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Smart Medicine Reminder Box

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Abstract: ***Our project's principle point is to make a Smart medication box for those clients who routinely take medicines and the solution of their medication is extremely long as it is difficult to recollect to patients and furthermore for their parental figure. Additionally Old age patients experience the ill effects of issues of neglect to take pills on appropriate time which causes certain medical problems for patients having Permanent infections like diabetes, circulatory strain, breathing issue, heart issues, malignancy sicknesses and so forth We saw these issues in emergency clinics and individuals around us who have such sort of infections and accordingly dependent on these two issues we made brilliant medication box which tackle these issues by Setting up time table of endorsed drugs through press catches as given in remedy.***
Keywords: Smart medication box, old age patients, medicine.

I. INTRODUCTION

In everyday life the majority of individuals need to take medicines and the purpose for this is infections are expanding in huge sum. So sometime numerous individuals interact with these sicknesses. A few illnesses are transitory infections while many are lasting hazardous sicknesses. Dangerous infections gets blends in with the human body so that they can't leave the body ever and they increments in fast time. Life expectancy of people turned out to be less a direct result of such infections and to survive or to carry on with a superior life we need to take medications consistently and furthermore in huge sum. We should be in guidance of doctor who advises us to take wanted pills in wanted manner with the goal that patients deal with issues like failing to remember pills to take at right time and furthermore when Doctor changes the medicine of medication patients need to recollect the new timetable of medication. This issue of neglecting to take pills at perfect time, taking incorrectly meds and inadvertently taking of terminated medication causes medical problems of patient and this prompts experience the ill effects of undesirable life. Our task is to made Arduino-Uno based Smart medication box which utilizes Real time clock. The new anticipated element in our task is our framework is reasonable that patient has taken medication or not and in this manner the patient can't delay the time on which he needs to take pills. It is mandatory for the patient to take pills from the container at the ideal opportunity in any case our frameworks keeps on making enormous sound until the medication is taken out from the case. This notice highlight adds life years to the patient and consequently this thing isn't accessible in any gadget which is the need for present days.

II. SYSTEM ANALYSIS

A. Proposed Method

The proposed technique comprise of Arduino uno as a universally useful board, 4x4 keypad grid, LED, Buzzer and GSM and so on In this module we are giving security framework the secret word access and secret key reset framework.

So the patient or approved individual possibly can get to the module and in the event that the person needs they can reset the secret word. The patient requirements to give the right key then just the module box will open with the assistance of electronic lock, else it will show erroneous secret word on the LCD.

B. Existing Method

We tracked down a few diverse pillbox items accessible on the lookout. The least expensive one was the conventional pillbox, which contained seven boxes for seven distinct days of seven days.

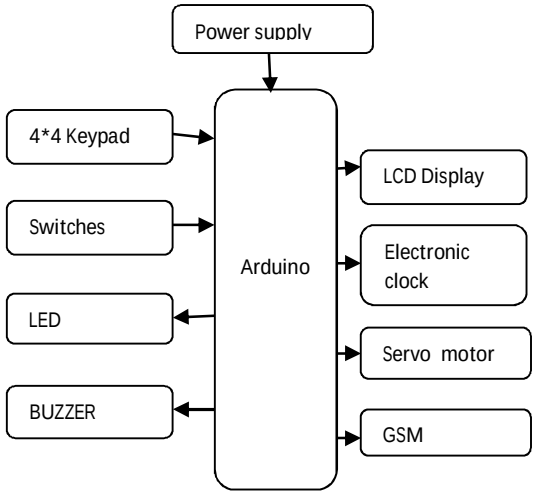
1) The client needed to stack the pills to the cases each week. Blending various pills in a similar box would expand the danger of committing errors. We additionally discovered another sort of pillbox, which had the sound update, and had the option to remind the client to take medication at client determined time.

2) However, the clients actually need to place various types of pills in a similar box, and reload the containers consistently. Furthermore, It could just remind the client to take pills once every day. The expenses of this kind of pillbox is as yet costly than our own.

3) Therefore, we think it was important to fabricate a modest and useful savvy pillbox that could bring more accommodation for the client.

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III. BLOCK DIAGRAM

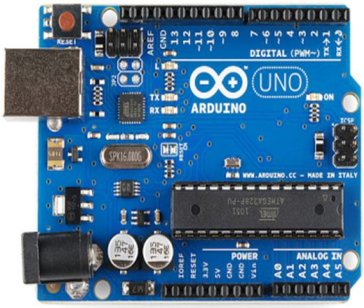


LCD 2084, Buzzer and GSM module is a yield gadgets which runs on the contribution of ATmegha16 microcontroller.

a) GSM module is a yield gadgets which runs on the contributin of ATmega16 microcontroller.
b) Keypad 4*4 fills in as a contribution to the ATmegha16 microcontroller.
c) Power supply is an electronic gadget that provisions electric capacity to an electrical burden.

IV. HARDWARE AND SOFTWARE DISCRIPTION

A. *Arduino UNO*



It's anything but an open-source stage utilized for building hardware projects. Arduino comprises of both an actual programmable circuit board (frequently alluded to as a microcontroller) and a piece of programming, or IDE (Integrated Development Environment) that sudden spikes in demand for your PC, used to compose and transfer PC code to the actual board Buzzer.

B. *LED*

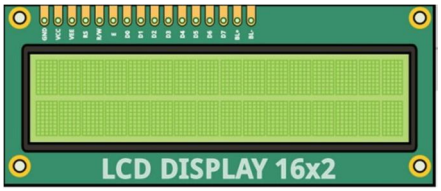


LED is the truncation of light transmitting diode. It's anything but a sort of semi channel diode and can change over power into light.

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C. LCD Display



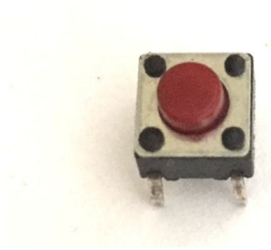
There are many presentation gadgets utilized by the specialists. LCD shows are quite possibly the most refined presentation gadgets utilized by them. When you figure out how to interface it, it will be the simplest and truly dependable yield gadget utilized by you! More, for miniature regulator based task, few out of every odd time any debugger can be utilized. So LCD presentations can be utilized to test the yields. Clearly, for last chance, you need to realize how to utilize this stuff quite well.

D. Buzzer



A buzzer or beeper is a flagging gadget, "bell" comes from the grating commotion that signals made when they were electromechanical gadgets, worked from ventured down AC line voltage at 50 or 60 cycles. Different sounds usually used to show that a catch has been squeezed are a ring or a blare.

E. Switch



F. Arduino IDE

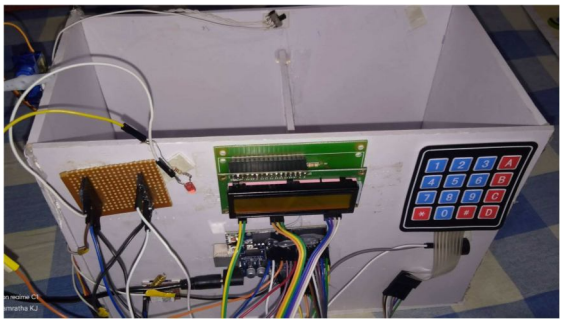
The Arduino Integrated Development Environment is a cross-stage application that is written in capacities from C and C++. It is utilized to compose and transfer projects to Arduino viable sheets, yet in addition, with the assistance of outsider centers, other merchant improvement sheets

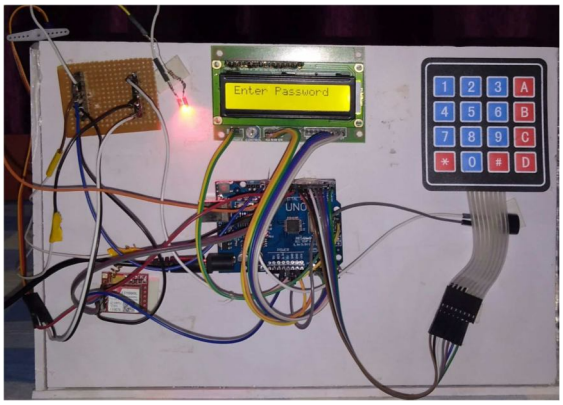
V. ADVANTAGES

1) *Cost Proficient:* Our item cost is moderate contrasted with other item accessible in market.
2) *User Cordial:* Client can set time table of medication without help from anyone else.
3) *Highly Dependable:* Great in quality and execution; ready to be trusted for patients and advanced age individuals.
4) *Provide Comfort and Wellbeing:* Agreeable for advanced age individuals and give solid life to patients who are consistently take medication.
5) *Long Enduring:* This can be utilized for long time.
6) *Easy to Utilize and Produce:* It is exceptionally simple to utilize and fabricate.
7) *Accurate Result:* Alert will ring at legitimate time which is set by client already.
8) *Simple to Keep Up With:* It need less maintenance. It is one time venture a short time later it tends to be utilized continuously.

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VI. RESULT





Present time will be saved in RTC module and notification time will be saved in EEPROM. Therefore at the time of taking medicines system generates notification sound and led starts to blink. Then the patient needs to apply correct password and take out the medicine and he/she should turn off the switch so that message will not send to the caretaker if the patient fails to do so then the system sends message to the caretaker.

VII. CONCLUSION

The main goal of our project is to give sound and pressure free life to those clients who are taking medicines consistently and to give this item at reasonable expense moreover. Our undertaking is more powerful than those other medication box that has just cautioning framework and are excessively expensive contrast with our item.

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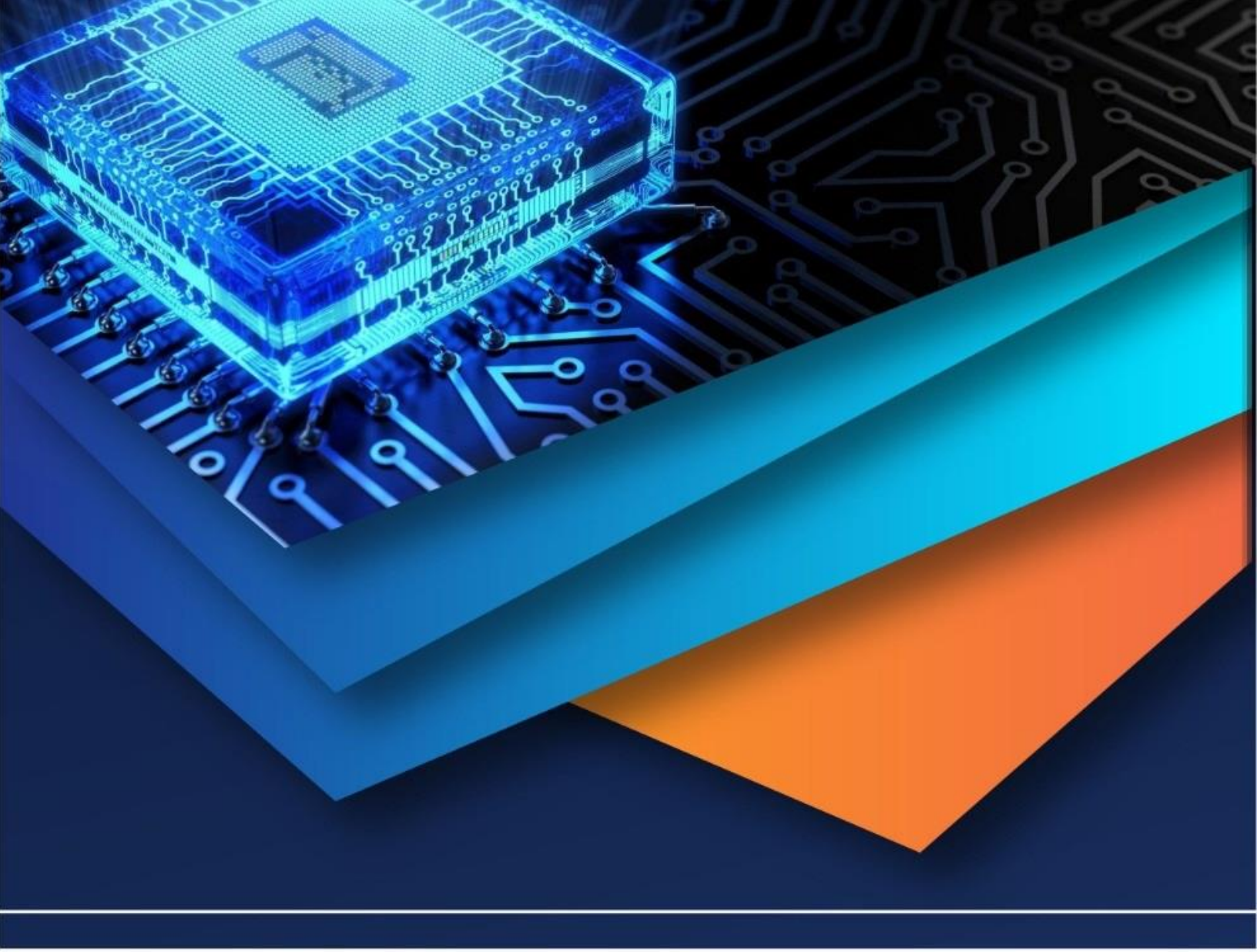
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