

github.com/sinkukumar



EMBEDDED SYSTEMS AND IOT

VERSION 0.1

DATE 08/12/2021

Presented by
Sinku Kumar

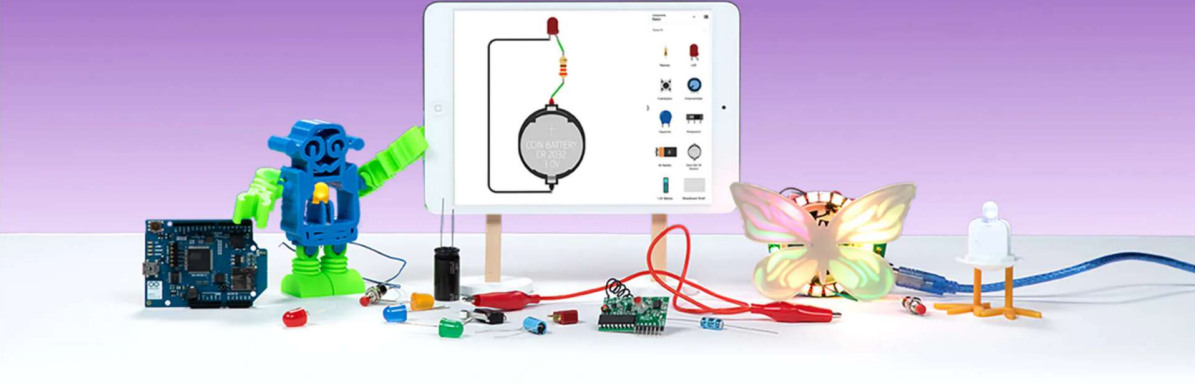
Getting Started with Tinkercad

TINKERCAD

AUTODESK

TINKERCAD

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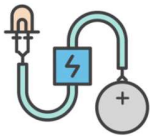
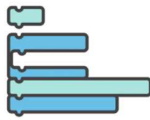



Circuits

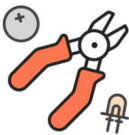


Add light and movement to your 3D designs with electronic circuits.

[Start Tinkering](#) [Join your class](#)

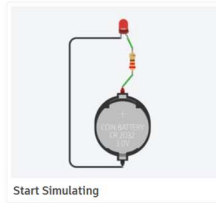
It's as easy as...

<div>Design</div>  <p>Place & wire components to create a virtual circuit, or begin with a Starter.</p>	<div>Program</div>  <p>Program using Codeblocks or C++.</p>	<div>Simulate</div>  <p>See how components will respond in real life.</p>
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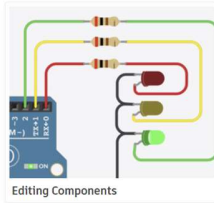
Next steps:

<div>Build</div>  <p>Take your virtual circuit and make it real.</p>	<div>Program</div>  <p>Export your source code from Tinkercad to program your circuit.</p>	<div>Enhance</div>  <p>Add in 3D design and printing with Circuit Assemblies.</p>
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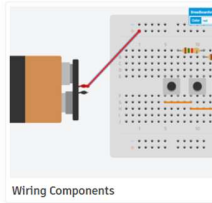
Getting started



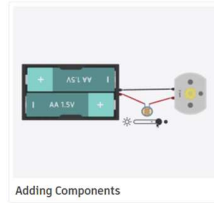
Start Simulating



Editing Components



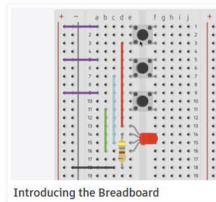
Wiring Components



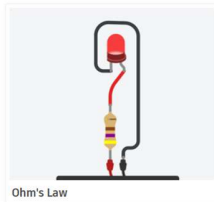
Adding Components

Show all Lessons

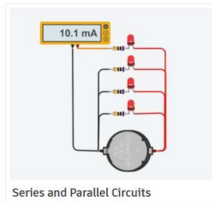
Skill builders



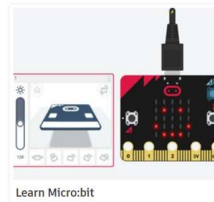
Introducing the Breadboard



Ohm's Law



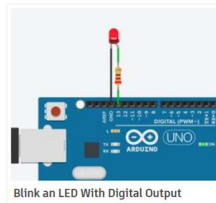
Series and Parallel Circuits



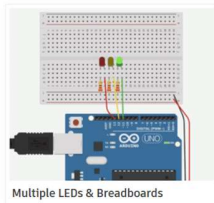
Learn Micro:bit

Show all Skills

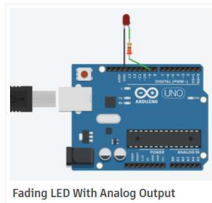
Learn Arduino



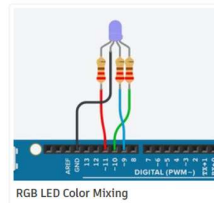
Blink an LED With Digital Output



Multiple LEDs & Breadboards

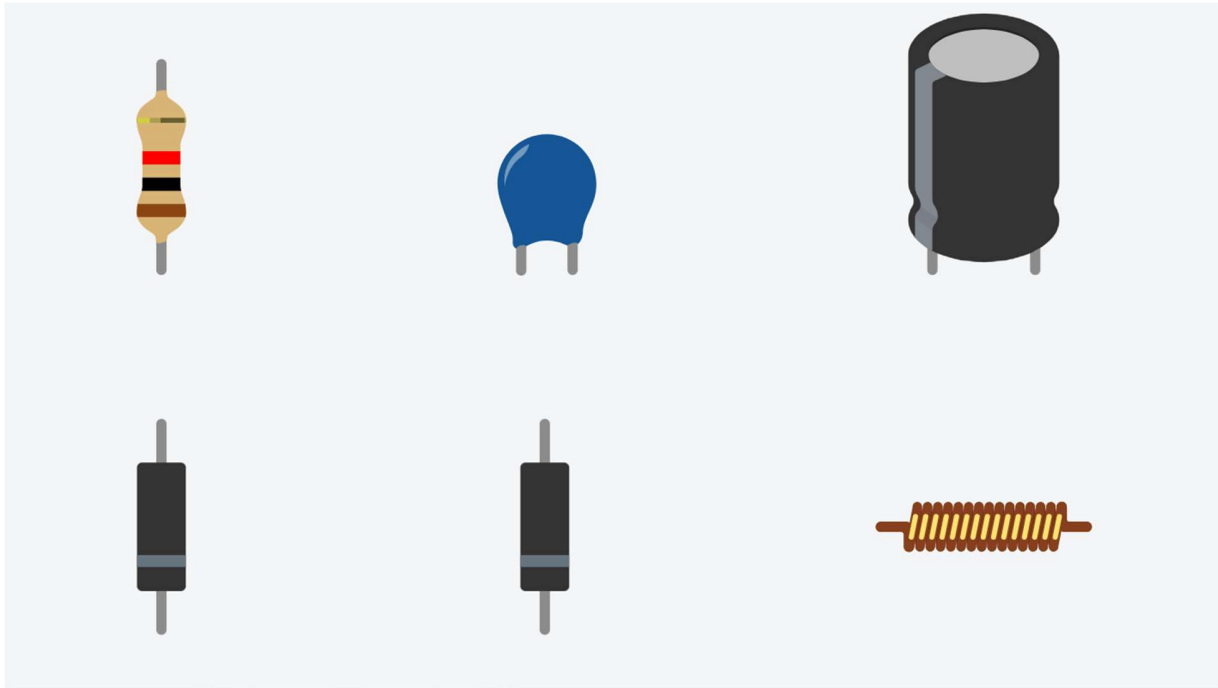


Fading LED With Analog Output

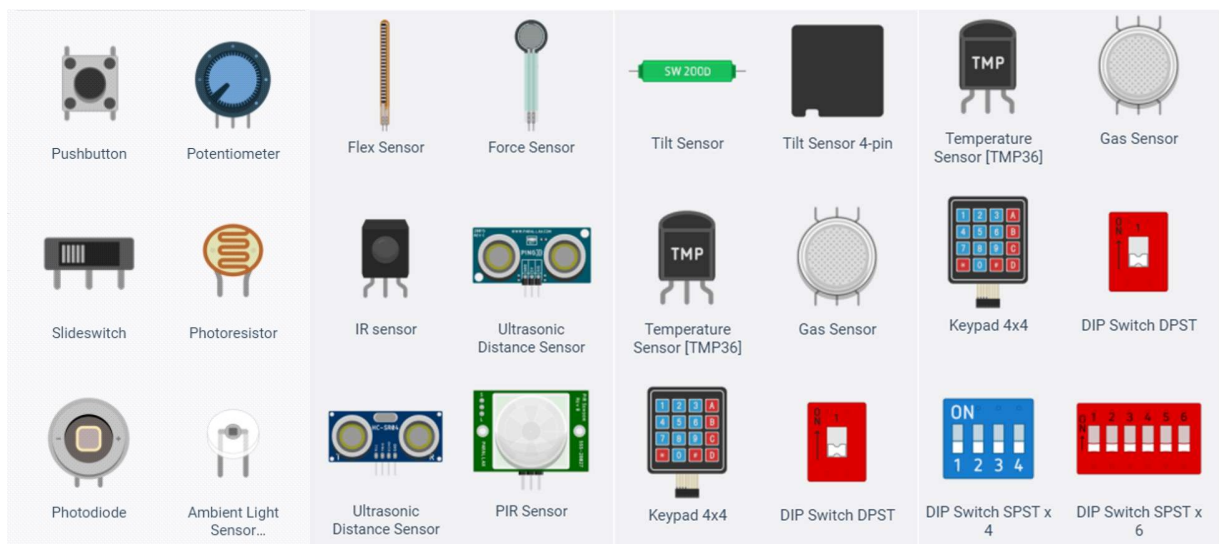


RGB LED Color Mixing

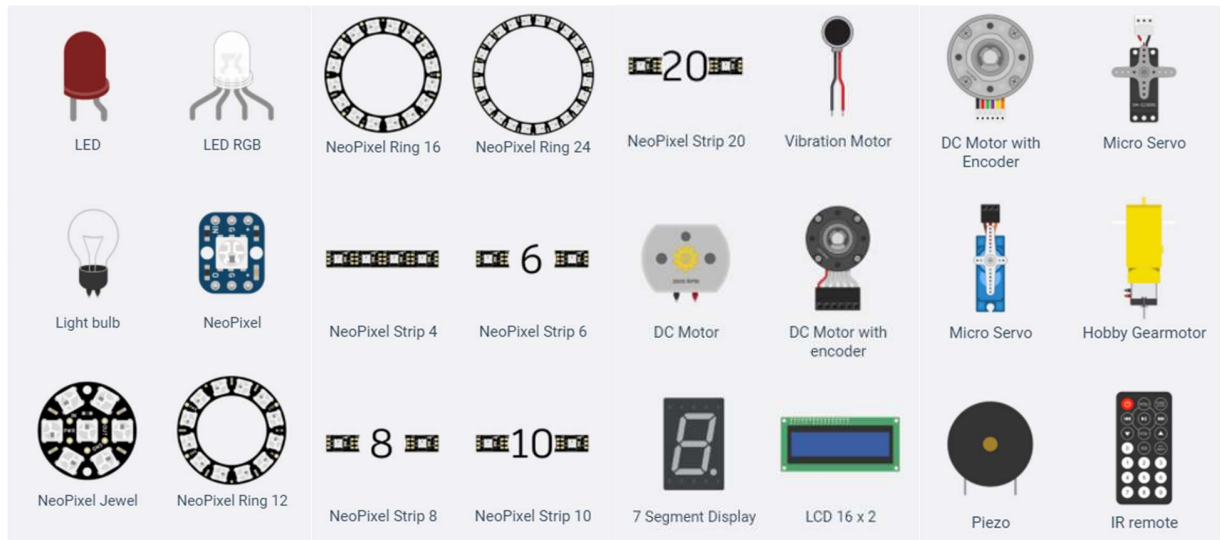
Show all Arduino



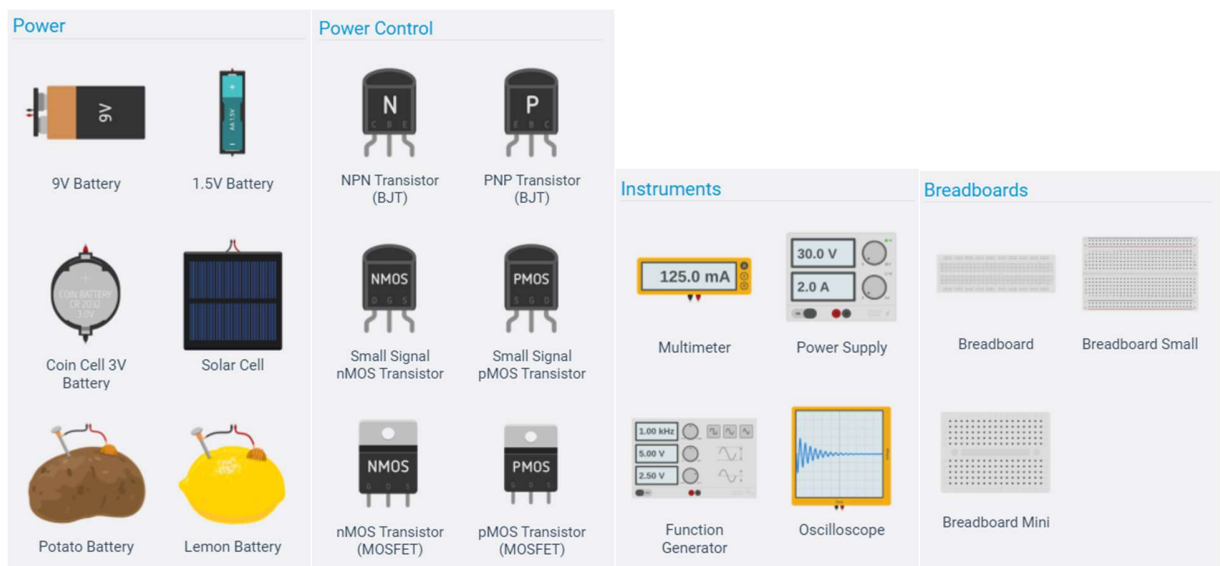
BASIC COMPONENTS



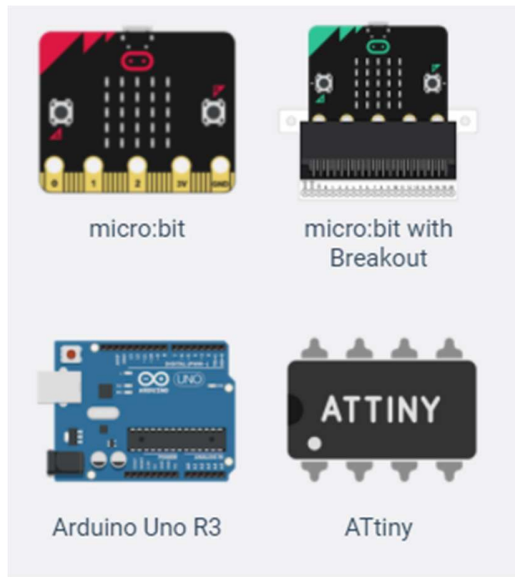
INPUT COMPONENTS



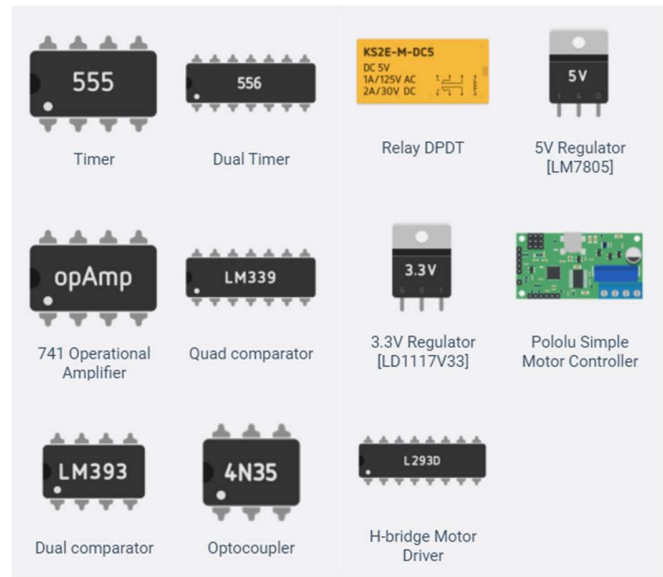
OUTPUT COMPONENTS



POWER COMPONENTS



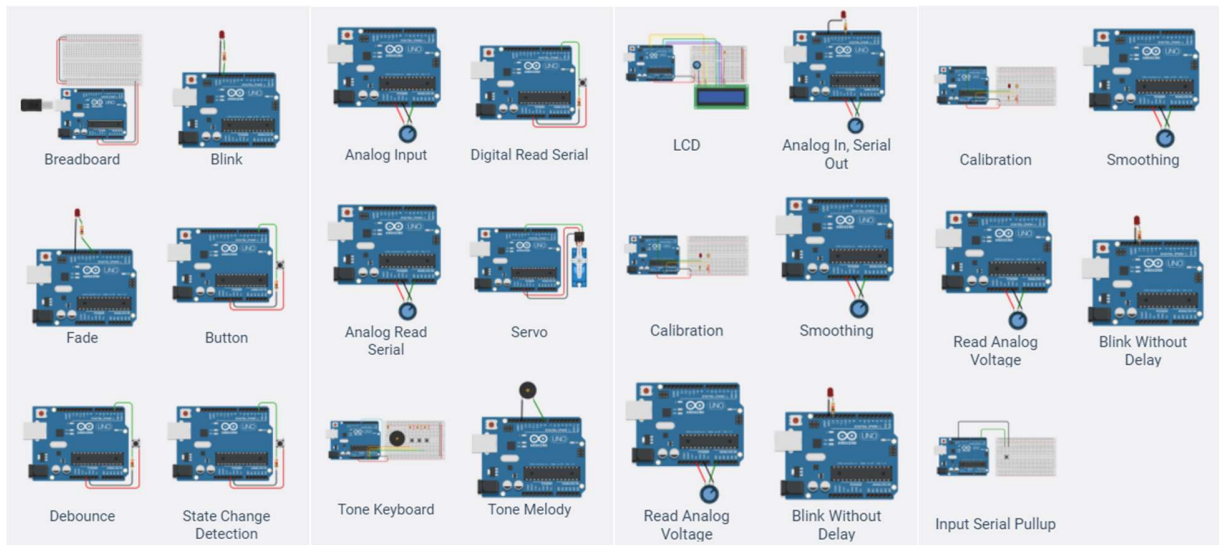
MICROCONTROLLERS



INTEGRATED CIRCUITS



LOGIC GATES



ARDUINO CIRCUITS

Circuits

Create new Circuit

Select

11_Serial_Buzzer_Tone
4 days ago
Public

1_RGB_LED
5 days ago
Public

10_Serial_RGB_LED_Buzzer
5 days ago
Public

9_Serial_Buzzer
5 days ago
Public

8_Serial_RGB_LED
5 days ago
Public

7_Servo
6 days ago
Public

6_Thermistor
6 days ago
Public

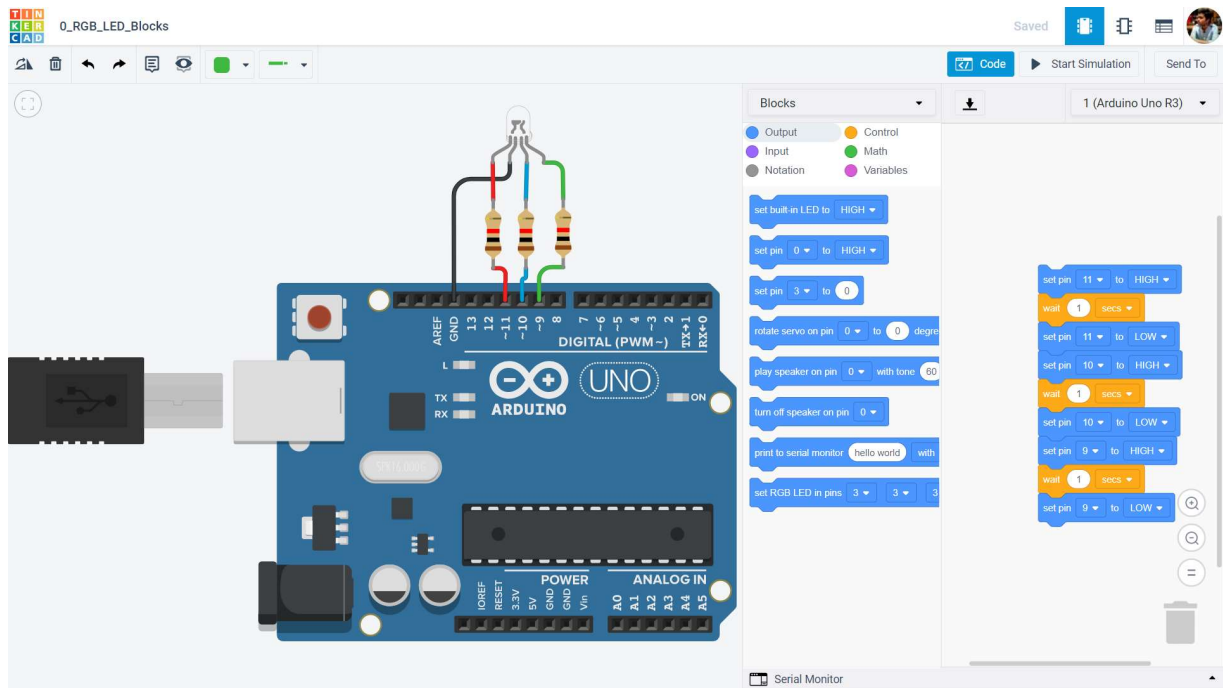
5_Photoresistor
6 days ago
Public

4_Potentiometer
6 days ago
Public

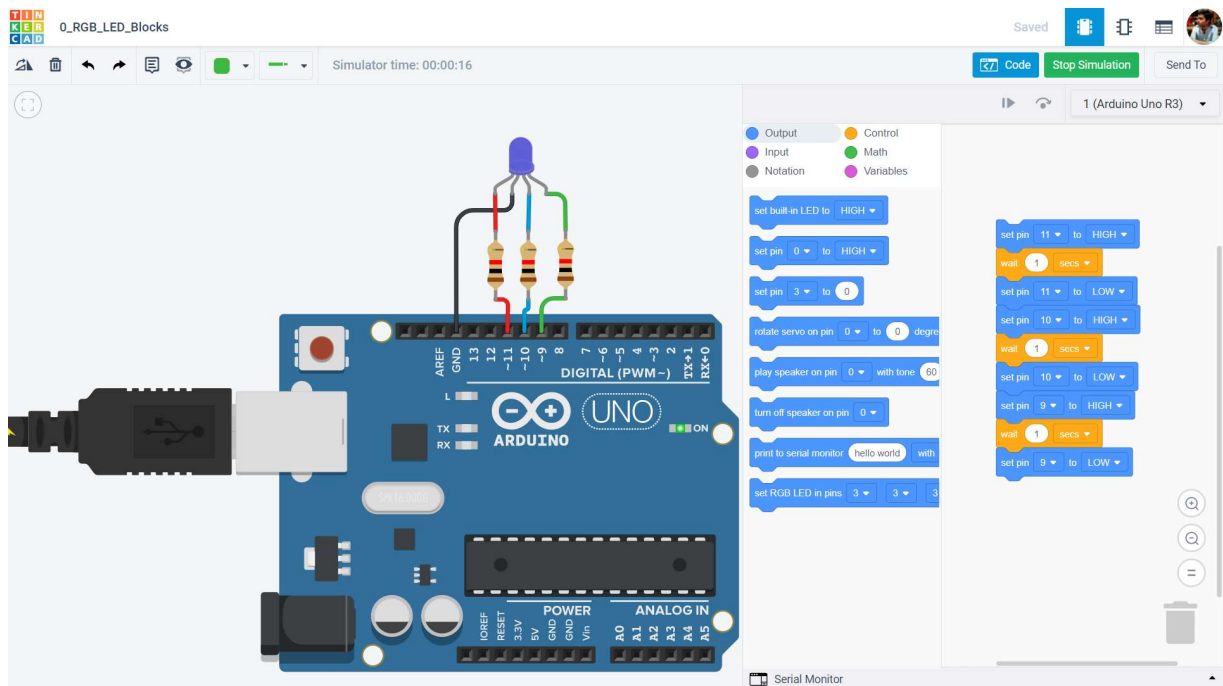
3_Push_Button
6 days ago
Public

2_Buzzer
6 days ago
Public

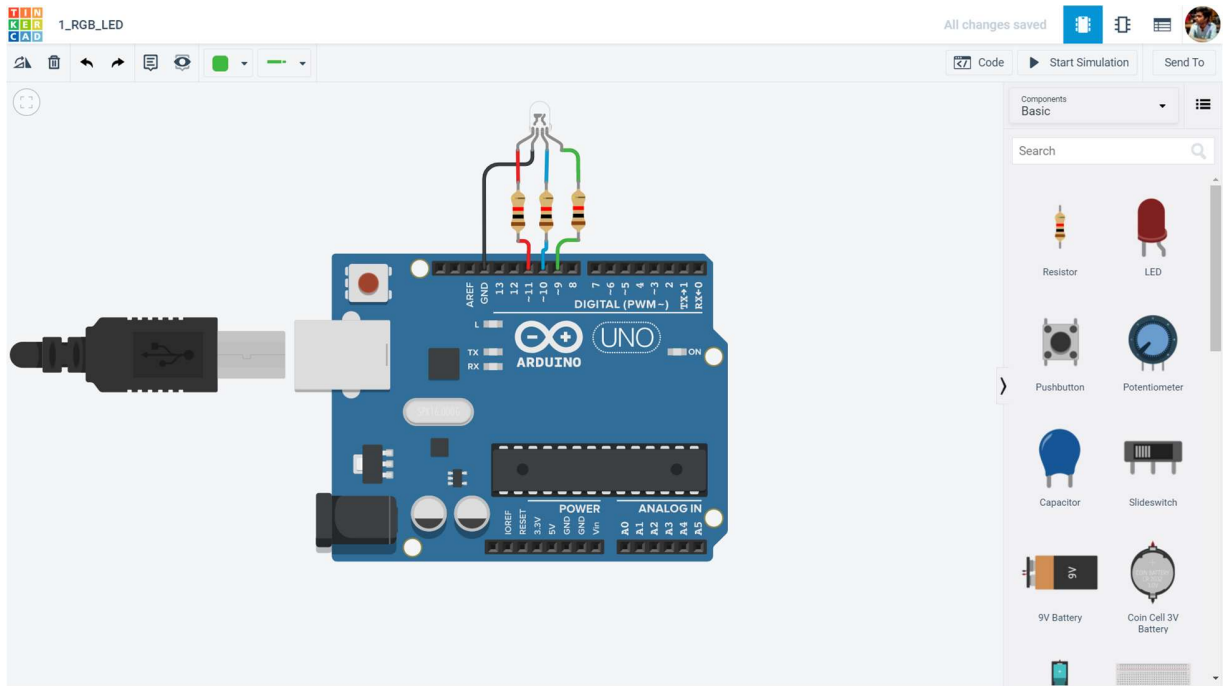
ARDUINO CUSTOM CIRCUIT ASSEMBLIES



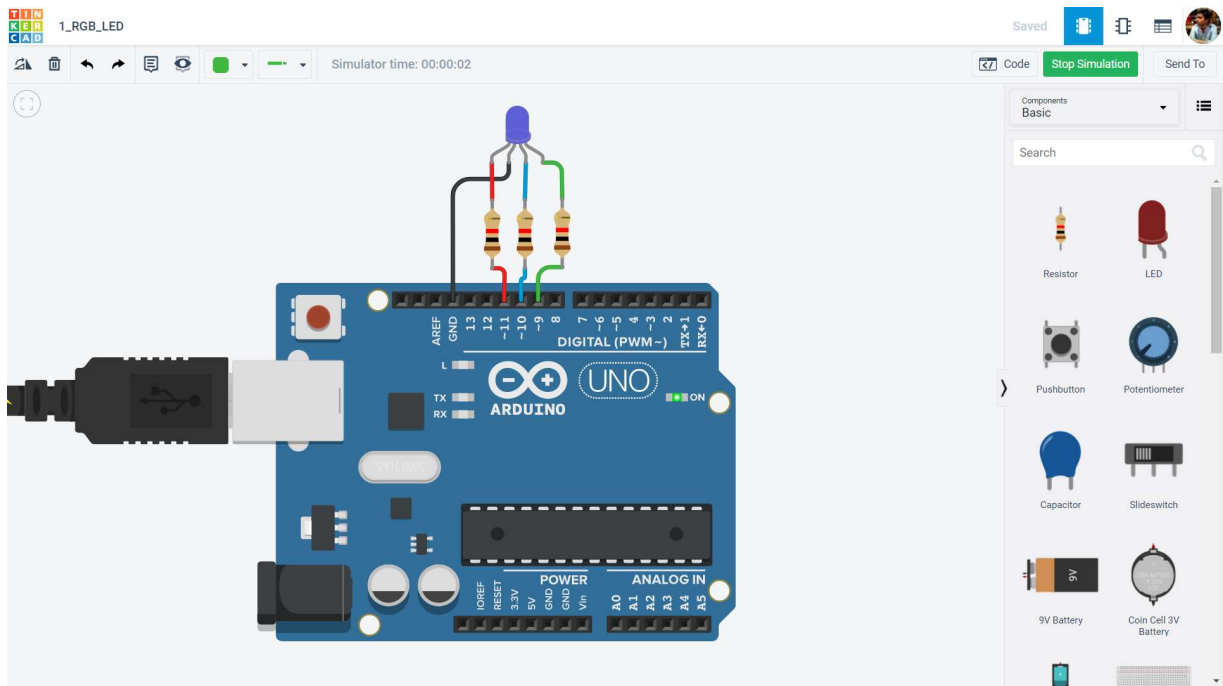
ARDUINO RBG LED BLINK USING BLOCKS



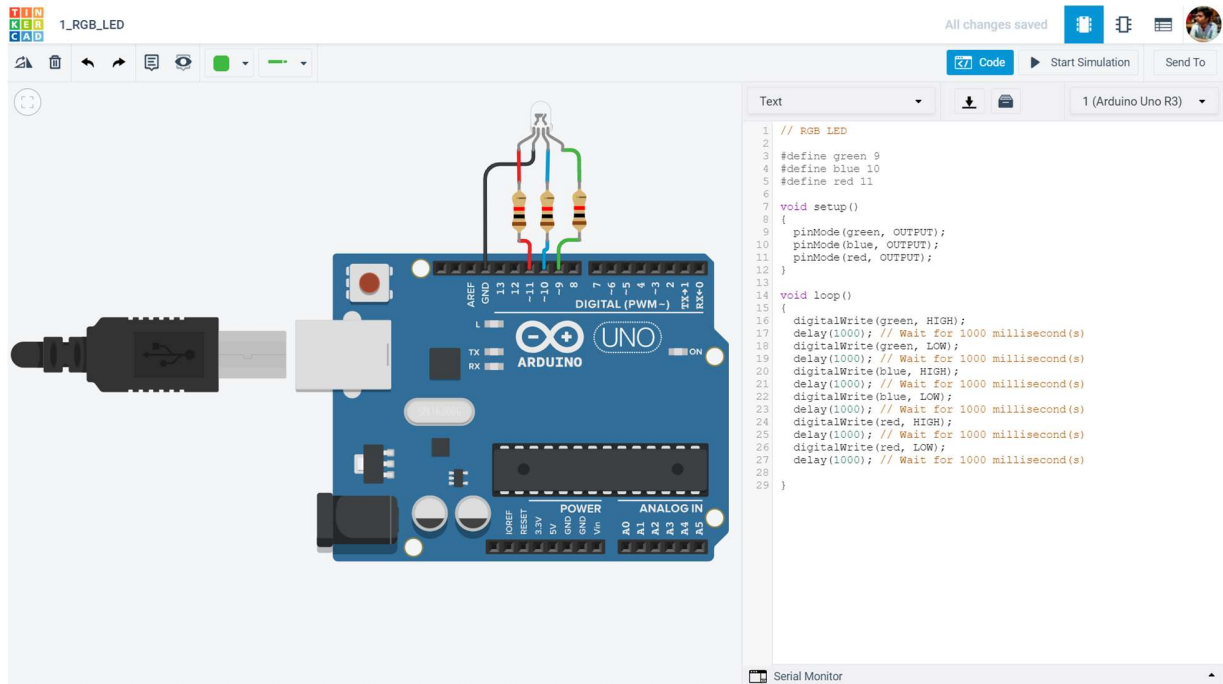
ARDUINO RBG LED BLINK USING BLOCKS SIMULATION



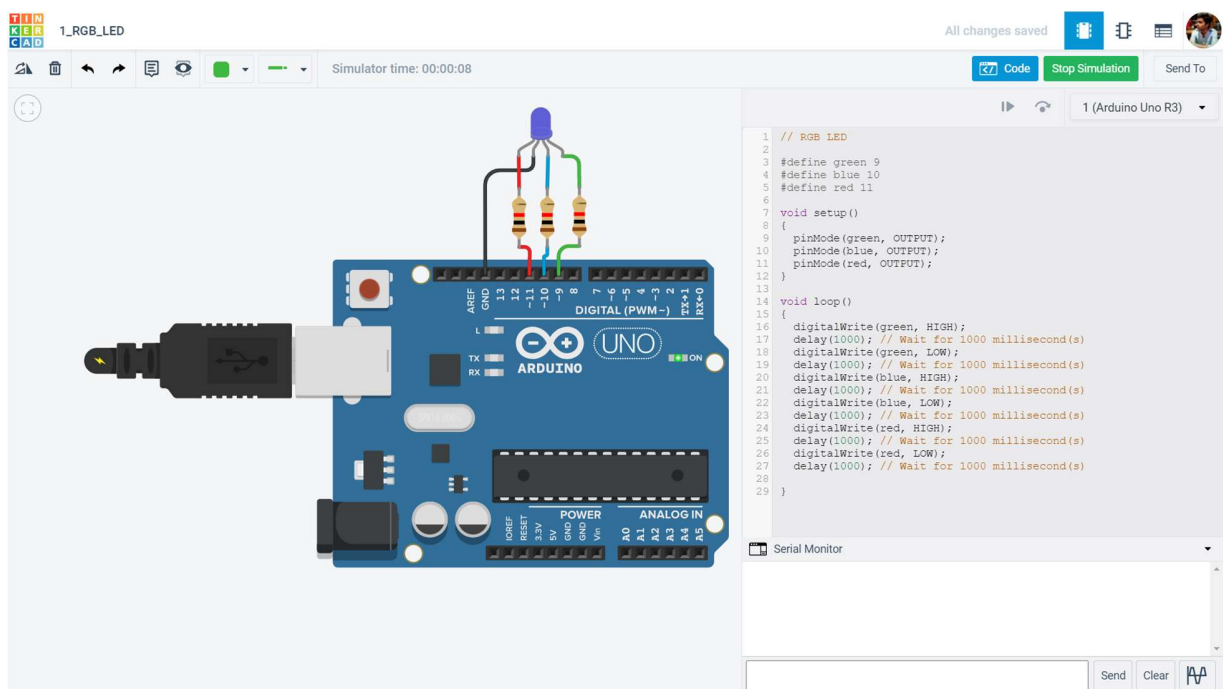
ARDUINO RGB LED BLINK



ARDUINO RGB LED BLINK SIMULATION



CODE VIEW



SERIAL MONITOR SIMULATION VIEW

