SCORE BOARD

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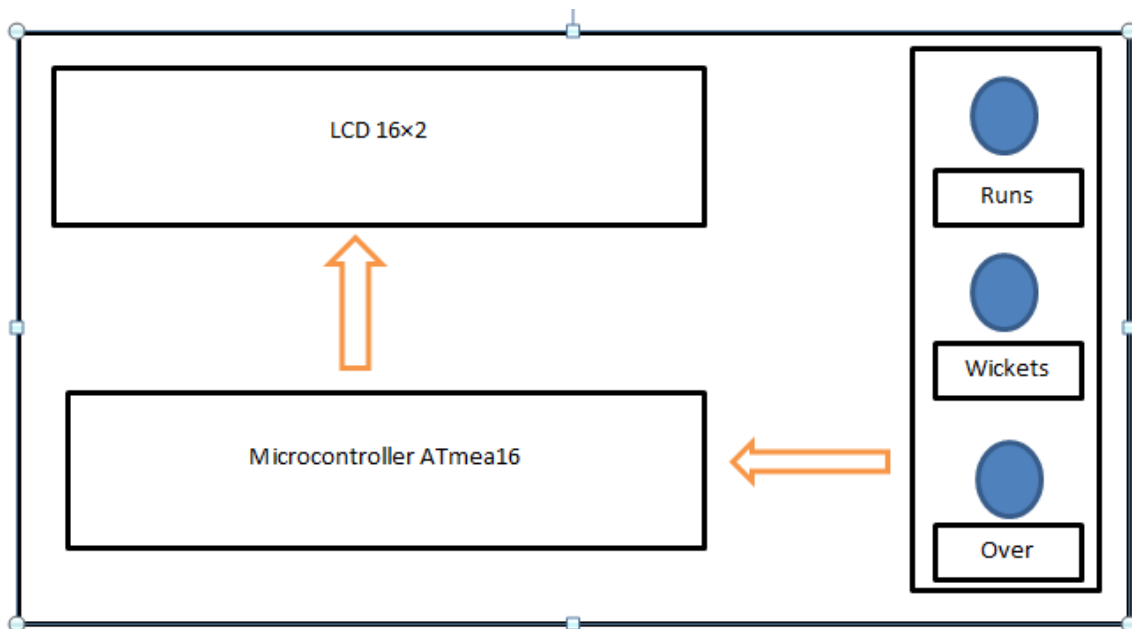Karachi, Pakistan

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I. Objectives

   Our objective it to design this scoreboard, with operates manual buttons that aid in these small scale tournaments of the cricket match. In order for the scoreboard to effective, it needs to be affordable, portable and versatile in terms of sport it can accommodate and how it can be controlled.

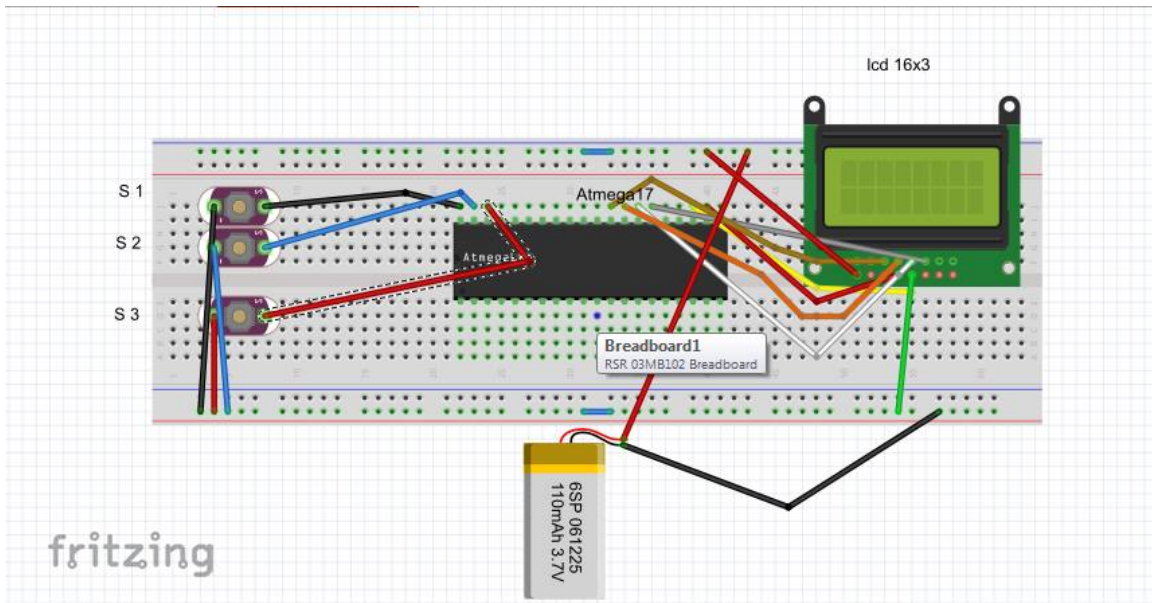| #	Component Name	Model	Price (PKR)
1	Microcontroller	ATMega16	270
2	LCD	CharacterLCd Module	325
3	Switches	Mini Push Button	35
		Total	630

II. Need Statement:

As stated in the objectives above, the biggest need is to develop a cost effective scoreboard (preferably with a parts cost Rs 630. That will be used for recreational tournaments, intramural games and also small scale competitive games.
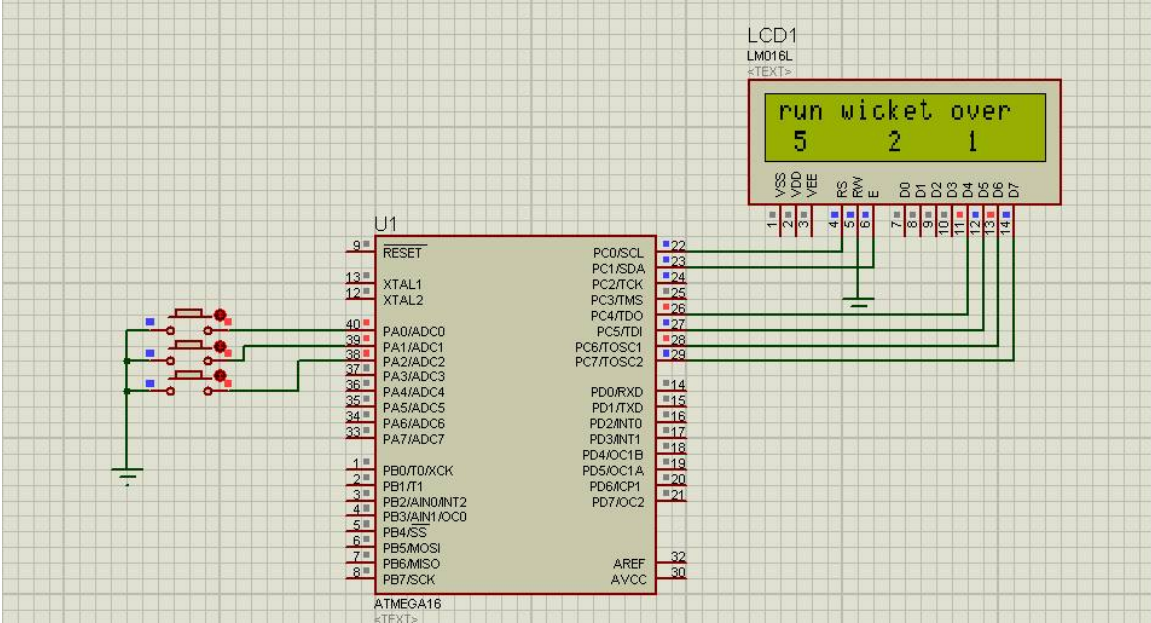
III. Block Diagram

IV. **Diagram**

Embed diagram from Fritzing and describe interconnections.

V. Simulation Model

Embed Proteus model here.

VI. Program Code

```c
#include <mega16.h>     //Header file of ATmega16 Microcontroller
#include <alcd.h>     //Header file of Alpha Numeric LCD
#include <delay.h>
 unsigned char  data,data1,data2;
 void main(void)
{
  lcd_init(16);     //Initialize LCD of 16 matrix per line
  lcd_clear();     //Clear LCD
  PORTA.0=1;
  PORTA.1=1;
  PORTA.2=1;
  lcd_gotoxy(0,0);     //Move cursor to position x,y = 0,1
  lcd_putsf("run");     //Put String on LCD screen
  lcd_gotoxy(4,0);     //Move cursor to position x,y = 0,1
  lcd_putsf("wicket");     //Put String on LCD screen
  lcd_gotoxy(11,0);     //Move cursor to position x,y = 0,1
  lcd_putsf("over");     //Put String on LCD screen
  while(1)
  {
  if(PINA.0 == 0)
  {
  lcd_gotoxy(1,1);     //Move cursor to position x,y = 0,0
  data++;
  lcd_putchar(data+0x30);     //Put character 'a' on LCD screen
  delay_ms(1000);
}
  if(PINA.1 == 0)
  {
  lcd_gotoxy(7,1);     //Move cursor to position x,y = 0,0
  data1++;
  lcd_putchar(data1+0x30);     //Put character 'a' on LCD screen
  delay_ms(1000);
}

  if(PINA.2 == 0)
  {
  lcd_gotoxy(12,1);     //Move cursor to position x,y = 0,0
  data2++;
  lcd_putchar(data2+0x30);     //Put character 'a' on LCD screen
  delay_ms(1000);
}
}
}
```

Group Members