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A Smart Pill Box to Remind Medicine Consumption for Patients Using IOT

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ABSTRACT: The aim of this project is to remain people United Nations agency forget to require their medicines on time. This project proposes a wise pillbox with inform and consumption perform. that is employed to relinquish alert the user to require pills at a specific time and also the pills required to require at that point comes bent the user to avoid confusion among medicines. good pill box will reduce older family member's responsibility towards giving the right and timely consumption of medicines. This system Get the main points concerning pills from the user and Send commercial document to medical look by exploitation GCM communication. Those who're terribly busy, as this device will not only inform them of their treatments with a voice command are going to be generated for medicine taken at that point. The patient will store the respective time of the distinctive medication by associate IR detector. Based on associate RTC (Real Time Clock) interfaced to the microcontroller, the programmed time for medicament is displayed on the liquid crystal display in conjunction with a voice sound to alert the patient about taking the drugs. The microcontroller employed in this challenge is of ATMEGA328 family. RTC used maintains an accurate time because it is supported with the help of a crystal.

KEYWORDS : Atmega328 controller, infrared sensor, 5v regulator, power supply, wireless device, LCD display

I. INTRODUCTION

This project deals with the time at explicit, the Patient must take pills. The temporal arrangement is about to the system at the start reminding and it are often modified by the patient in line with his demand. The system will generate voice alert at that specific time. To make the easy system, the liquid crystal display connected to the system. This helps to vary pills time. The user desires to order the medication by clicking the medicine ordering mode order for the actual pill is sent by the system mechanically to medical look through GSM communication. So, it's useful to user to get the pill at explicit time and avoid confusion among pills.

II. RELATED WORK

In day along life, individuals have hassle to recollect the pills they have to require from the bag of medication. Multiple times the matter is that the time needed to require medicine isn't written on the box drugs{of drugs{of medication} or they couldn't browse English. individuals have conjointly habit to sometimes forget to require pills. thanks to this, some medicines were invalid. Most patients with chronic diseases have to be compelled to take medications over a chronic period of your time so as to stabilize their conditions. Ensuring that the patients consume the proper medication at the suitable time becomes crucial. In day along life, individuals have hassle to recollect the pills they have to require from the bag of medication. Multiple times the matter is that the time needed to require medicine isn't written on the box drugs{of drugs{of medication} or they couldn't browse English. Individuals have conjointly habit to sometimes forget to require pills. thanks to this, some medicines were invalid. Most patients with chronic diseases have to be compelled to take medications over a chronic period of your time so as to stabilize their conditions. Ensuring that the patients consume the proper medication at the suitable time becomes crucial.

III. METHODOLOGY

This project proposes a smart pillbox with remind and consumption function. Which is used to give alert the user to take pills at a particular time and the pills required to take at that time comes out to the user to avoid confusion among medicines. This system Get the details about pills from the user and Send purchase order to medical shop by using GCM communication. The patient can store the respective time of the unique medicine by a IR sensors. Based on an RTC (Real Time Clock) interfaced to the micro controller, the programmed time for medicinal drug is displayed on the LCD in conjunction with a voice sound to alert the patient approximately taking the medicine. The micro controller used in this challenge is of ATMEGA328 family. RTC used maintains a correct time as it is supported with the assistance of a crystal.

IV. EXPERIMENTAL RESULTS

Figures shows the results of text detection from an image



Fig 1 : This LCD Display shows the remainder of morning tablet



Fig 2: This LCD display shows the remainder of afternoon tablets



Fig. 3 This LCD display shows the remainder of Night tablets

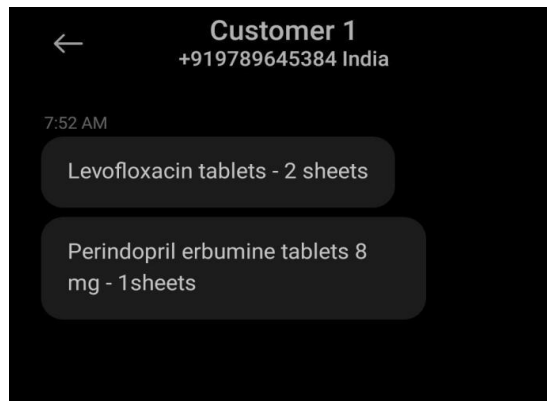


Fig. 4 This shows the message details of the ordered tablet

V.CONCLUSION

To improve medication safety and to avoid confusion in taking tablet among the elderly, this project proposed a smart pillbox with remind and confirm functions. The proposed pill box can reduce family member's responsibility towards ensuring the correct and timely consumption of medicines. Because the proposed pillbox containing an voice alert sound to the user for a particular time and real-time clock gives continuous time as an output. The objective of creating a device that allows the organization of several medication schedules, automatic opening system and an effective notification system, is reached.

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