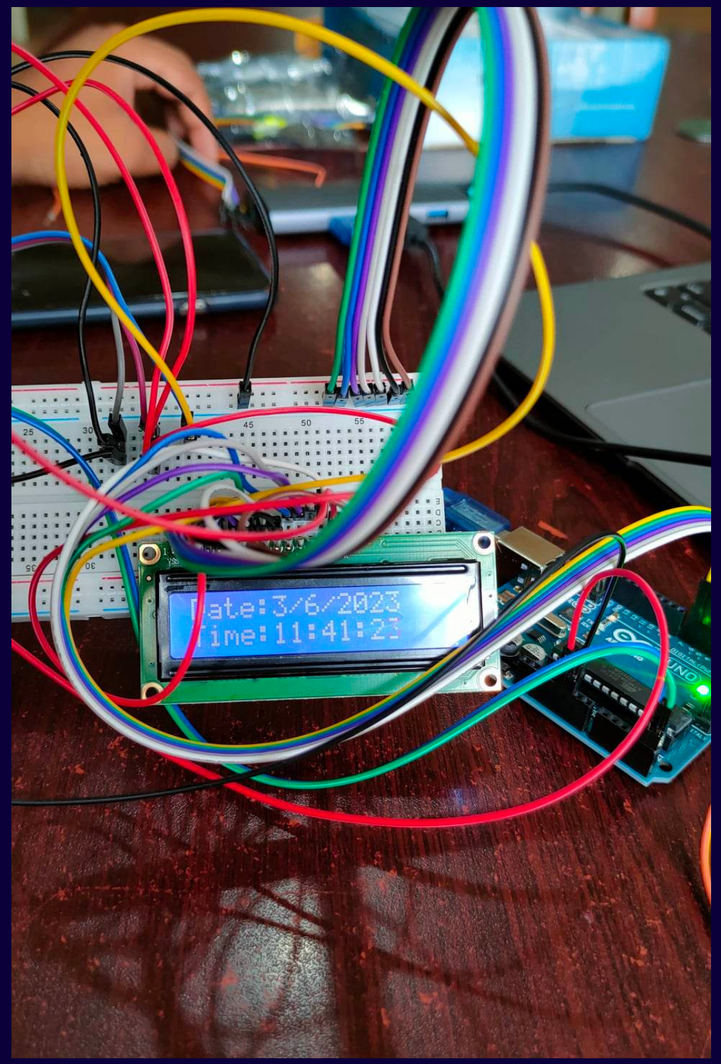


7 SEGMENT DISPLAY CLOCK

Operating Systems Design

Course Code: CSE323

Section: 03

Faculty: Mosabber Uddin Ahmed (MUA3)

MEMBERS

Rashedul Islam Tono 2022154642

Wahidun Akter 2022188642

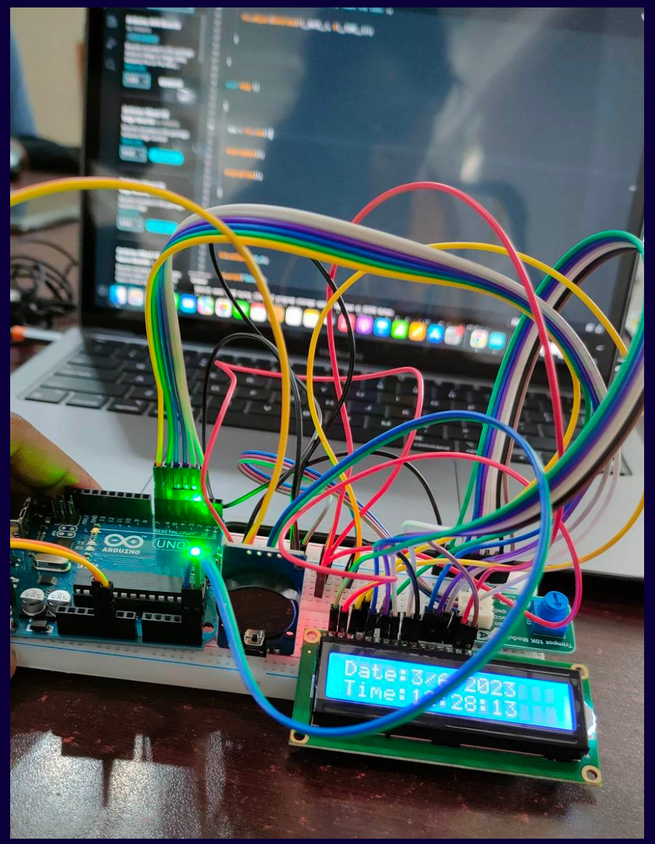
Hadi Uzzaman 2022206642

Sumaya Yasmin 2021374642

OBJECTIVES

In this project, we have built 7 segment display clock, which is controlled by Arduino Uno.

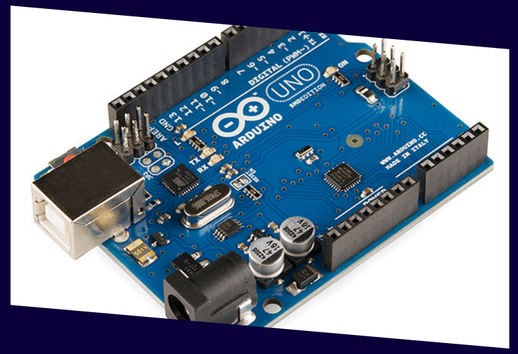
We have combined 7-segment displays and keep time using a real-time clock module.



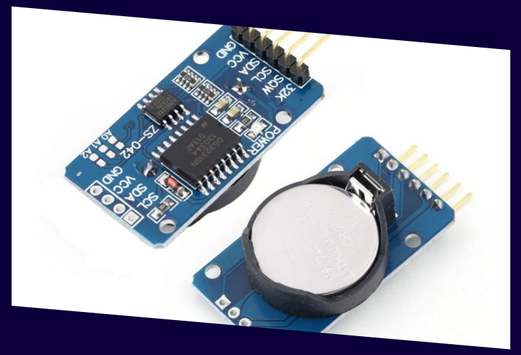
EQUIPMENT LIST

HARDWARE:

Arduino Uno

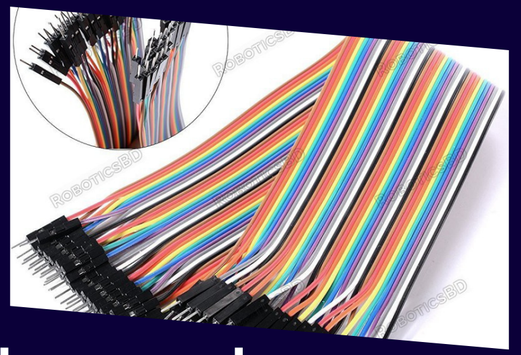


Clock Module

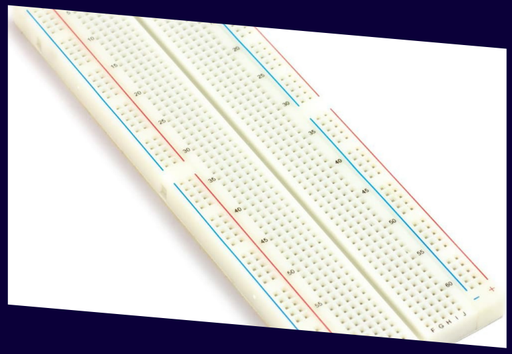


LED display

Wires



Breadboard



SOFTWARE: ARDUINO IDE

CODE

```
#include <Wire.h>
#include <LiquidCrystal.h>
#include <RTClib.h>

DateTime now;
RTC_DS3231 rtc;

LiquidCrystal lcd(7, 6, 5, 4, 3, 2);

void displayDate(void);
void displayTime(void);
void setup ()

{
 Serial.begin(9600);
 lcd.begin(16,2);

 if (! rtc.begin())

 {
  Serial.println(" RTC Module not Present");
  while (1);
 }


 if (rtc.lostPower())
 {
  Serial.println("RTC power failure, reset the time!");
  rtc.adjust(DateTime(F(_DATE_), F(_TIME_)));
 }
}
```

```
void loop ()
{
 now = rtc.now();
 displayDate();
 displayTime();
}

void displayDate()

{
      lcd.setCursor(0,0);
      lcd.print("Date:");
      lcd.print(now.day());
      lcd.print('/');
      lcd.print(now.month());
      lcd.print('/');
      lcd.print(now.year());
}

 void displayTime()
{
      lcd.setCursor(0,1);
      lcd.print("Time:");
      lcd.print(now.hour());
      lcd.print(':');
      lcd.print(now.minute());
      lcd.print(':');
      lcd.print(now.second());
      lcd.print("    ");
}
```

THANK YOU