1D - LED Pong: a Fun Electronics Project

by newsonator

In this project we will be making LED PONG using Arduino, this is a two player game where each player must push their button before the ball (LED) reaches the red led. If the player waits until the yellow led and pushes the hit button it will shot the ball extra fast so watch out!!! After each bounce the speed of the ball increases until it's a battle to the DEATH!!

Supplies:

9 LEDS (2 Red, 2 Yellow, 5 Green)

1 Arduino Uno

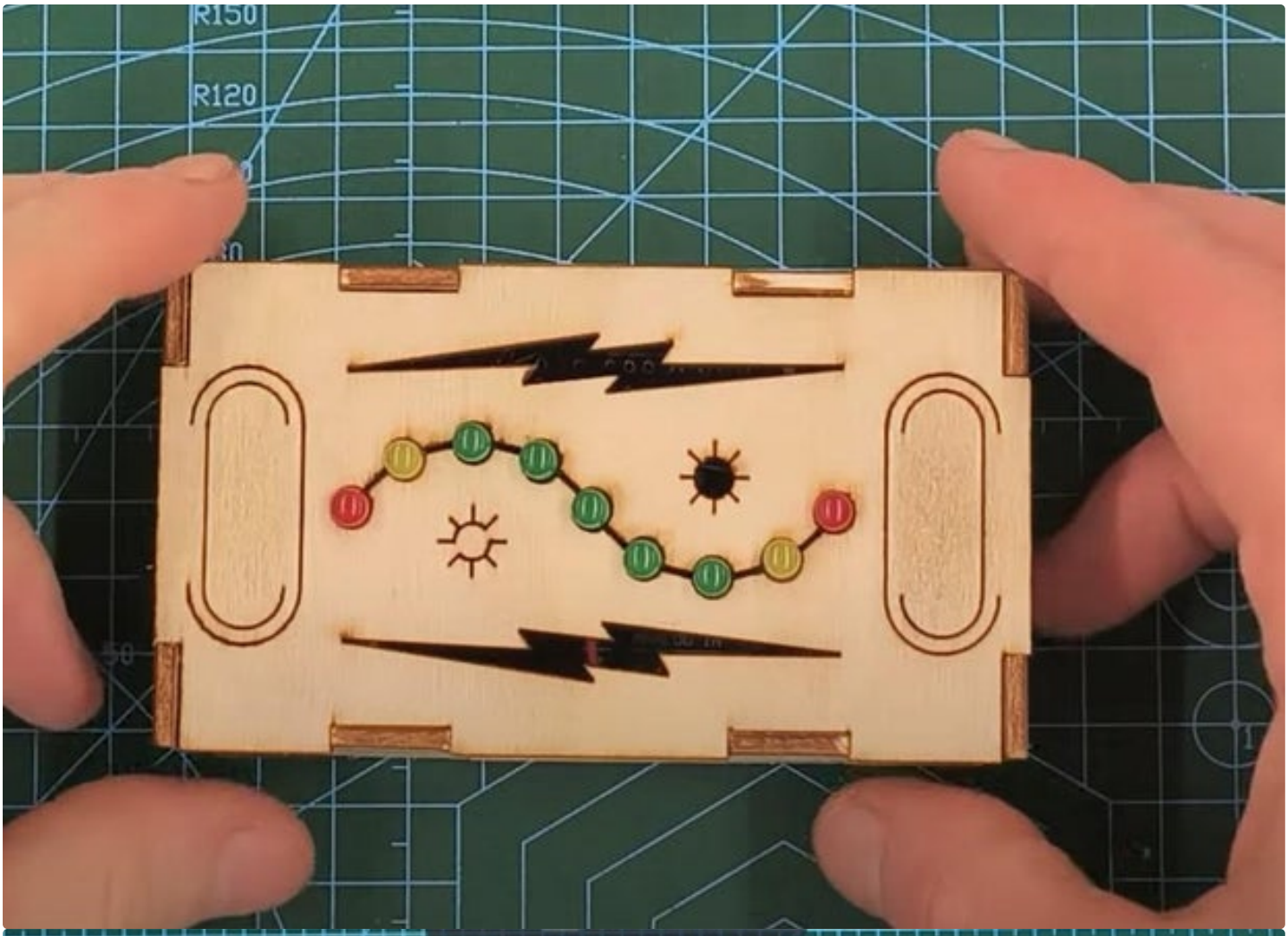
2 push buttons

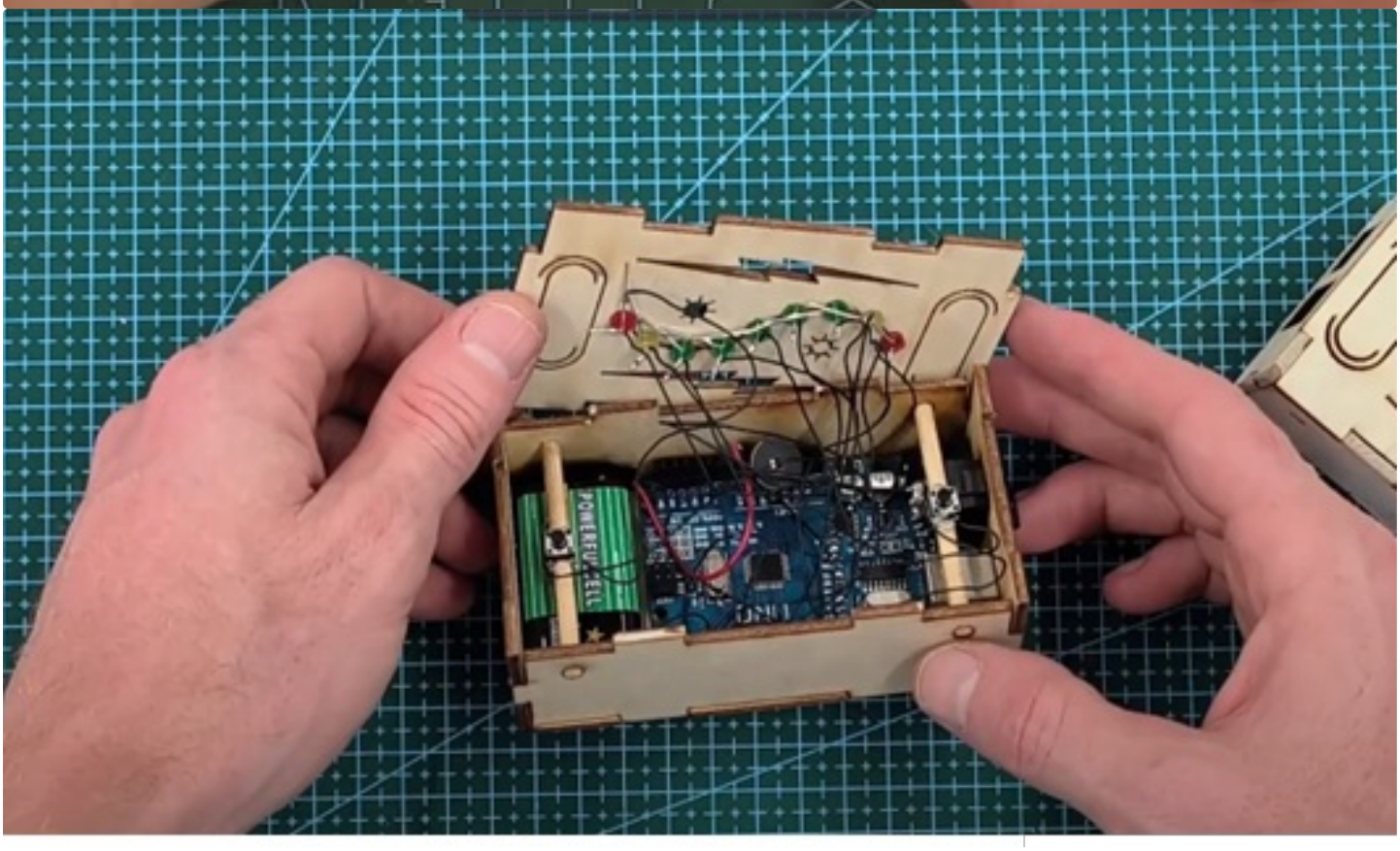
1 Buzzer

1 220 ohm resistor.

1 9V batter and connector

wires,


R150
R120



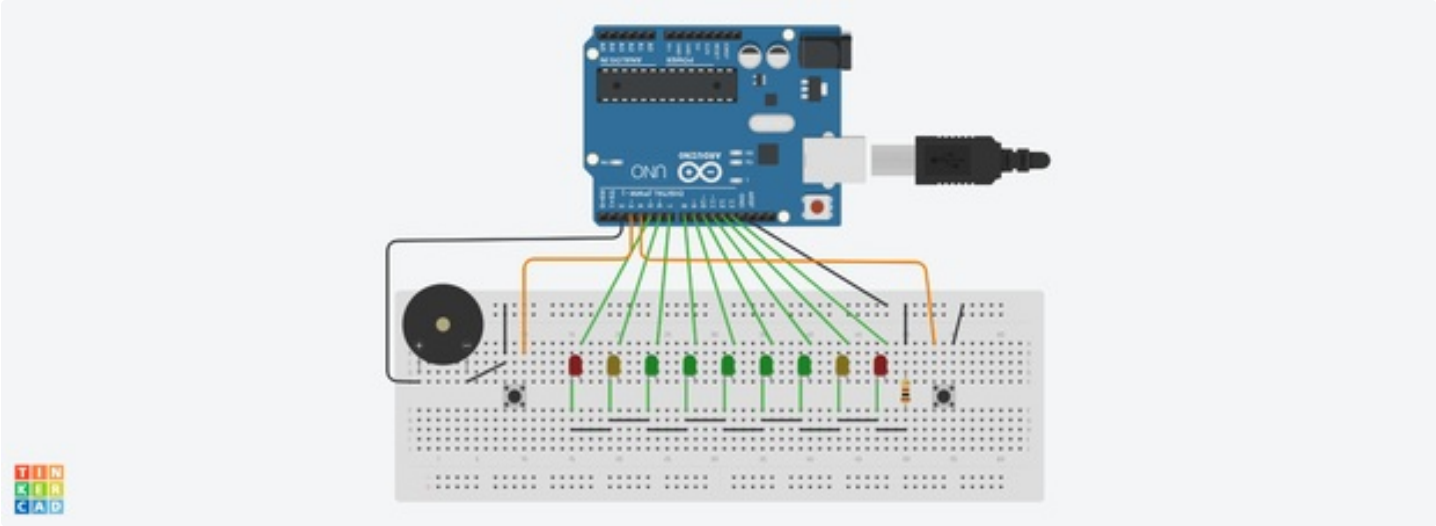
https://youtu.be/nGvu17ubb4U?si=pTlCEJCPXZgvQTUy

Step 1: Breadboarding (create the Circuit)

First create the circuit using a breadboard follow the circuit diagram.

Link to tinker cad files https://www.tinkercad.com/things/5bt8qxqKSwQ-led-pong

https://youtu.be/nGvu17ubb4U?si=y0-Csm1fkng1x4hb



Step 2: Create the Box

I used a laser cutter to cut the box out of 3mm wood panels, the below cad files are below including the drawings in google sketchup

https://youtu.be/9iuLk-2eGeg?si=NgZCxisXD39yzzKt

https://www.instructables.com/FER/QCT2/LQ57QUVC/FERQCT2LQ57QUVC.dxf Download

https://www.instructables.com/FDK/IBFG/LQ57QWWX/FDKIBFGLQ57QWWX.skp Download

Step 3: Solder the Wires

Solder the Leds and other components together, use header pins to plug into the ports of the Arduino

https://youtu.be/S5wndBFwmtY?si=lNf72o-zMGsJW21I

Step 4: Upload the Code

After soldering all the components upload the code via USB, change any code as needed.

Have fun and enjoy!!

https://youtu.be/D6cMZYNPaIU?si=q20vyhYdumIJPKzp

https://www.instructables.com/FDG/6XF5/LQ57QUQD/FDG6XF5LQ57QUQD.ino

Download