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PROGRAMMED ENGINE LOCKING SYSTEM BY AUTOMATICALLY DETECTING DRUNKEN DRIVERS

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ABSTRACT :Now a days it has been an acknowledged actuality that significant piece of the mischances are because of the uneven interferences, improper driving by the drivers. It's an exceptionally undesirable circumstance which is valid. So a framework has been proposed to naturally bolt the engine of the vehicle with the utilization of AT89C52, if any alcoholic individual tries to drive the auto/transport/whatever other. Likewise the capability of gadget will rely on upon the accessibility of the useful parts and in addition the limit of the engine utilized.

Despite the fact that productive set up of necessities have been received for the customary routines it may not be adequate and that much defensive for such an unpredictable technique, though here in this procedure this could be a superior thought of embedding the complete condition of workmanship configuration into the framework. A large portion of the customary frameworks are liable to be more subject to the administrator and it may fall flat because of different components like the battery life, power utilization and in addition the unavoidable outside unsettling influences.

KEYWORDS: MQ-3 Alcohol detector, Tissue Spectrometer, AT89S52 microcontroller, Engine, Relay, Relay driver, comparator.

I. INTRODUCTION

The employments of installed frameworks are basically boundless, in light of the fact that consistently new items are acquainted with the business sector that uses inserted PCs in novel ways. As of late, equipment, for example, microprocessors, micro controllers, and FPGA chips have turned out to be much less expensive. So while actualizing another type of control, it's savvier to simply purchase the nonexclusive chip and compose your own custom programming for it. Creating a uniquely crafted chip to handle a specific errand or set of assignments expenses much additional time and cash. Numerous inserted PCs even accompany broad libraries, so that "written work your own particular programming" turns into an exceptionally insignificant undertaking to be sure. From a usage perspective, there is a noteworthy contrast between a PC and an inserted framework. Implanted frameworks are frequently required to give Real-Time reaction. The primary components that make implanted frameworks exceptional are its unwavering quality and straightforwardness in troubleshooting.

II. MQ-3 ALCOHOL SENSOR

This liquor sensor is suitable for distinguishing liquor fixation on your breath, much the same as your regular breath analyser. It has a high affect-ability and quick reaction time. Sensor gives a simple resistive yield in light of liquor fixation. The drive circuit is exceptionally straightforward everything it needs is one resistor. A straightforward interface could be a 0-3.3 V ADC.

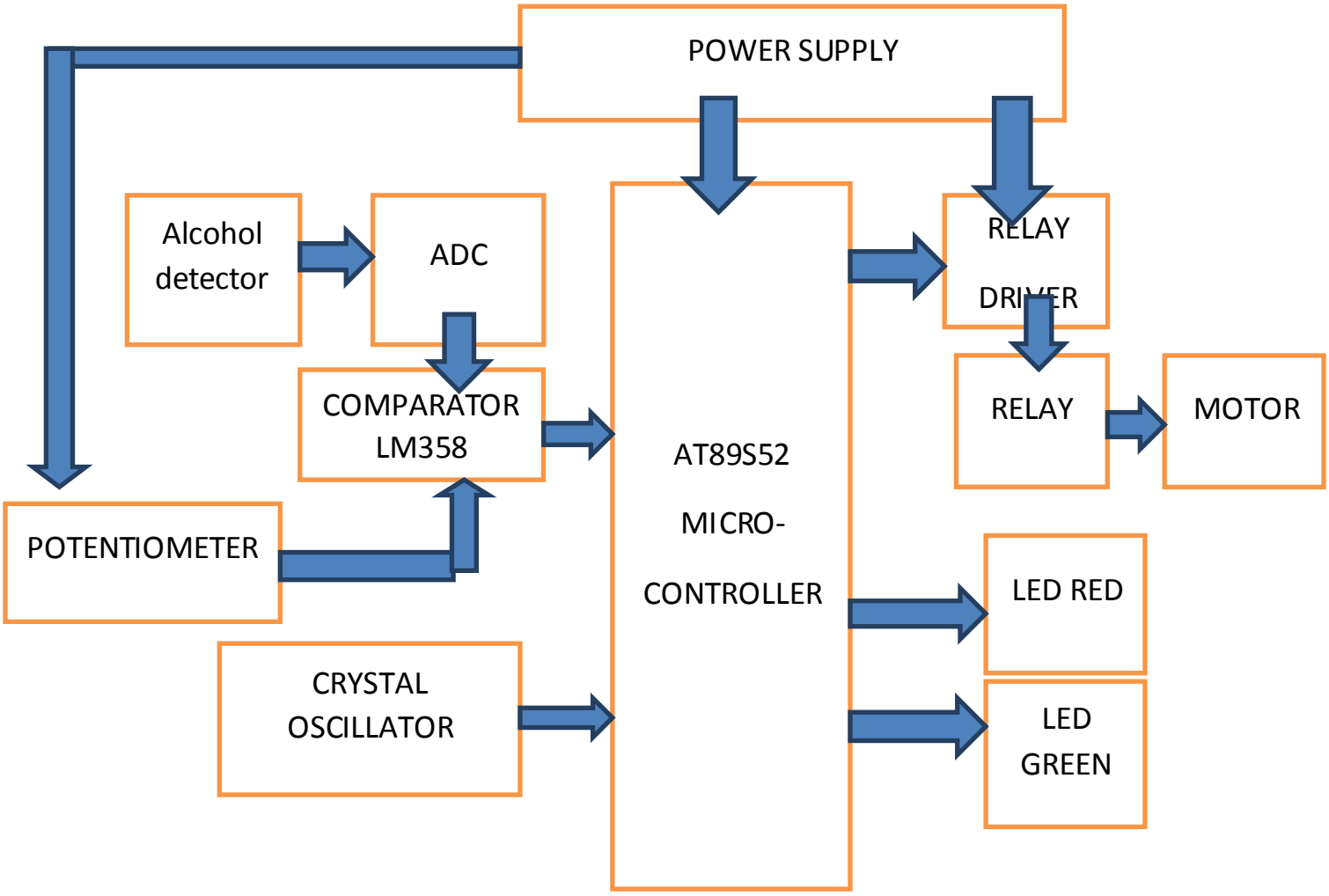
Features:

- 5V DC or AC circuit
- Requires warmer voltage
- Operation Temperature: - 10 to 70 degrees C
- Heater utilization: less than 750mW

AT89S52 Microcontroller

The Intel 8052 is Harvard architecture, single chip microcontroller (µC) which was developed by Intel in 1987 for use in embedded systems. 8052 is an 8-bit processor, meaning that the CPU can work on only 8 bits of data at a time. Data larger than 8 bits has to be broken into 8-bit pieces to be processed by the CPU. 8052 is available in different memory types such as UV-EPROM, Flash and NV-RAM.

Block Diagram



The heart of the venture is liquor discovery sensor. At the point when a man is in plastered state, his inhale contains liquor particles. At the point when the individual breathes out, liquor particles are discharged. These particles are distinguished by liquor sensor. At the point when liquor atom interacts with the sensor, the warmer inside the sensor parts the particle into acidic corrosive and electron. In this way, more the quantity of atoms more is the current. The current will be given as information to comparator which will thusly send the sign to microcontroller. A level will be set to comparator with the help of potentiometer, if the info voltage is more prominent than reference voltage logic'1' will be sent to microcontroller or else logic'0' will be sent. On the off chance that logic'1' is yield of comparator then microcontroller will send logic'1' to hand-off which will stop dc engine or else the engine keeps running as a rule. A code will be dumped into microcontroller such that at whatever point the info from comparator is high LED ought to gleam demonstrating tanked state or else fill in of course. This is the manner by which the engine can be controlled by location of liquor.

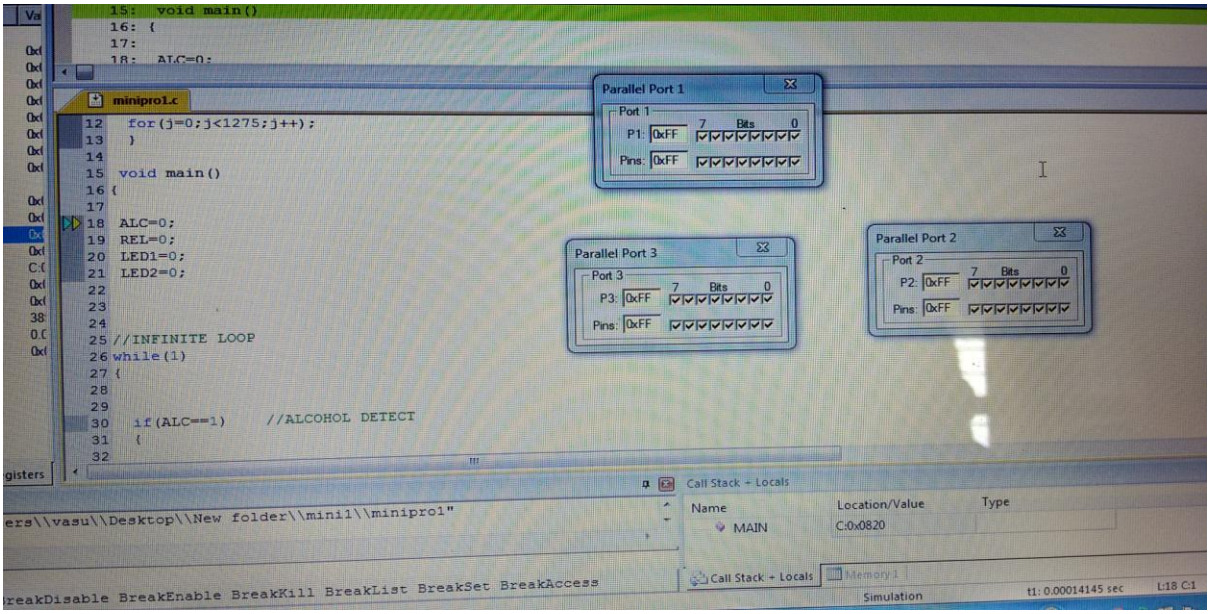
III. IMPLEMENTATION RESULTS

PROGRAM CODE ON KEIL SOFTWARE

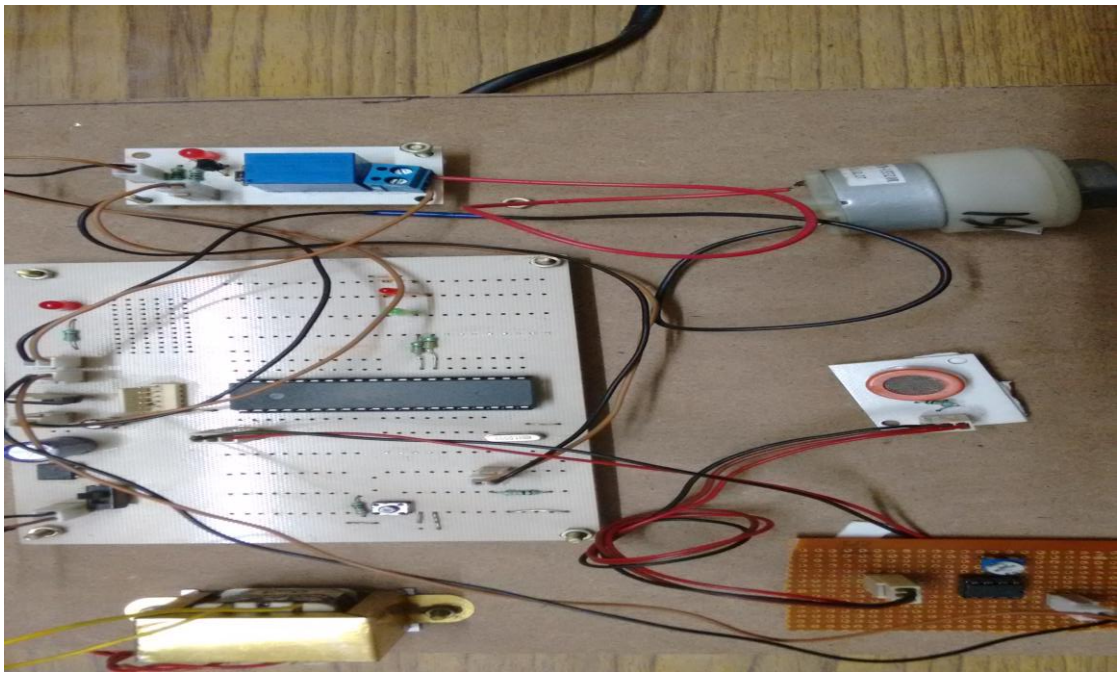

```
#include<reg51.h>
sbit  LED1   =  P2^7;   //GREEN LED
sbit  LED2   =  P2^6;   //RED LED
sbit  ALC    =  P1^0;   //ALCOHOl
sbit  REL    =  P3^7;   //RELAY FOR IGNITION CONTROL


void delay(unsigned int t)
  {
  unsigned int i,j;
  for(i=0;i<t;i++)
  for(j=0;j<1275;j++);
  }

 void main()
{

 ALC=0;
 REL=0;
 LED1=0;
 LED2=0;
```

```
//INFINITE LOOP
while(1)
{


  if(ALC==1)     //ALCOHOL DETECT
  {


    REL=0;     //RELAY OFF   (IGNITION OFF)
    LED1=0;   //GREEN LED OFF
    LED2=1;    //RED LED ON

  }
    else
  {

    REL=1;     //RELAY ON    (IGNITION ON)
    LED1=1;   //GREEN LED OFF
    LED2=0;    //RED LED ON
```

EXECUTION OF PROGRAM

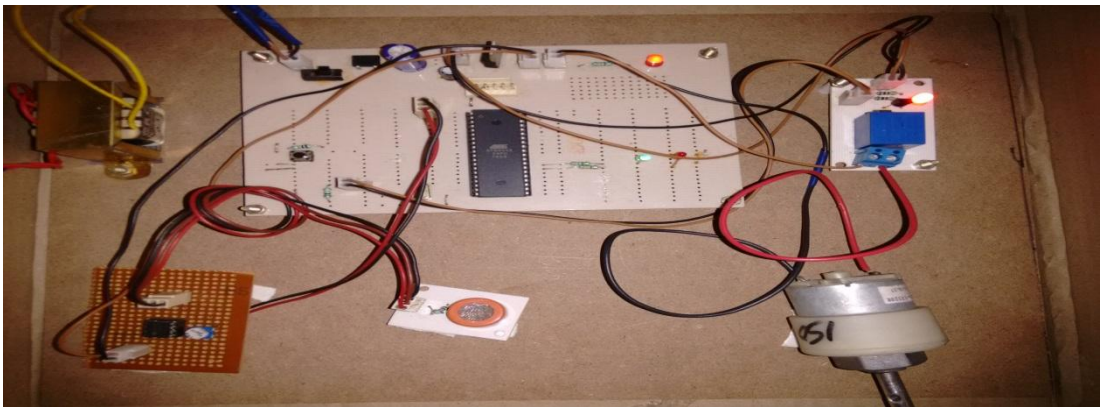


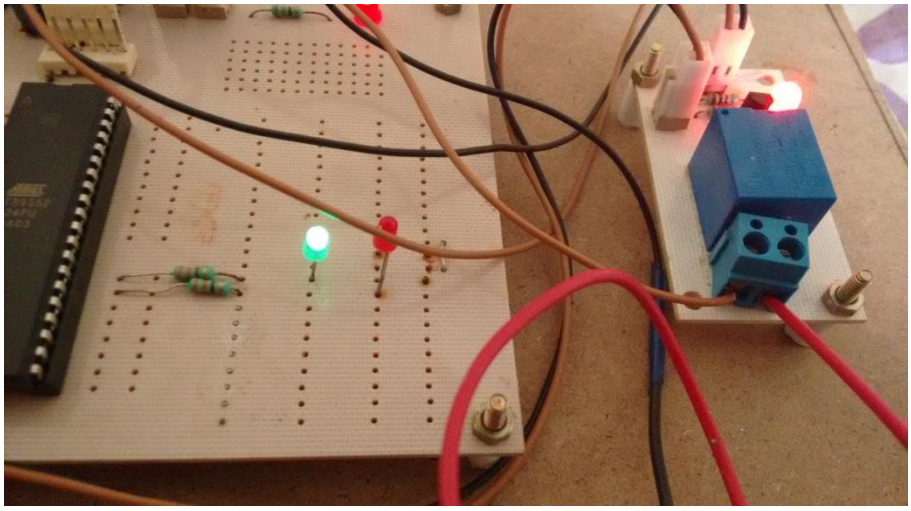
PROJECT KIT OVERVIEW



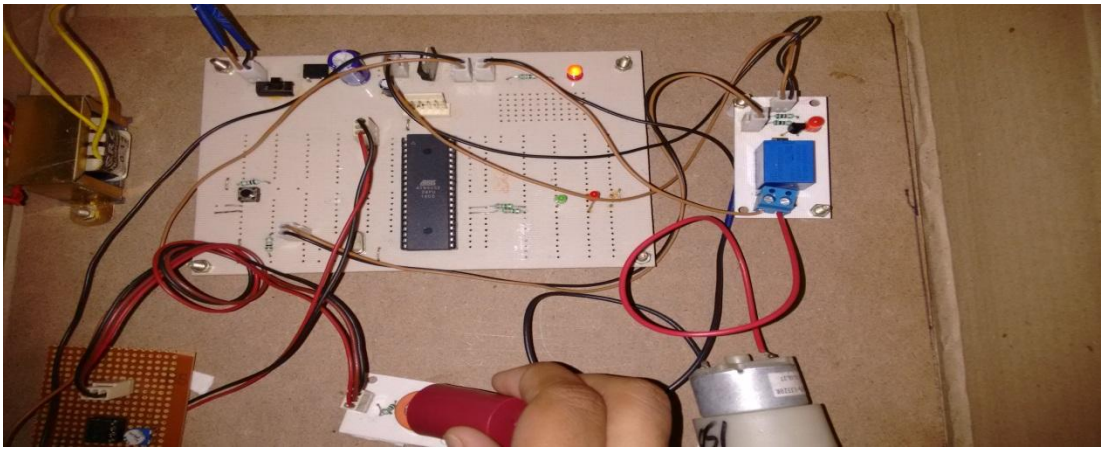
OUTPUT

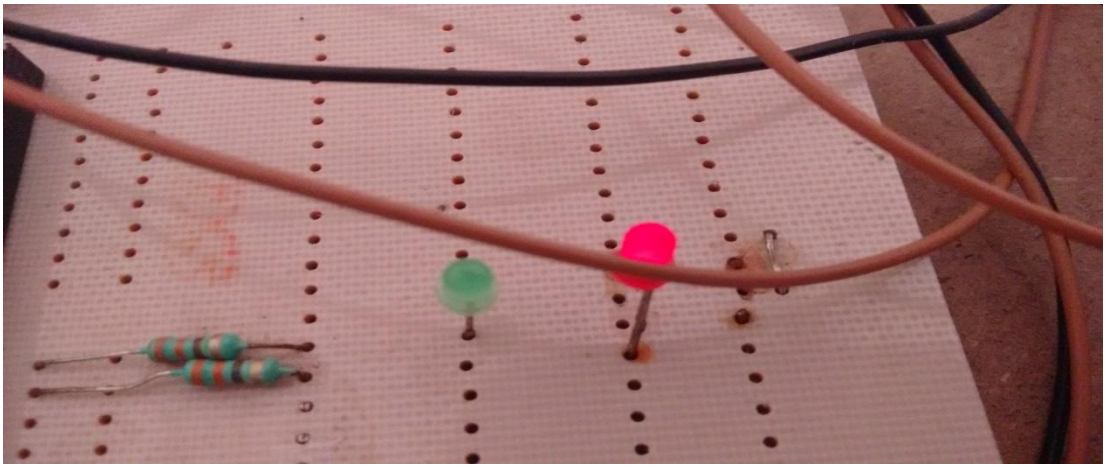
BEFORE DETECTION OF ALCOHOL (indicated by green light)





AFTER DETECTION OF ALCOHOL (indicated by red light)





IV. CONCLUSION:

Coordinating elements of all the equipment parts utilized have been created as a part of it. Vicinity of each module has been contemplated out and set deliberately, in this manner adding to the best working of the unit. Besides, utilizing exceptionally propelled IC's with the help of developing innovation, the task has been effectively executed. In this way the venture has been effectively outlined and tried.

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