



Workshop I Agenda

Meeting Time: 6:30 pm, September 10th, 2020

Supplies Needed:

- 5x Arduino Megas
- 5x USB cables for Arduinos
- 5x Breadboards
- 5x Push buttons
- 35x 220 Ω resistors
- Male to male jumper wires

Recommended Supplies For Online Members:

- Get Elegoo Arduino Uno starter kit.
- Have access to computer with Arduino IDE

Software Needed:

- Arduino IDE

Helpers Needed:

- One or two helpers needed about an hour ahead of workshop to gather the supplies and setup.
- Helpers during the workshop

Provided Files:

- DiceRoller.ino
- SerialRxTx.ino

Lesson Plan:

- Start by looking at schematic of the circuit from Multisim.
- Split into 5 groups, one for each Arduino Mega.
- Assemble the circuit on the breadboard based on the schematic. (Note: Pins 0-13 are digital on both the Uno and the Mega, so not much difference.)
- Going over Arduino IDE and how to use. (Note: Will mention the Arduino extension on VS Code)
- Upload the provided code (DiceRoller.ino), then test out the circuits.
- If there is enough time, will also cover serial communications between two Arduinos.



- Will need two groups, two Megas each to upload SerialRxTx.ino to each one, then connect them via the RX/TX pins. Then open up Serial Monitor tool in Arduino IDE.