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IoT Based Voice Interactive Medicine Box

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Abstract: The growing technologies and lifestyle, aids health sectors in modernizing world exponentially. In current decade, only fifty percentages of people are about their medication schedule to receive the full advantages of their prescriptions. The rest of the people are very busy with their hectic schedule which results in irregular intake of medicines. Patients with gradual loss of memory like elderly patients forgot to take right medicines at right time. The treatment goes ineffective for the concerned patient, when they fail to follow the clinician prescribed medication schedule. It avoids the complexity of patients carrying their prescription details and their medical records and hence they live independently.

Keywords: Internet of Things (IOT), Medicines, Wi-fi Controlling, Mobile Application, Sensors, Voice Module

I. INTRODUCTION

IOT Based Voice Interactive Medicine Box signed with 2 portable trays, one tray for one time of the day i.e., morning and night time. Using controller and Wi-Fi technology, the trays will be opened on exact time as set by user and will be closed after provided time delay. At the time of tray opening, we will be providing a Voice module which will announce audio of the medicine prescription in any regional languages such as English, Hindi and Marathi because not everyone understands English language. Also, using LCD, spelling as well as colour of the particular medicine will be displayed on it. As everyone is well known with colours, it will be advantageous by audio announcement even if anyone is illiterate and unable to get the exact medicine. The medicine box will remind the people to take medicines on time. The whole system will be monitored and controlled using android application through Wi-Fi with dynamic time setting so that user can set time as per need. In android application, there will be timers for time setting of each tray. User can set time of tray opening and closing as per their need.

II. LITERATURE SURVEY

Project's main aim is to make a Smart medicine box for those users who regularly take medicines and the prescription of their medicine is very long as it is hard to remember to patients and also for their care giver. Also, Old age patients suffer from problems of forget to take pills on proper time which causes certain health issues for patients having Permanent diseases like diabetes, blood pressure, breathing problem, heart problems, cancer diseases etc.

III. PROPOSED METHODOLOGY

The medicine box will remind the people to take medicine on time. The whole system will be monitored and controlled using android application through Wi-Fi with dynamic time setting so that user can set time as per need. In android application, there will be timers for time setting of each tray. User can set time of tray opening and closing as per their need.



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IV. CONCLUSION

We will study interfacing of voice module with Node MCU. Also, we need to study the power supply design of 5V required for the project. The interfacing of LCD 16X2 with Node MCU is studied which will be used to display the operation of the system. The goal of our project is to provide healthy and tension free life to those users who are taking regularly pills and to provide this product at affordable cost also. Our project is also reusable by exchanging those other medicine box that has only alerting system and are non-usable or unaffordable compare to our product.

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