

Smart Medicine Reminder Monitoring Using Arduino

***Lokhande P.D. , *Karnavar M.N., **Prof. Kokare.A.J.**

**Students, **Assistant professor of Electronics and Telecommunication Department, Solapur University, Akluj, Maharashtra, India.*

Received: 10 January, 2022 Accepted: 22 February, 2022 Online: 05 March, 2022

ABSTRACT

Most of the time due to work of the people as well as regarding age and some disease which leads to forget the basic things among daily routine . Health monitoring specially for elderly people is a concern and as most people in the modern times are job holders and have so hectic life.

If the patients suffering from the disease where it is compulsory to take medicine at proper time.It can be possible the development of a low cost medical sensing, communication and analytics device that is real time monitoring internet allowed patients physical conditions.

In day to day life people face trouble remembering the pills that need to be consumed .people also have habit of forgetting to take pills.

The basic two reasons Arduino is important for this project is firstly it is automated, so no human interaction is needed. And secondly, because of automation the process have less chance of having errors i.e. having a more efficient system indicating a better quality in service to make a smart identification technology which will help to reduce the error rate subsequently increasing efficiency and to automate.

Keywords: - Speaker, Arduino, LCD Display, Wires, PCB, Battery, Voice output module, Resistor

INTRODUCTION

Most of the time due to work of the people as well as regarding age and some disease which leads to forget the basic things among daily routine . Health monitoring specially for elderly people is a concern and as most people in the modern times are job holders and have so hectic life.

If the patients suffering from the disease where it is compulsory to take medicine at proper time. It can be possible the development of a low cost medical sensing, communication and analytics device that is real time monitoring internet allowed patients physical conditions. In day to day life people face trouble remembering the pills that need to be consumed .people also have habit of forgetting to take pills. The basic two reasons Arduino is important for this project is firstly it is automated, so no human interaction is needed. And secondly, because of automation the process has less chance of having errors i.e. having a more efficient system indicating a better quality in service to make a smart identification technology which will help to reduce the error rate subsequently increasing efficiency and to automate. But since then, the concept of IOT has evolved rapidly in various ways, as now with the help of this huge number small

networks which can remain connected to each other and can directly send data to the main network without any human interaction. Quality of service in healthcare has always been under constant criticism in the modern era, as it is a very touchy subject. Health monitoring specially for elderly people is a concern and as most people in the modern times are job holders and have so hectic life.

THEORY

In this theory If the patient sufferings from the disease where it is compulsory to take medicine at proper time, in this project we will develop the model to demonstrate the smart medicine reminder system.

The main objective of this model will be to solve the above mentioned problems patient forgets medicine to take at time to time therefore this intelligent pill dispenser.

This is intended to log the pill name, number of pills and hours at which each pill is actually taken versus the time it should have been taken.

Making an alarm or reaction system which will react whenever there is an alarming situation.

Contributing in the field of Arduino to pave a way for future project in the technological development

Xc is the capacitive reactance

Circuit Diagram

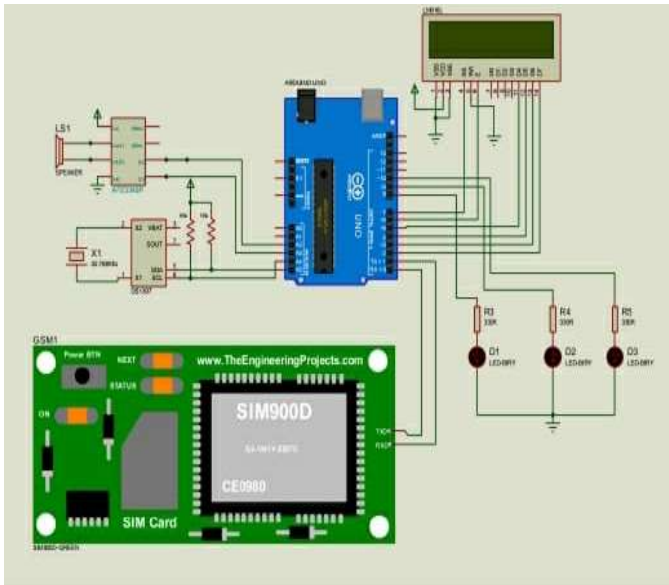


Fig 1:- Circuit diagram

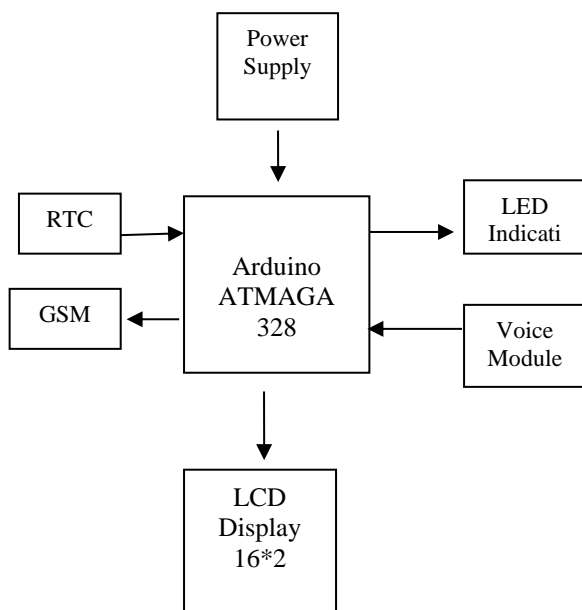
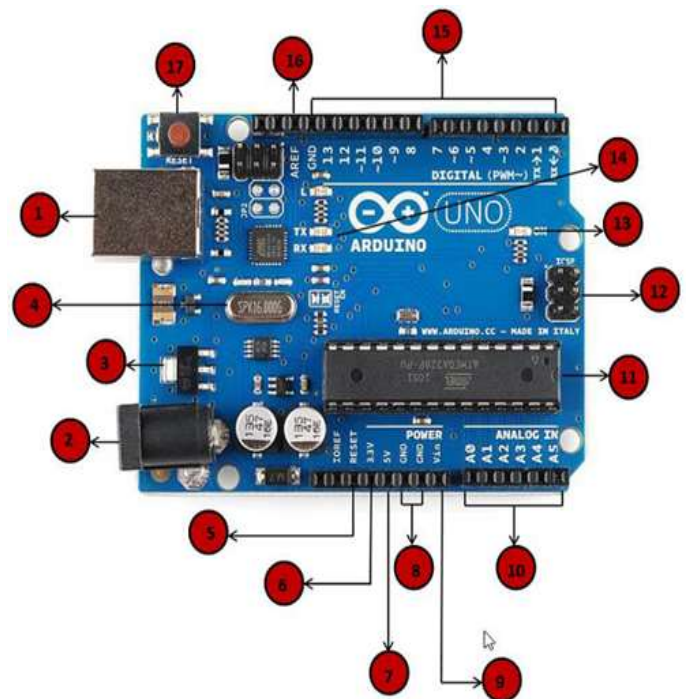


Fig 2:- Block Diagram

INTRODUCTION TO ARDUINO

Arduino board - UNO ATmega328:

The Arduino UNO is a microcontroller board based on the ATmega328 (datasheet). It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog inputs, a 16 MHz crystal oscillator, a USB connection, a power jack, an ICSP header and a reset button.



It contains everything needed to support the microcontroller; simply connect it to a computer with a USB cable or power it with an AC-to-DC adapter or battery to get started.

The UNO differs from all preceding boards in that it does not use the FTDI USB-to-serial driver chip. Instead, it features the Atmega328 programmed as a USB-to-serial converter. "UNO" means one in Italian and is named to mark the upcoming release of Arduino.

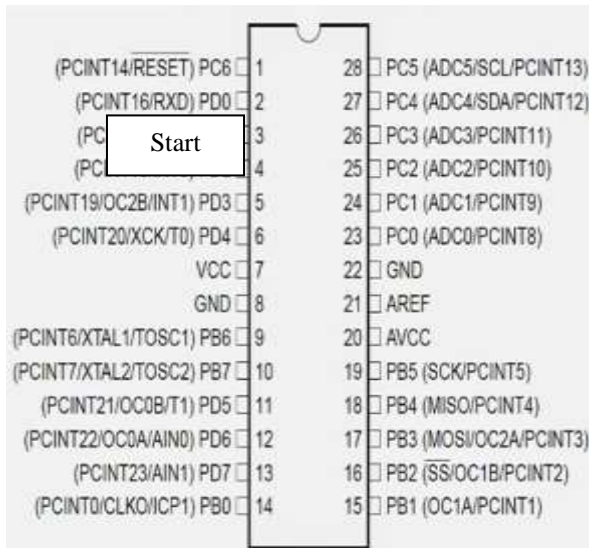


Fig 3:- Pin Diagram

ACKNOWLEDGMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible and whose constant encouragement and guidance crowned our efforts with success.

I am highly indebted to the Management and the Principal of **SMSMPITR College of Engineering Dr. I. N. YADAV** for the facilities provided to accomplish this project. I would like to thank the Head of the Department Prof. A. J. Kokare for his constructive appreciation throughout my project. I am extremely grateful to my department staff members and friends who helped me in successful completion of this project. Last but not the least I would like to thank all my friends without whose support and co-operation the completion of project would not have been possible.

REFERENCES

1. A. Sawand, S. Djahel, Z. Zhang, and F. Na. Multidisciplinary Approaches to Achieving Efficient and Trustworthy eHealth Monitoring Systems. *Common China (ICCC), 2014 IEEE/CIC Int. Conf.*, pp. 187–192, 2014.
2. D. a. Clifton, D. Wong, L. Clifton, S. Wilson, R. Way, R. Pullinger, and L. Tarassenko. A large-scale clinical validation of an integrated monitoring system in the Emergency Department. *IEEE J. Biomed. Heal. Informatics* vol. 17, no. 4, pp. 835–842, 2013. *Drug Management System. 15th Int. Conf. Network-Based Inf. Syst.*, pp. 577–581, 2012.
3. L. Ilkko and J. Karppinen. UbiPILL A Medicine Dose Controller of Ubiquitous Home Environment. *2009 Third Int. Conf. Mob. Ubiquitous Comput. Syst. Serv. Technol.*, pp. 329–333, 2009. *Networked Medical Devices in Mobility-Aware eHealth Environments*, 2012. *IEEE First Int. Conf. Mob. Serv.*, pp. 112–114, 2012.

FLOW CHART

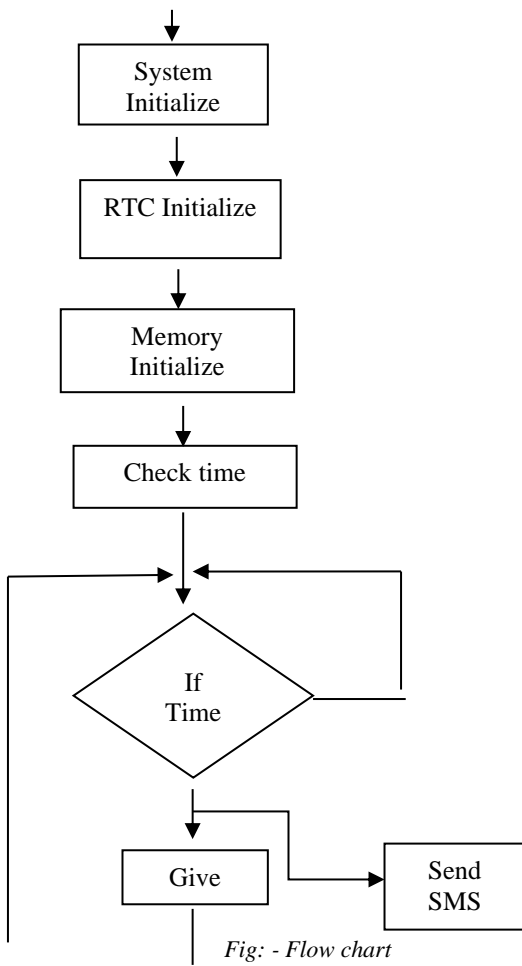


Fig: - Flow chart