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IoT Based Military Task Force Health Parameters and GPS Position Tracking System using Raspberry PI

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Abstract: In this project we present an Internet of Things based Soldier Health Status Detection and Location Tracking System using Internet of Things for the safety purpose of the soldier. The soldier is the critical unit of the nation and their life is valuable. Lot of soldiers are facing many problems such as communication with the control room and no proper medical help at a proper time which leads to the death of the soldier. To minimize such cases, we have proposed a continuous alert system to track location and monitor the health of the soldier. The proposed system is very useful in detecting location of the soldier in real time using GPS and communicating the health status parameter continuously using GSM module embedded in microcontroller. The tiny sensors can be fixed to the Soldier body or dress of the soldier to detect body parameter and transmit the information to the control room and other solider when there is a low body rate or when it falls than the defined threshold value. The soldier can send an alert message to the guardian and control room for the help in the panic situation using an application. The control room/guardian also uses android application to request the location of the solider automatically in the panic situation. The soldier can also request for the nearest hospital information in the emergency.

Keywords: GPS.

REFERENCES

- [1]. Mr. Palve Promod, "Gps Based Advance Soldier Tracking with Emergency Message and Communication System," International Journal of Engineering Research and General Science, Volume 2, Issue 6, October-November, 2016.
- [2]. Mr. Rajdeep Limbu, Prof. V.V. Kale, "Gps Based Soldier Tracking and Health Monitoring System," International Journal For Technological Research In Engineering, Volume 1, Issue 12, August-2018.
- [3]. Dineshkumar Jaiswar, Sanjna S. Repal, "Real Time Tracking and Health Monitoring of Soldier using ZigBee Technology: a Survey," International Journal of Innovative Research in Science, Engineering and Technology, vol.4, Issue 7, July 2015.
- [4]. Pankaj Verma, J.S Bhatia, "Design and Development of GPS-GSM Based Tracking System with Google Map based Monitoring," International Journal of Computer Science Engineering and Applications (IJCSEA), vol.3, No.3, June 2016.
- [5]. Rubina. A. Shaikh, "Real Time Health Monitoring System of Remote Patient Using ARM7," International Journal of Instrumentation, Control and Automation (IJICA) ISSN: 2231-1890, Vol-1 Iss-3,4,2012.
- [6]. Niket Patil, and Brijesh Iyer, "Health Monitoring and Tracking System For Soldiers Using Internet of Things (IoT)," ISBN:978-1-5090-6471-7/17/\$31.00©2017 IEEE.
- [7]. Aashay Gondalia, Dhruv Dixit, Shubham Parashar, Vijayanand Raghava, Animesh Sengupta, "IoT-based Healthcare Monitoring System for War Soldiers using Machine Learning," Procedia Computer Science133 (2018) 1005–1013, © 2018, The Authors Published by Elsevier Ltd.

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