

VEHICLE THEFT CONTROL AND ACCIDENT LOCATION INTIMATION THROUGH SMS

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ABSTRACT

Human life is more valuable than anything else, timely help is more important than lending a helping hand. There are two main modules discussed in the project. The first module is password based security system to access the vehicle and the second one is accident location intimation through SMS by using GSM module. This project is one among those which is designed in a way to save human lives in a timely manner. In modern day's vehicles, vehicle anti theft system is of prime importance and traffic accidents are one of the leading causes of fatalities. An important indicator of survival rates after an accident is the time between the accident and when emergency medical personal are dispatched to the accident location. By eliminating the time between when an accident occurs to the scene decreases mortality rates, we can save lives.

I INTRODUCTION

In the present growing economy of India, the country also faces the uprising of crime rate. The offense has generated losses in properties, valuables and money. Car theft, which is the main concern for the conduct of this project, is one of the biggest crimes which are hard to eliminate. The person travelling can be tracked and secured in the case of an emergency. On the other hand, safety has also become a major factor that is to be taken care of which numbers of accidents have rapidly increased day by day, many lives are lost due to improper post-accident signalling and tracing out the exact location. Our project provides solution for the above stated problems which involves intimating the authorized person in advance about the status of the vehicle if it is being intruded by an unauthorized person or an accident using GSM and GPS based technology. In addition to it our project also includes the work of intimating the car dealers regarding any malfunction of the car with exact location. This project involves intimating the authorized person in advance about the status of their vehicle. The ignition control over the vehicle is with the owner and when the vehicle is being intruded by an unauthorized person, a message is sent post-accident signalling can be given in form of text message with the exact location using GPS and GSM based technology. Here the GSM is used in order to alert the prior person through a text message and the GPS is used to track the exact coordinates of the vehicle which is also included to the text message. Here the serial communication interface UART is used for the communication between the controller, GSM and GPS module. The RS232 communication standard is used for the Electrical signal characteristics such as voltage levels, to find signalling rate.

II PROPOSED SYSTEM

Designed a vehicle tracking and locking system based on GSM and GPS using GSM Modem SIM300 V7.03 as the technology. This GSM modem was designed such that it can accept SIM card. The project

is further stated that the designed system is sets such that it will go into sleeping manner when the vehicle is being driven by the vehicle owner, otherwise, it will be in active status. Also, the system has the capacity such that when SMS message is sent to the controller, it has the features of sending signals to the vehicle engine motor which enable the engine of the vehicle to decreases steadily and then off, thereafter, it will locked all the doors and the engine which has to be restarted again before the door can be opened by entering the password given to the rightful owner of the vehicle. We proposed the design and development of Global positioning system and Global system for mobile communications-based vehicle tracking in a real time. The designed system gives an alert which is used for reporting any events that happens to the vehicle as it moves. The proposed system also consists of an embedded system with Arduino Processor which is installed in the vehicle. The system has the ability to send an SMS which consist of latitude and longitude of the vehicle by using AT commands after pressing the emergency key if there is any problem that is associated with the vehicle and also designed a car authentication and accident intimation system using GPS and GSM which is used to save lives. The design of the system has three modules. The first module is used to send the vehicle numbers and the coordinates to a nearby hospital, the second module is used to send message to the vehicle owners whenever the vehicle got crank such that it will notify the status of the vehicle for the owner to take action while the third module is used to notify the nearest service centre for action based on the error signals and coordinates that shows on the dash-board of the vehicle and also developed a massive vehicle security system which uses embedded and mobile technologies. In this research, two modules was used; the first one is an android module that uses GPS system to get the coordinates of the vehicles which assist the owner to track the vehicle while the other module is used to interact with the vehicle owner by using SMS for receiving and sending messages which uses GSM as a communication channel in helping the owner in tracking the vehicle. Our proposed system consists of three modules

(1) SMS Ignition Module: This is user defined module. When the car starts it sends the short message service (SMS) to the owner of the car, only if a reply is received the user is enabled to crank the car

(2) Accident Alert Module: This module sends alert message to hospital or to the specified person

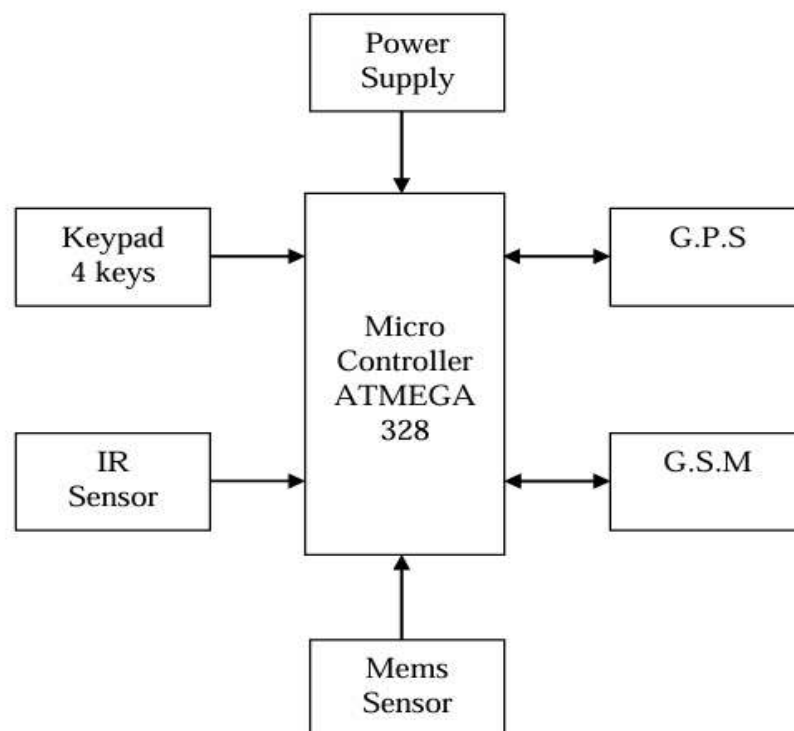


Fig.1 : Block Diagram of proposed system

III RESULTS AND DISCUSSION

Vehicle identification and authentication system was developed by for traffic monitoring. This system prevents unauthorized vehicles from gaining access to restricted areas, such that when a vehicle entered a particular state it needs to be verified by using registered number plate which the vehicle owner has already registered earlier. The number is searched from their database to ascertain the genuineness of the vehicle and if it belongs to that state or area entrance is guaranteed. According to, traffic accidents are one of the leading causes of fatalities in most of the countries. Since the rate at which vehicle increase so also the rate of road accidents increase, in view of this and to find measure to reduce road accidents and find means of attending to road accident victim, the researcher look at how accident can be notified automatically whenever it occurs by using a sensors which look at the health condition of the passengers and then sent as a video through the GSM to Vehicle Theft Alert and Location Identification Using GSM and GPS.

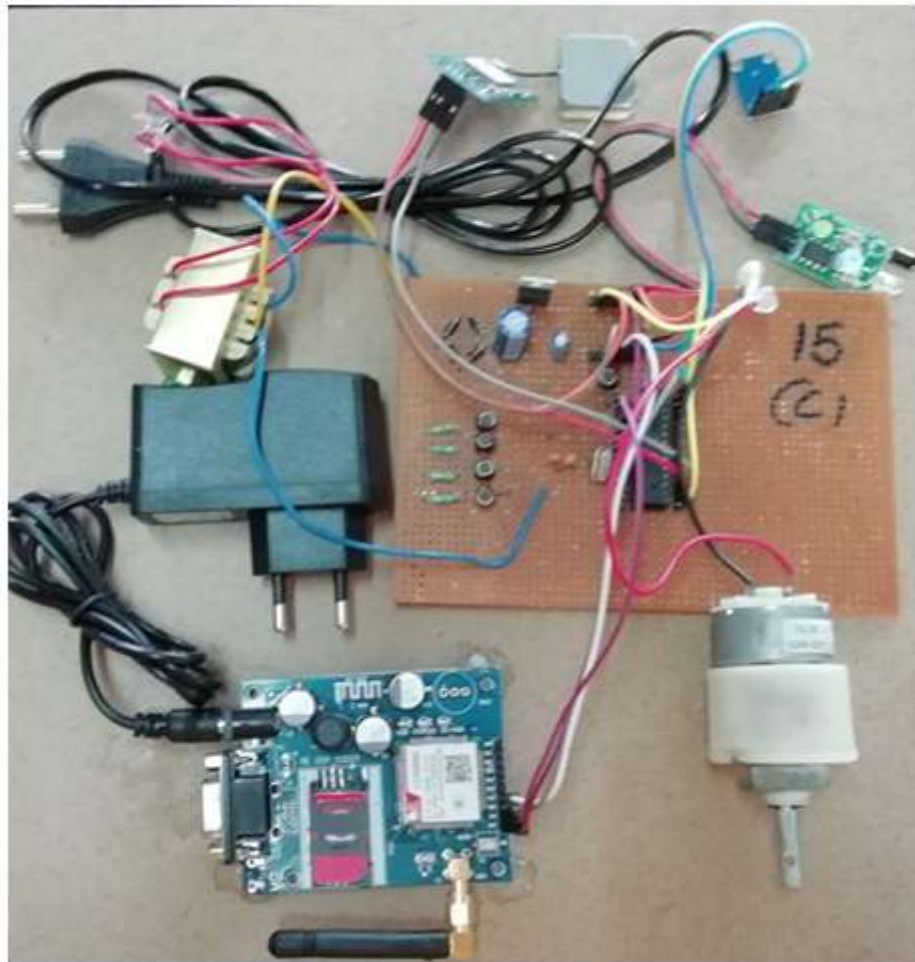


Fig 2: Output of Proposed System

IV CONCLUSION

This Paper works on vehicle theft prevention by means of alert and location identification as effort towards recovering missing, stolen or unauthorized use of vehicles. Several literatures reviewed shows how various technologies (e.g. Sensors, GPRS, GPS, GSM, etc.) have been used in this area over the years. Most of these technologies have been helpful but fails at times due to signals distortion and lack of network coverage. This paper proposed the use of GSM, GPS, and the Web technologies to achieve the implemented system. The proposed system to ascertain the workability and functionality of each component that makes up the system. System acceptance evaluation was also carried out to ascertain acceptability and effectiveness of the developed system. Results analysed from both the system integration testing and acceptance evaluation shows the implemented

system can be deployed and used as a cheaper means of preventing vehicle theft and as a recovery tool for missing or stolen vehicles.

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