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Soldier's Health Status Monitoring Using Arduino (Iot Based)

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ABSTRACTNowadays, the security system of the state relying upon the warfare and troopers have necessary role in it. There area unit several considerations relating to the safety of troopers, therefore for his or her security purpose, several instruments area unit mounted on them to appear at their health standing. Bio-sensor systems comprise varied types of tiny sensors, transmission modules and process capabilities, and will therefore facilitate inexpensive wearable unnoticeable solutions for health observance. IOTin tending is that the key player in providing higher medical facilities to the soldier's and facilitates the doctors and hospitals also. The projected system here consists of assorted medical devices like sensors and net primarily {based} or mobile based applications that communicate via network connected devices and helps to observe and record soldier's health information and medical data. The projected outcome of the paper is to make a system to produce best medical care to the troopers even within the remotest areas with no hospitals within their areas by connecting over the web and grasping data through regarding their health standing via the wearable devices provided in the kit employing a Arduino UNO microcontroller which might be able to record the soldier's temperature, vital sign and force per unit area. The collected data area unit typically used to analyze and predict chronic disorders or alternative diseases like heart attacks in preliminary stage itself victimization the information mining techniques that may additionally offer the approach advantageous for deciding .

Keywords—Internet Of Things, WIFI Module, Sensors, Arduino UNO

I. INTRODUCTION

In this project, we have a tendency to square measure observation varied parameters of the soldier victimization the web of things. within the soldier observation system supported the web of things project, the period of time parameters of a soldier health square measure sent to the cloud victimization web property. These parameters square measure sent to a far off web location so user will read these details from anyplace within the world. The interconnected objects collect the knowledge at regular intervals, analyze and accustomed initiate required action. The conception of IOT stands on sensors, entree and wireless network that modify users to speak and access the application/information the aim of this work is to boost health observation victimization humanoid application in mobile phones. The soldier will read the history of his health knowledge on his phone and therefore the doctor will read the health info relating to all the troopers United Nations agency square measure being monitored by him. necessary body functions square measure measured victimization the web of medical things. IOT medical devices record blood heat, rate (heart rate), pressure and alternative measurements looking on diagnostic needs and expected illness. The scope of this work in the main lies within the health sector and to the those that want continuous observation of health knowledge. The system can even bridge the gap between doctors and troopers by permitting doctors to look at the soldier's knowledge anytime they require to.

II. METHODOLOGY

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III. MODELING AND ANALYSIS

Figure1

IV. RESULTS AND DISCUSSION

Figure2: Temperature, Blood Pressure and blood pressure versus time graph

CONCLUSION

Above system once completed would facilitate in determining health status of soldier's with measures of pulse rate, pressure level and temperature. Arduino UNO was found to be additional compact user friendly and fewer advanced, that may without delay be utilized in order to perform many tedious and repetitive tasks. This technique helps to safeguard soldier life on the war and also in day today life,the data is stored in cloud so,we can treat them anywhere from the world.

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