

## **AUTOMATIC MEDICINE REMINDER USING RTC AND BLUETOOTH**

### **AIM:**

Design and development of Automatic medicine reminder using RTC and Bluetooth.

### **PURPOSE:**

Patients should take medicines according to their time line. There is a common problem for every one that they will forget medicine doses. Especially, aged and ill people commonly forget to take medicine in proper time. We want to design a system that will act like a medicine remainder. It will work based on timings. Based on medicine time it will announce through a voice module, also it will send notification to a Bluetooth app. This project name is automatic medicine remainder using RTC and Bluetooth.

### **DESCRIPTION:**

Bluetooth module (HC-05) connected to Arduino UART port. RTC module (DS1307) interfaced with Arduino I2C pins. Voice module (APR33A3) interfaced to Arduino digital output pins.

### **WORKING:**

We can set the time of medicine remainder through a Bluetooth mobile application. It allows eight different time slots for eight kinds of medicines daily. This is the maximum number of medicine remainder time slots available. Particular medicine remainder time triggers then corresponding voice will come through the APR module. The announcement voice outputs like "Medicine-1 Remainder".

## TECHNICAL SPECIFICATIONS:

### HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16x4 LCD display
Bluetooth module	:	HC-05
Voice Module	:	APR33A3
RTC module	:	DS1307
Buzzer	:	5vDC
Power Source	:	12v 1 amp DC Adaptor

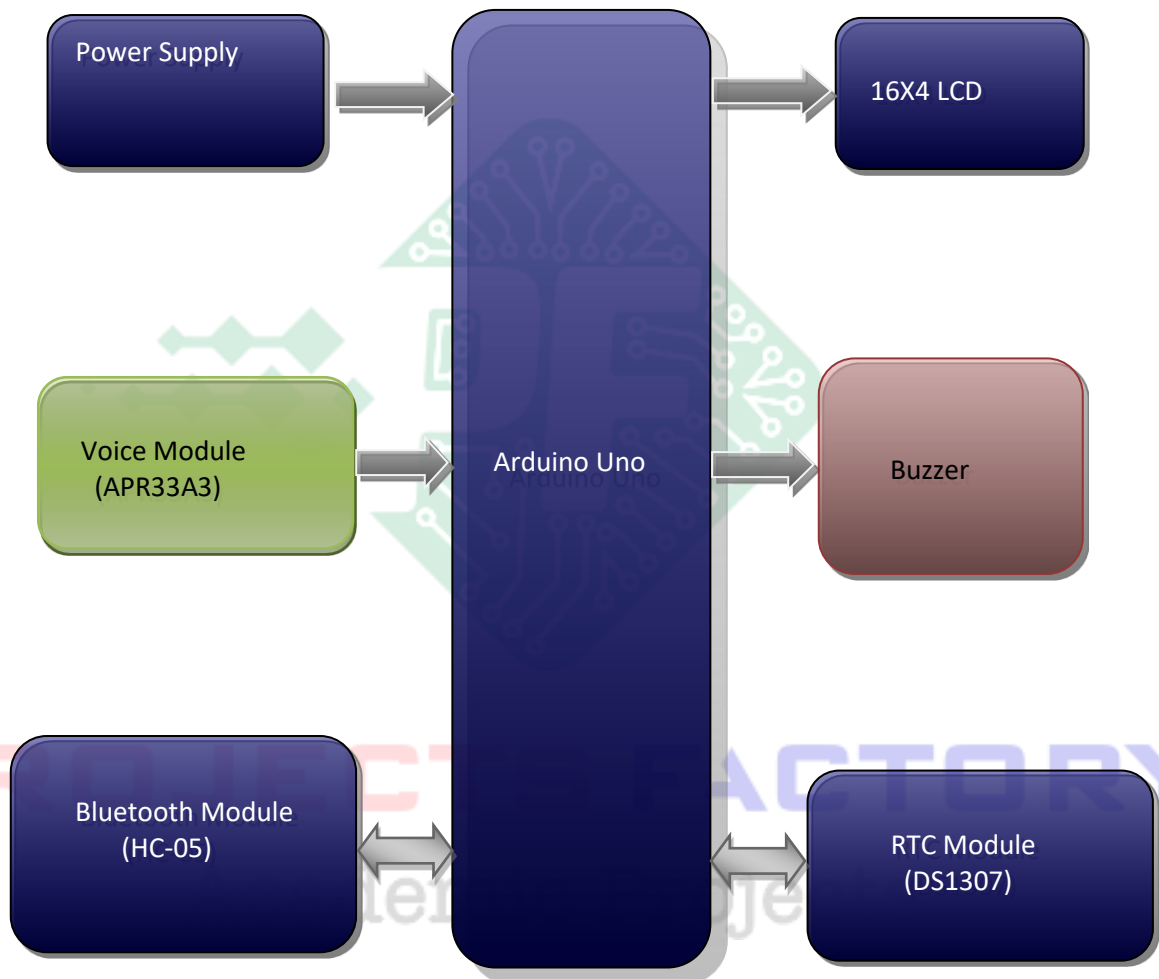
### SOFTWARE:

Arduino IDE  
Proteus based circuit diagram

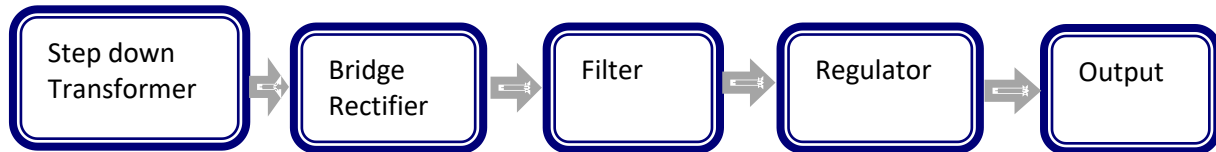
### APPLICATIONS:

- Medical applications
- Smart and intelligent medicine reminder
- Smart medicine box
- Hospitals

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered Arduino programming
- RTC (DS1307) and Bluetooth module (HC-05) interface

**PROJECTS FACTORY**  
Academic Projects