INTELLIGENT ALL TIME MEDICINE DISPENSER AND CONSULTAION FOR RURAL PEOPLE USING CLOUD SERVICE

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***Abstract*— This paper deploys the use of Anytime Medical Counter in rural areas where people cannot get the best doctor on track. The idea behind the IOT initiated medical counter is to help illiterate people. Sensors such as temperature sensor, ultrasonic sensor, heartbeat sensor, moisture sensor are installed in the Medical Dispenser. Patient will then be examined by doctor through IOT and medicines are prescribed. The Medicine Dispatcher dispatches the medicines from the dispenser to the user. The patient will be authenticated using the RFID card. Initially, patient will authenticate himself and then feed the medical data which is then viewed by the doctor using IOT. Medicine switch was pressed by doctor to disperse the medicine .**

Keywords: Drug, Pills, Prescription, Online consultation.

I. INTRODUCTION

The idea behind the All-time medicine dispenser and consultation for rural people using cloud service is to help rural people get good medical facility. In order to measure the height, heartbeat, sugar level and temperature of a person, several sensors such as the ones mentioned above are installed in the medical dispenser. The patient logs into the system using unique RFID (Radio Frequency Identification) card. After authentication, the patient's height, heartbeat and other factors are measured. The patient is then examined by a specialized doctor and medicines prescribed will be received through the medical dispenser.

II. OBJECTIVES

Simplifies the medical process is the main objective of this project. The people from the non urban area can consult the experienced doctor through this system for medical needs. The chance of mistakes are reduced through this system. It makes more easier for the end user to get examined and avail of medicines for their ailment. Through the limited computer knowledge, this system can be fully utilized by the end users. Another notable feature is the simple methods which avoids larger equipment. The product of this system cost effective for an everyday problem.

III. EXISTING FEATURES

The patient's data are stored in the data base. This system is more cost effective. The patient can easily access the doctor through this system which minimize the travelling time. Non urban patients would be able to access doctors. Regular monitoring of patient's health data is proposed.

IV. ADVANTAGES

A) Applications

The Intelligent all time medicine dispenser will be useful for people living in rural areas to get good medication facilities. It can also be implemented at the highways where are lack of hospitals.

B) Social Benefits

The interface is user friendly, so that anyone can use it. The records of the patient are stored in cloud for future use. Our Intelligent All Time Medicine Dispenser will reduce self medication to a great extent. This system is more accurate. The rural people will get more benefits through this medical dispenser.

V. PROPOSED SYSTEM

In this system, Though online facilities have been massively developed in India, there are many rural areas where they don't have a proper facility to consult with doctor and get modifications from them and they do lack non exposure to specialists like speech therapist and psychiatrist.

VI. MODIFICATION

So here we come up with solution where that people can get good medical facilities by consulting the doctor through video conferencing. They can even also interact with doctors in various fields like speech therapist and psychiatrist, so patient can consult from doctor.

VII. SENSORS

A) Transformer

Fig 2 : Transformer

In our project we are used transformer to provide power supply. Transformer has 240 v primary winding and center tapped secondary winding .supply voltage value is in between 220-230$V_{AC..}$ output current and output voltage are 1A and $12V_{AC.}$

B) Temperature Sensor

Fig 3: Temperature Sensor

The temperature of the patient is measured through this sensor. The temperature device (LM35 series) with an output voltage linearly- proportional to the centigrade temperature. It directly Calibrated in Celsius (centigrade).

C) Moiture Sensor

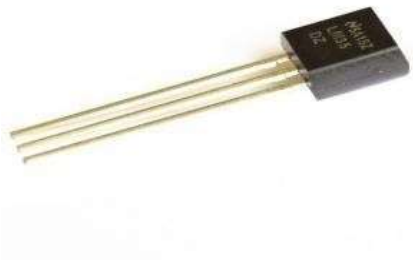
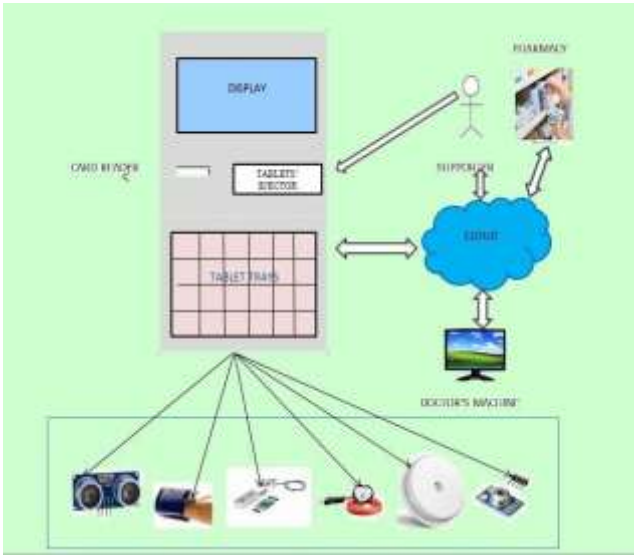


Fig 4: Moisture Sensor

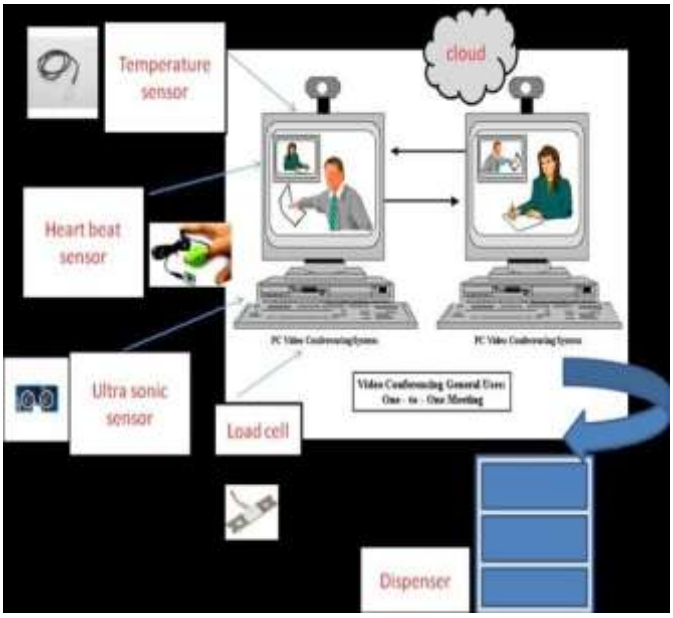
The moisture content of our body are measured through this sensor by which blood glucose level can be calculated. The volume of water quantity are measured directly by the property such as electrical resistance, dielectric constant or interaction with neutrons as a proxy for the moisture content. Five volt is provided as input volt and between 0 to 5volt as output volt. The output received in the form of analog and the sensitivity can be adjusted.

Fig 5: Architecture Diagram



IX. PRELIMINARY RESULT

Fig 6: Preliminary Result



X. MODULES

VIII. ARCHITECTURE DIAGRAM

XI. CONCLUSION

We have used cloud system to save the information of the patient for future use. Both the patient and the doctor have already registered so that both can interact each other. We use sensor to examine the patient.

This Intelligent all time medicine dispenser help the rural people to get good medical facility. It is also used to improve medication adherence. The price of this system is low and also high degree of scalability and remote manageability

XII. REFERENCES

1. G Andria, F Attivissimo, and A Lanzolla "Digital measuring techniques for high accuracy ultrasonic sensor application" Proc. IMTC, vol. II, St. Paul
2. Bandodkar AJ, Wang J Non-invasive wearable electrochemical sensors: a review - Trends Biotechnology
3. Kuglestadt T Semiconductor Temperature Sensors Challenge Precision RTDs and Thermistors in Building Automation, Application Report
4. Marathe R, Kulkarni A, Devkar U Portable automatic height detector. International Journal of Science Engineering and Technology Research (IJSETR)
5. Razbzn A, 1993 "Intelligent Control of an Automated Adhesive Dispensing Cell" Ph.D. Thesis, Imperial College- London- UK