

# VOICE BASED INTELLIGENT MEDICAL SHOP

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**ABSTRACT:** *In early days there is so many work efforts for human being they required lots of man power for there working. Because of this they required more time to complete their work. In today's world, there is need of time management and also security, safety of shops. So we are designing this system .To ensure security and safety of our medical shop we design the "voice based intelligent medical shop" by using voice reorganization.*

*In that by using different electronic module like ARM7, IR Sensor, DC Motor, Mice, DC Motor drive, LCD etc. In system voice data from the user is given as input to system using mice to PC. In PC the voice data is process in MATLAB where the voice identification process is carry out using signal processing tool.*

*When the voice processing is carried out the data is send to microcontroller .In microcontroller according to the voice the drover is opening and closing using dc motor and the driver IC Microcontroller send signal to driver IC and according to microcontroller the dc motor operates .IR sensor is to detect the obstruct so that the drover will be close after few second according to requirement. This system is more advantages like highly flexible, quick response time and fully automated.*

## I. INTRODUCTION:-

Efficiency and cost-effectiveness are essential components like medicine of medical store management system. Manual systems lack several drawback is over come in an automated voice based computer system. A complete medical store management must have advanced features that lack in a medical management system like voice operated medicine drover open and closing.

It will useful to all who are still adhering to a manual system to think of implementing a computerized system, to others who are already using a system to compare and add features as necessary. The auto medical drover opening and closing using voice. Though the process is automatic, it customized at any stage to meet any unpredictable variation.

As the items are categorized by generic name, form user can easily find possible alternatives during issuing a prescription and making orders. The ability to handle unlimited number of separate stores is essential when design in large scale institutions. The ability to inform the sub optimum availability of a certain item among different stores will prevent unnecessary ordering of an item when there is an excess in another unit

## II. LITERATURE REVIEW:-

- 1) Zhibo Pang, Junzhe Tian, Qiang Chen, Corporate Research, ABB AB, Västerås, Sweden, ICT School, Royal Institute of Technology (KTH), Stockholm, Sweden in their paper published " **Intelligent Packaging and Intelligent Medicine Box for Medication Management towards the Internet-of-Things** ", This paper presents a study of not only themedication but also noncompliance problem has caused

serious threat to public health as well as huge financial wastewould wide.

The emerging pervasive healthcare enabled by the Internet-of-Things offers promising solutions. In addition, an in-home healthcare station (IHHS) is needed to meet the rapidly increasing demands for daily monitoring and on-site diagnosis and prognosis. In this paper, a pervasive as well as preventive medication management solution is proposed based on intelligent and interactive packaging (I2Pack) and intelligent medicine box[1].

- 2) Lirong Zheng, Qiang Chen, Elena Dubrovab Corporate Research, in their paper publish " **An In-home Medication Management Solution Based on Intelligent Packaging and Ubiquitous Sensing** " In this paper, intelligent medication management system is proposed based on intelligent package as well as ubiquitous sensing technologies. Preventive medication management is enabled by an intelligent package sealed by Controlled Delamination Material (CDM) and controlled by RFID link. Many vital parameters are collected by wearable biomedical sensors that the short range wireless link. Onsite diagnoses as well as prognosis based on these health parameters are supported by the scalable architecture [2].
- 3) Wan Hussain Wan Ishak, Fadzilah Siraj School of Information Technology, Universiti Utara Malaysia, 06010 Sintok, Kedah, MALAYSIA " **Artificial intelligence in medical application: an exploration** " It will represent a study of the software development exploits the potential of human intelligence like reasoning, making decision, learning and each other's. Artificial intelligence is not only a new concept, but also it accept as a new technology in computer science. It is applied in many areas like as education, business, medical and manufacturing. This paper explores the potential of artificial intelligence techniques particularly for web-based medical applications [3].
- 4) Arnab Pramanik, Rajorshee Raha "Automatic speech recognition using correlation analysis" This paper presents a study the growth in wireless communication as well as mobile device has support the development of speech recognition systems . so for many speech recognition system feature extraction and patter matching are very significant terms. Due to this paper we will developed a simple algorithm for matching the patterns to recognize speech.

## BLOCK DIAGRAM AND DISCRPTION:-

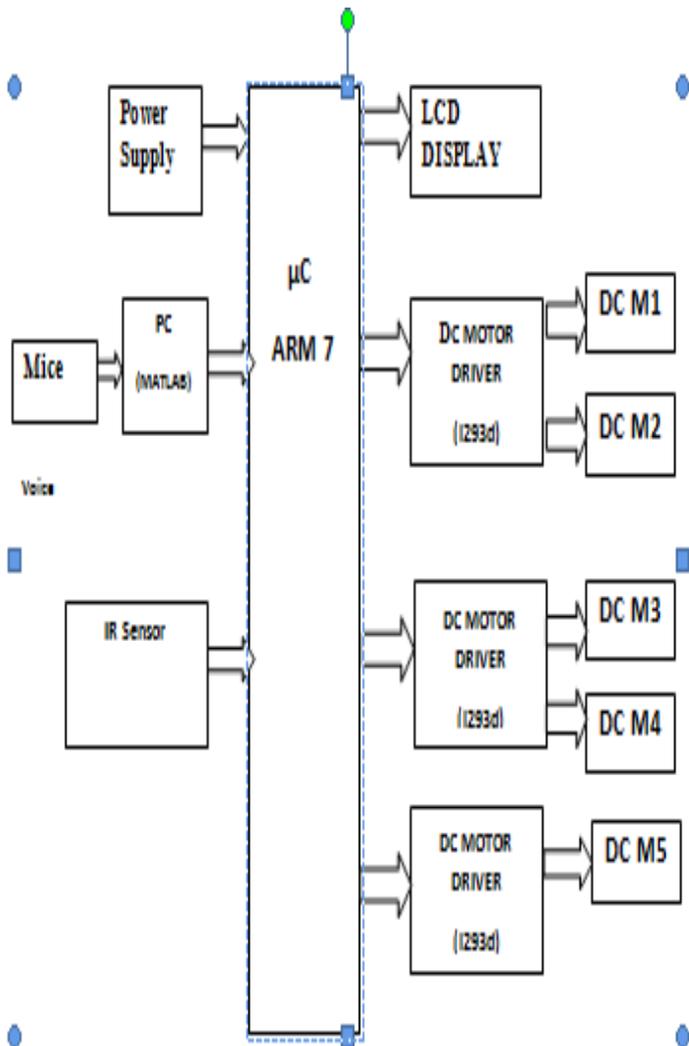


Fig 1.1 . Block diagram of voice based intelligent medical shop

Fig 1 voice based intelligent medical shop

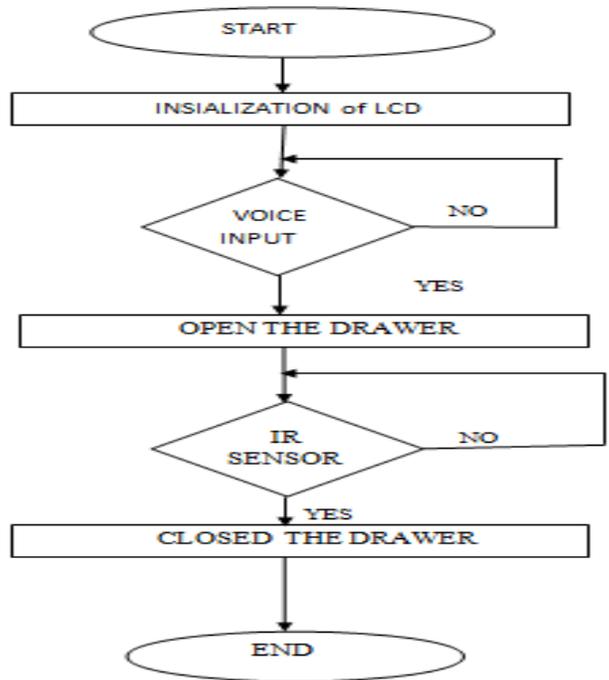
**Working:-** Voice operated medicine drover system consist of arm controller dc motor and dc motor driver IC (L293d) IR sensor and PC with MATLAB for voice processing.

We have given the power supply to our circuit. In system voice data from the user is given as input to the system using mice to PC. In PC the voice data is process in MATLAB software where the voice identification process is carry out using signal processing tool. When the voice processing is carried out the data is send to microcontroller. In microcontroller according to the voice the drover is opening and closing using dc motor and the driver IC. Microcontroller send signal to driver IC and according to microcontroller the dc motor operates. IR sensor is to detect the obstruct so that the drover will be close after few second according to requirement. After bringing the tablet from the drawer. With the help of IR Sensor drawer get closed. We are using LCD display for displaying the tablet name.

**Algorithm:-**

- Step 1-Start
- Step2-Insialization of LCD
- Step3-Voice input reorganization through MATLAB
- Step 4-Operation of drawer open using dc motor.
- Step5-Interrupt receive due the IR sensor
- Step6-closing the drawer.
- Step7-End

**Flowchart:-**



**Application:-**

- In market .
- In Toys .
- In watches .
- Mobile phone .
- Home appliances .

**Result:-**In this system we designed the voice based intelligent medical shop. Due to the system becomes more secure, highly flexible, quick response time and also fully automated.

**Conclusion:-**We can get medicine in proper time and it also minimizes the workload of human being. With the help of using these prototypes our shop can secure with the help of our voice.

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