Atom IDE, Fritzing ve Arduino ile LCD Ekran Kullanımı

ANTALYA SINAV ANADOLU LİSESİ ROBOTİK TOPLULUĞU

SINAV KOLEJİ

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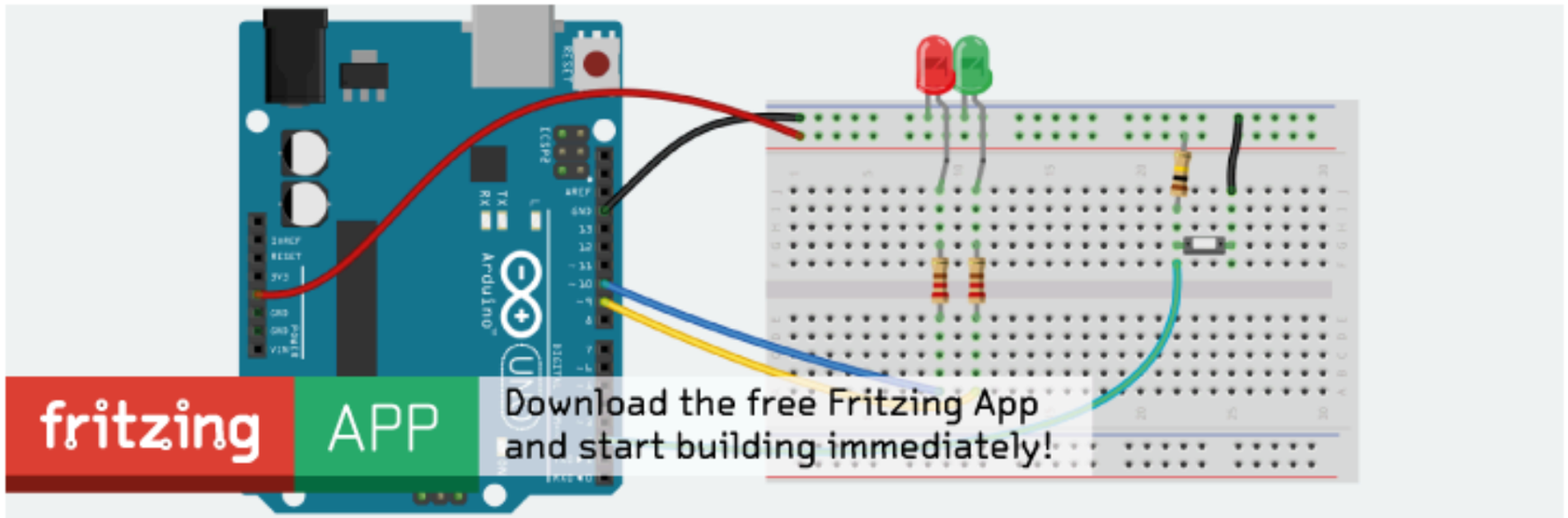
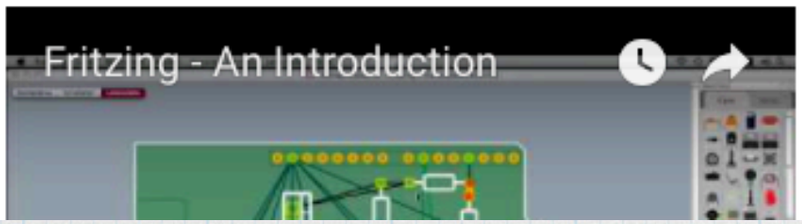
GFDL



Fritzing is an open-source hardware initiative that makes electronics accessible as a creative material for anyone. We offer a software tool, a community website and services in the spirit of Processing and Arduino, fostering a creative ecosystem that allows users to **document** their prototypes, **share** them with others, **teach** electronics in a classroom, and layout and **manufacture** professional pcbs.



Download and Start

Download our latest version 0.9.3b released on June 2, 2016 and start right away.

Produce your own board

With Fritzing Fab you can easily and inexpensively turn your circuit into a real, custom-made PCB. Try it out now!

Participate

Fritzing can only act as a creative platform if many people are using it as a means of sharing and learning. Let us know how it fits your needs and how it doesn't, show it to your friends, and share your projects.

Blog

New fritzing release 0.9.3b!
Jun. 3, 2016

New Book: "Fritzing for Inventors"
Dec. 6, 2015

A new fritzing discussion forum
Nov. 8, 2015

More posts...

Projects

Solar Powered FONA
biod101

Project_1_UNESP
guipjfranze

Line 6 Floorboard Arduino Interface
jero

More projects...

Fritzing is open source, free software. Please consider donating to Friends-of-Fritzing e.V. before downloading the app.
Fritzing is a non-profit organization devoted to making creative use of electronics accessible to everyone.

- ◯ **No Donation**
- ◯ **€ 10**
- ◯ **€ 25**
- ◯ **€** 50

Donate & Download

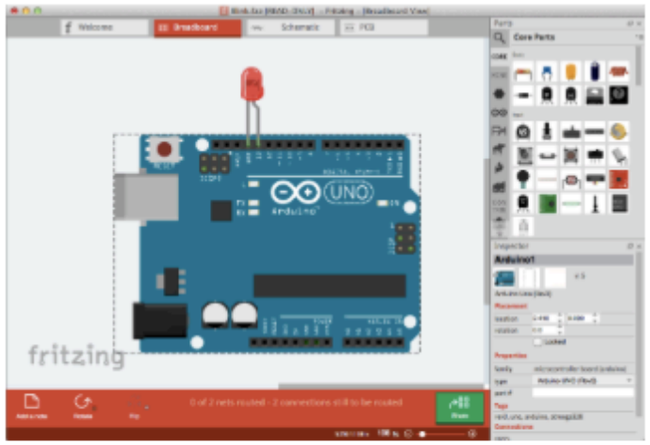
Version 0.9.3b was released on **June 2, 2016**.

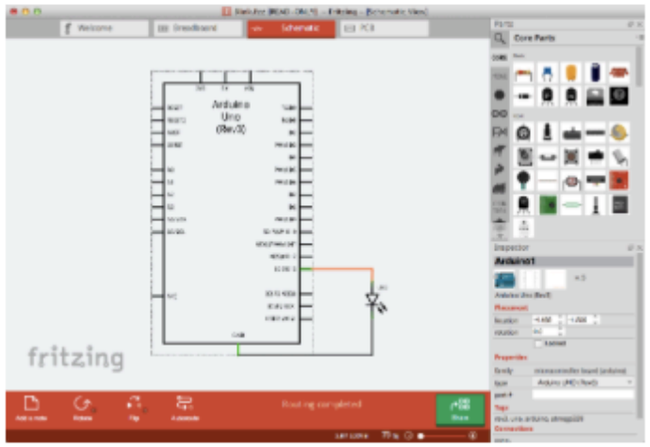
Downloaded 780497 times.

See what's new and the known issues.

Read the installation instructions below.

This version includes translations for:
Deutsch (German), **English**, **Español** (Spanish), **Français** (French), **Italiano** (Italian), **Nederlands** (Dutch), **Português (eu)** (Portuguese EU), **Português (br)** (Portuguese BR), **日本語** (Japanese), **中文 (简体)** (Chinese Simplified), **正體中文 (繁體)** (Chinese Traditional), **Русский** (Russian), **Čeština** (Czech), **한국어** (Korean), **Ελληνικά** (Greek), **slovenčina** (Slovak), **română** (Romanian), **Türkçe** (Turkish), **Български**





GO

FAQ ABOUT CONTACT

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http://fritzing.org/download/

Arduino İçin Muhteşem Bir IDE!

https://atom.io

LCD Ekran!

2x16 LCD Ekran - Yeşil Üzerine Siyah - TC1602A

Tanım:

Uygulamalarınızda kullanabileceğiniz kaliteli bir LCD, 16x2 karakter yeşil üzerine siyah yazı yazmaktadır.

Özellikleri;

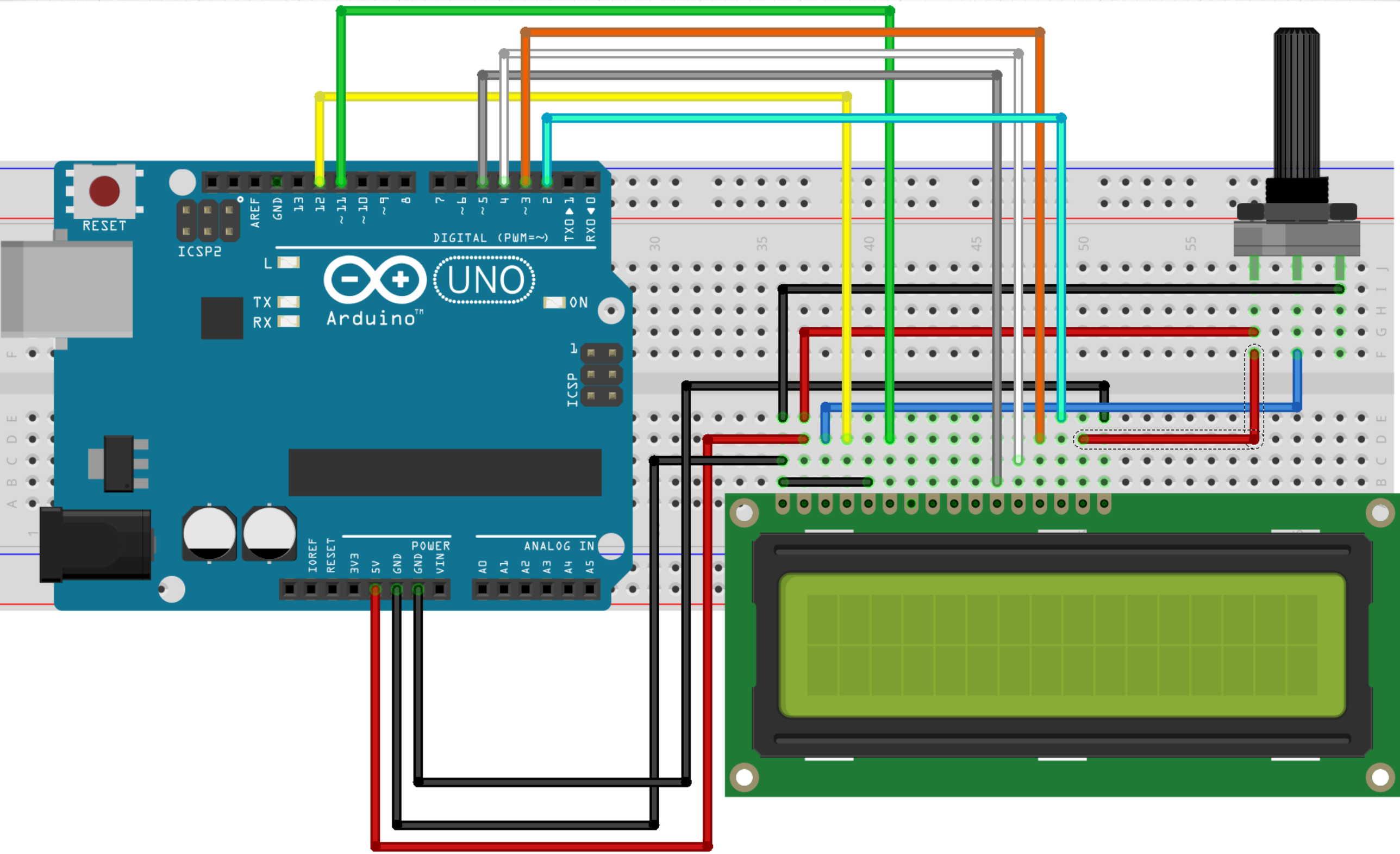
- +5V ile çalışmaktadır.
- Back Lighting özelliğine sahiptir.
- LCD arka fon ışığı olmadan 4mA akım çekmektedir.
- Boyutları 80x36x9.4mm'dir
- Çalışma sıcaklığı -20 ile +70 derece arasıdır.

http://www.robotistan.com/16x2-lcd-ekran-yesil-uzerine-siyah

Bacak Bağlantıları;

LCD Pin	Sembol	Bağlantı
1	Vss	GND
2	Vdd	+5V
3	Vo	Kontrast ayarı
4	RS	Register seçme pini
5	R/W	Data read/write pini.
6	E	Enable pini
7	DB0	Data Bus 0
8	DB1	Data Bus 1
9	DB2	Data Bus 2
10	DB3	Data Bus 3
11	DB4	Data Bus 4
12	DB5	Data Bus 5
13	DB6	Data Bus 6
14	DB7	Data Bus 7
15	A	LED arka ışık +5V
16	K	LED arka ışık gnd

http://www.robotistan.com/16x2-lcd-ekran-yesil-uzerine-siyah


RESET
ICSP2
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM=~)
L
TX
RX
UNO
Arduino™
ON
ICSP
POWER
IOREF
RESET
3V3
5V
GND
GND
VIN
ANALOG IN
A0
A1
A2
A3
A4
A5
fritzing

Kod

PlatformIO Home | lcd.ino

```
1     #include <LiquidCrystal.h>
2     LiquidCrystal lcd(12,11,5,4,3,2);
3
4     void setup() {
5     lcd.begin(16,2);
6     lcd.clear();
7     lcd.print("Merhaba Dunya!");
8     }
9
10    void loop() {
11
12    }
13
```

Özel Karakter?

PlatformIO Home | lcd.ino | ozelkarakter.ino

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12,11,5,4,3,2);

byte ozelkarakter[8] =
{
  B00000,
  B00000,
  B01010,
  B00000,
  B10001,
  B01110,
  B00000,
  B00000,
  };

void setup() {

lcd.begin(16,2);
lcd.clear();
lcd.setCursor(0,0);
lcd.print("OZEL KARAKTER");
lcd.createChar(1, ozelkarakter);
lcd.setCursor(0,1);
lcd.write(1);
}

void loop() {


}

```

Challenge

1- Uzaklığı LCD Ekrana Yazdırma!

2- Ortam Sıcaklığını Ekrana Yazdırma!

* To be continued...