on ladies harassment area unit accentuating at nice heights, making anguish and distress among the ladies of nowadays. As a matter of grave concern, this project introduces a E.S.P. primarily based wearable sensible device that proves constructive to the ladies at risk and helps them to fight such odds.

II.EXISTING SYSTEM

The existing vehicle anti theft system are alarm, flashing light automation which makes apply of different kind of sensors which can be force, slope & door sensors, but the shortcomings are cost and it only

blocks the vehicles from the robbery but can't be used to trace the thief. Traditional vehicle security system hangs on many sensors and fetch is also towering.

III. PROPOSED SYSTEM

The Device consists at risk; she presses the button that triggers the psychic phenomena thirty two module that allows the camera module to capture a picture of the incident. The captured image and sending to the emergency contacts and police. The buzzer connected to psychic phenomena thirty two module is activated and it generates a high frequency screeching alarm to hunt the eye of the folks therein section and additionally is a warning to the persona non grata, on the clicking of constant button. In lady safety application camera is employed to search out location of the user and send close pictures to emergency contact numbers severally. This device is best than the prevailing systems and might be extremely useful to people at risk attributable

ESP 32



ESP32 based boards come in a variety of shapes and sizes and pinout of each board is different to other. Also, not all pins of the ESP32 Microcontroller SoC will be available on a development board as some pins might be permanently tied to a dedicated function.

One such case is the Flash Memory. We know that all ESP32 boards come with 4 MB of Flash Memory to store the programs. So, some of the GPIO Pins (6 to be specific) are connected to SPI Flash IC and those pins cannot be used as regular GPIO Pins.

Hence, it is important to understand the pinout of popular ESP32 boards so that you will know what pins are available for use in projects.

ESP 32 CAM



The ESP32 CAM WiFi Module Bluetooth with OV2640 Camera Module 2MP For Face Recognition has a very competitive small-size camera module that can operate independently as a minimum system with a footprint of only 40 x 27 mm; a deep sleep

current of up to 6mA and is widely used in various IoT applications.

It is suitable for home smart devices, industrial wireless control, wireless monitoring, and other IoT applications.

This module adopts a DIP package and can be directly inserted into the backplane to realize rapid production of products, providing customers with high-reliability connection mode, which is convenient for application in various IoT hardware terminals.

DC MOTOR



In a DC motor, electromagnetism plays a crucial role in generating rotational motion. When a current-carrying conductor is placed in an external magnetic field, it experiences a force proportional to the current and the strength of the external magnetic field. This interaction between the conductor and the magnetic field produces rotational motion in the motor.

DC motors typically have more than two poles to prevent "dead spots" in the commutator. Dead spots occur when the rotor aligns perfectly with the field magnets,

causing it to get stuck. Additionally, having more than two poles helps avoid shorting out the power supply, which can damage motor components and waste energy.

Another advantage of having multiple poles is that it reduces torque ripple, which is the variation in torque produced as the rotor rotates. With only two poles, torque ripple would be high, resulting in uneven performance. By having more poles, the motor can produce smoother and more consistent torque output.

Overall, the internal configuration of a DC motor is designed to optimize performance, prevent damage, and ensure smooth operation by leveraging the principles of electromagnetism.

BUZZER



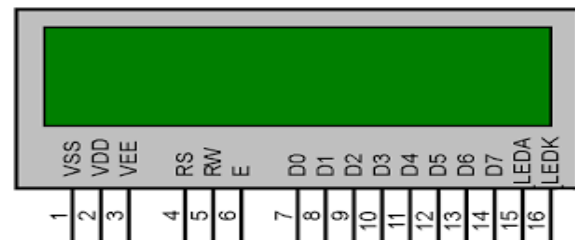
A buzzer or beeper is an audio signaling device used for various purposes such as alarms, timers, and user input confirmation. There are two main types: electromechanical and electronic.

Electromechanical buzzers are based on an electromechanical system similar to an

electric bell but without the metal gong. They typically involve a relay connected to interrupt its own actuating current, producing a buzzing sound. These buzzers were often mounted on walls or ceilings to amplify the sound.

Electronic buzzers utilize a piezoelectric element driven by an oscillating electronic circuit or audio signal source. They produce sounds like clicks, rings, or beeps to indicate actions such as button presses. Electronic buzzers are widely used in modern applications due to their versatility and reliability.

LCD



It is called Liquid Crystal Display. We are going to use 16x2 characters LCD. This will be connected to microcontroller. The job of LCD will be to display all the system generated messages coming from the controller. LCD will provide interactive user interface. This unit requires +5VDC for its proper operation. This module is used for displaying the present status of the system.

IV.RESULT

This is the result of our Project where the unknown person unlock door of the Vehicle ,it will not open and gives the Electric Shock to that person in case the owner of default person's face detects while opening the door, it will open This will provide Antitheft Detection and also provides the Experimental Setup solution for the theft kind of Activities in the vehicle with the help of DIP and gives best Security System to authorized person. The above figure shows the experimental set up of our method wherein a circuit board is present to process the data

V.CONCLUSION

From these, we apply theft control strategies that will offer the crucial features needed by sophisticated intelligent vehicle security, preventing theft and safeguarding the use of unauthorized users. crucial features that make it easy for investigators to identify the hijacked image, as well as a secure and safe environment system for drivers.

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