Best Solution For Human Health

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ABSTRACT

This system design and implementation of Human Health Monitoring system. System is integration ofwireless sensor network and cloud computing. The architecture of this system is depends on medical sensor which capture the patient data with the help of sensor's from the patient bodies. In case of large number of people when they meeting same place, Aimed of this system is to stop the human data entering in manually. This system is used for large number of chronic disease patient's and also works for normal patient's.

1 Introduction

Wireless sensor network is used for the sensing the data. WSN has different application such as military application, under water network application and health monitoring application. But Wireless Sensor Network has many disadvantages just like limited capacity of the memory, low power consumption and slower to data transmission. In this system we can used the cloud computing concept for improve the wireless sensor efficiencies.

In Hospital Health Care System, sensors are necessary for sense the data from patient bodies using the wireless sensor network. These sensors are used to sense the heart bit, blood pressure or physical parameters of the patient's bodies. This sensor captured those parameters and send to the server [1]. Cloud computing is responsible for provide the flexibility and it also provide the information and which has a minimum cost. Cloud computing technology can store the large number of data and it has provides the faster services. The users who are used the cloud service then they have do not worry about the size of their file.

This system aimed, integrating the idea of Wireless sensor network and cloud computing. Medical sensors are connected to the patient bodies, sensor can sensing the data and this sensed data send to the cloud, cloud are responsible for receiving, storing and retrieving the data. In this system we can use the raspberry pi technique which is responsible for gathered the data from sensors and these gathered data are send to the cloud, with the help of wireless communication channel.

2 Literature Survey

In Hospital Health Care System, Sensors are necessary for sense the data from patient bodies using wireless sensor network. This sensors are able to sense the heart rate, blood pressure or physical parameters of patient bodies. This sensors are captured these parameter and send this to the server[1]. With the help of existing system it can monitor the patient details. Instead of this existing technologies we can used the wireless sensor technologies. In this system we used the six different types of sensors, this sensors are sensing the data from patient bodies. In this system doctor has to no need to visit the patients individually. In this system wireless medical devices and mainly aimed is wireless personal area network technologies, WiMax, WiFi and Zigbee[2]. This system is specially designed for chronic patients. Here patients monitor are used for observed the patient details by body sensors. This system architecture are used the sensors which is used for measure the physical parameters of patients with the help of wireless sensor network[3].In this system the health care technologies are used for fill the data of patient's with the help of wireless application. We can used this application for medical data analysis, monitoring. Healthcare has same features like mobility, flexibility, and monitoring. [4]. In this paper, e-health monitoring network system

design and implement based on smart device for real time analysis of different parameters of different patient's body. Cloud computing is used for stored large amount of patient's historical data for patient's data which are stored in cloud computing. Medical sensors are used for monitoring health as well as surrounding of the patient's. Aimed of these are developing architecture based on smart device and wireless sensor network which is used for monitoring the patient's data. Based on e-health service the current patient's data record are comparing with previous data record of patient's.[5]

3 Existing System

Present day in hospital, they have not any dedicated system. They have only patient's, doctor and approval staff. By using doctor and approval staff going to make decision for patient to create the report's. They use Microsoft word documents for preparation of patient test report. They only have fixed format of "word file".These word file are first of all savedas a new name and they make changes as require to generating particular patient test report. All report are generated by using this steps and take decision. Because of this reformatting the report format each time is the tedious work and process of generating report and treatment of patient's take much more time.This process is in form of paper work or patient's, hospital staff to the doctor and doctor make decision and give the suggestion to patient for their prescription it take more time. In health care monitoring this system is not very beneficial for saving life of " Critical Patient's"..

4 Proposed System

In proposed system a patient with a sensor attached to his body by using raspberrypi. Then collect data with the help of sensor is given to the wireless sensor network. By using SSL(Secure Socket Layer) patient's data is storing in encrypted form. So the data is get secure. SSL also used for

established encrypted connection between the server and Raspberry pi for transmitting patient's data to the cloud through this secure channel.

The authentication provided for to the authenticate patient's id is valid or not. When sensor calculates data that data is either above thresholds value or below thresholds value. If data is above threshold value then it is consider as abnormal data. If data is below threshold value then it is consider as normal data. Then this data is store on cloud at this stage the comparisons happen that if sensor data is normal data then it is directly saved in data base (i.e. Historical Patient's data). If sensor data is abnormal then it calls data mining procedure that is patient id, sensor type, sensor data. It checks for the current patient data is there any historical medical decision. If not then it sends notification to the doctor for making decision. If there is any medical historical decision found then send decision to the doctor for approval, then it send decision to the patient's for follow up then it is stored in database.
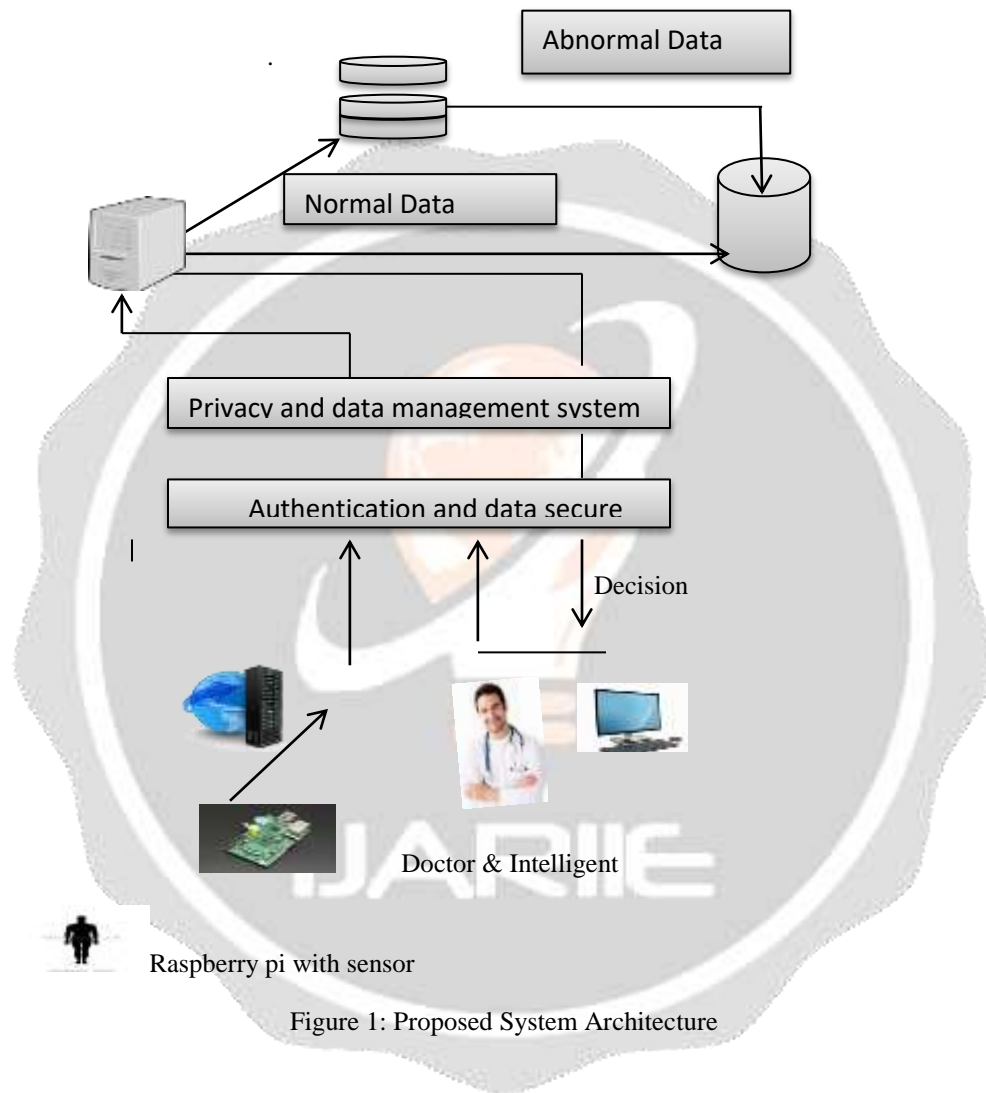
Figure 1: Proposed System Architecture

5 CONCLUSIONS

This system is integration of the wireless sensor network and the cloud computing which create new technology for patient's monitoring with minimal cost and improving medical staff performance. And also data mining techniques helps to extract the data of patient's. This system based on patient's Historical data and it provide the decision based on this data and eliminating manual data collections.

6 References

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