IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 2, February 2024

Vehicle Theft Detection and Locking System using GSM and GPS

Yelam Madan Rajendra, Jondhale Suyog Balasaheb, Kote Satyam Ravindra, Prof. Dahiphale P. D.
Department of Electronics & Telecommunication Engineering
Amrutvahini Polytechnic, Sangamner, India

Abstract: *A vehicle tracking system is very useful for tracking the movement of a vehiclefrom any location at any time. An efficient vehicle tracking system is designed and implemented for tracking the movement of any equipped vehicle from any location at any time. The proposed system made good use of popular technology that combines a smartphone with an Arduino UNO. This easy to make and inexpensive compared to others. The designed in vehicle device works using Global Positioning System (GPS) and Global System for Mobile Communication(GSM) technology that is one of the most common ways for vehicle tracking. The device is embedded inside a vehicle those positions is to be determined and tracked in real time. A vehicle tracking system is an electronic device installed in a vehicle to enable the owner or a third party to track the vehicle's location. This paper proposed to design a vehicle tracking system that works using GPS and GSM technology, which would be thecheapest source of vehicle tracking and it would work as anti-theft system. It isan embedded system which is used for tracking and positioning of any vehicle by using Global Positioning System (GPS) and Global system for mobile communication (GSM). An Arduino UNO is used to control the GPS receiver and GSM module. The vehicle tracking system uses the GPS module to get geographic coordinates at regular time interval. The GSM module is used to transmit andupdate the vehicle location to a database. This paper gives minute by minute update about vehicle location by sending SMS through GSM modem. This SMS contain latitude and longitude of the location of vehicle. Arduino UNO gets the coordinates from GPS modem and then it sends this information to user in text SMS. GSM modem is used to send this information via SMS sent to the owner of the vehicle. Location is displayed on LCD. And then Google map displays location and name of the place on cell phone. Thus, user able to continuously monitor a moving vehicle on demand using smartphone and determine the estimated distance and time for the vehicle to arrive at a given destination.*

Keywords: vehicle tracking system

REFERENCES

[1] Nagaraja, B.G.; Rayappa, R.; Mahesh, M.; Patil, C.M. and more authors, “Design & Development of a GSM Based Vehicle Theft Control System”, International Conference on Advanced Computer Control, 2009. ICACC ‘09, Page(s):148 - 152, 2009.
[2] D.Narendar Singh, K.Tejaswi (M.Tech), “Real Time Vehicle Theft Identity and Control System Based on ARM 9”, International Journal of Latest Trends in Engineering and Technology (IJLTET), Vol. 2 , Issue-1 January 2013, Page(s): 240-245, 2013.
[3] R.Ramani, S.Valarmathy, Dr. N.SuthanthiraVanitha, S Selvaraju, R Thangam, M Thiruppathi, “Vehicle tracking and locking system based on GSM and GPS”, I.J. Intelligent Systems and Applications, Vol. 5, Issue-9 August 2013, Page(s): 86-93, 2013.
[4] Amaradi Kondababu, N.V.Satish, “Vehicle Anti Theft System and Emergency Accident Notification and Rescue System using ARM”, International Journal of Scientific Engineering and Technology Research, ISSN 2319-8885 Vol.03,Issue.37 November-2014, Page(s):7574- 7580,2014.
[5] Vipin Venugopal, Haritha Chandrasekhar, Krishna Nilayangode, “Password Protected Vehicle Access System”, International Journal of Innovative Science and Modern Engineering (IJISME) ISSN: 2319-6386, Volume-2, Issue-11 October 2014, 2014.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 2, February 2024

[6] Mohammed Abuzalata, Muntaser Momani, Sayel Fayyad and Suleiman Abu-Ein, "A practical design of anti-theft car protection system based on microcontroller", American Journal of Applied Sciences 9 (5): ISSN 1546-9239, Page(s):709-716, 2012.