

Steps to build the Project

Subsystem 1

The first step in building the subsystem is to connect the NRF24L01 chip. The connections for the individual chip pins are as follows.

- Use Female to male Dupont cables for these connections.

Chip GND - Arduino GND

Chip VCC - Arduino 3.3v

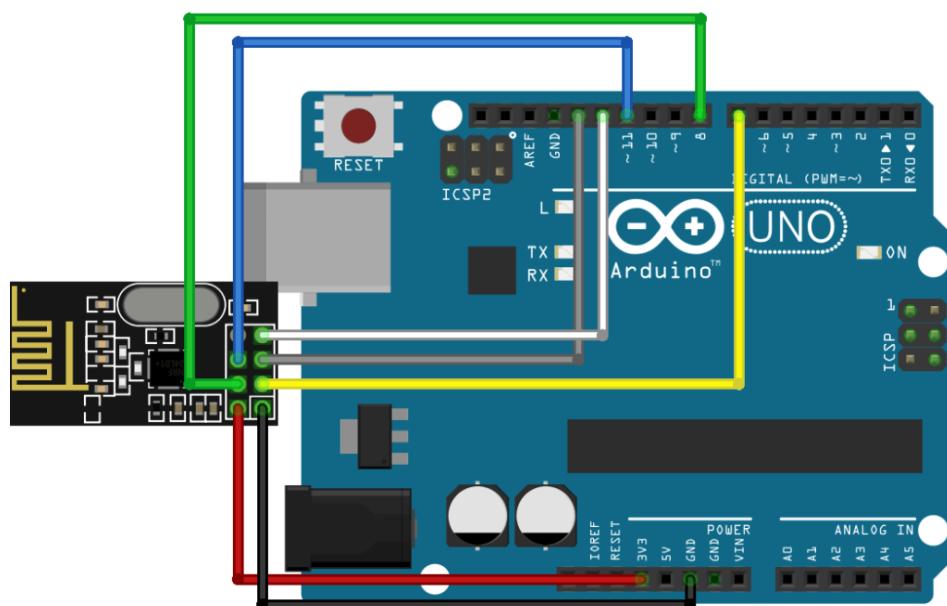
Chip CE - Arduino 7

Chip CS - Arduino 8

Chip SCK - Arduino 13

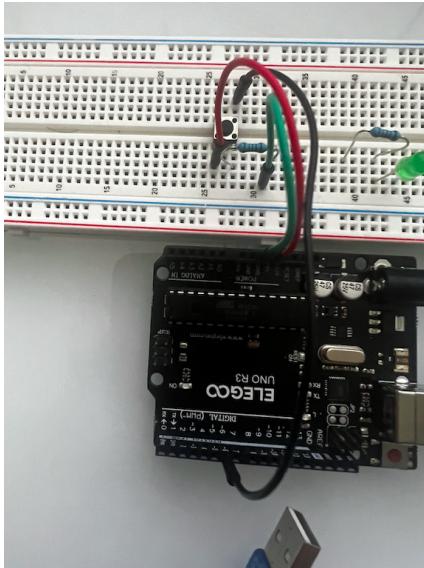
Chip MOSI - Arduino 11

Chip MISO - Arduino 12



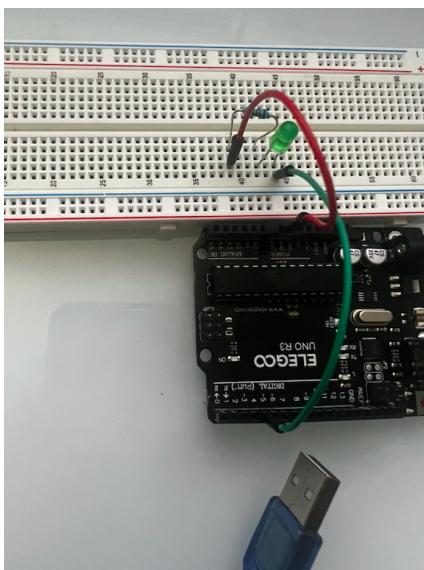
The Second step is to attach the button to the system.

- Attach the Button to 5V with the help of a jumper cable
- Attach the 10k Ohm resistor to the button and then attach a jumper cable to ground from the resistor's other end.
- Attach the button to arduino's pin 6 using a jumper cable.



The third step is to attach the Green LED.

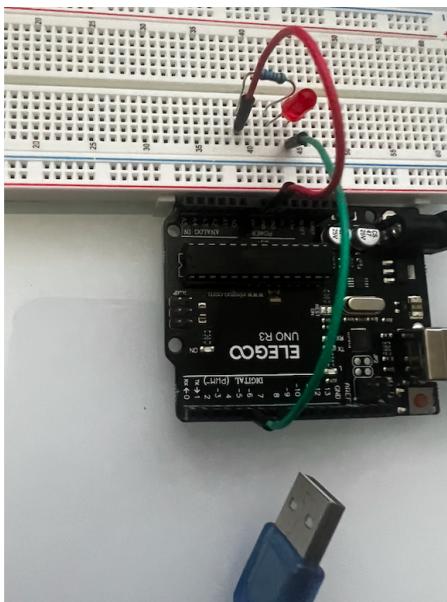
- Connect the longer end to the Arduinos 6 pin with the help of a jumper cable.
- Connect the other short end to the 200 Ohm resistor and then connect it to Ground.



The fourth step is to attach the Red LED.

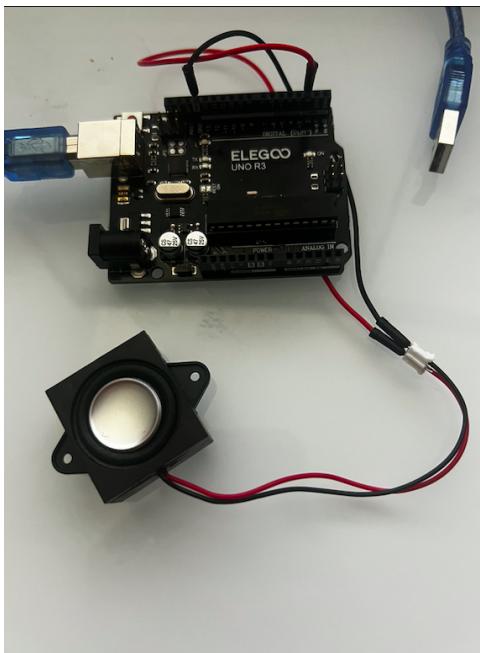
- Connect the longer end to the Arduinos 5 pin with the help of a jumper cable.

- Connect the other short end to the 200 Ohm resistor and then connect it to Ground.



The fifth step is to attach the speaker.

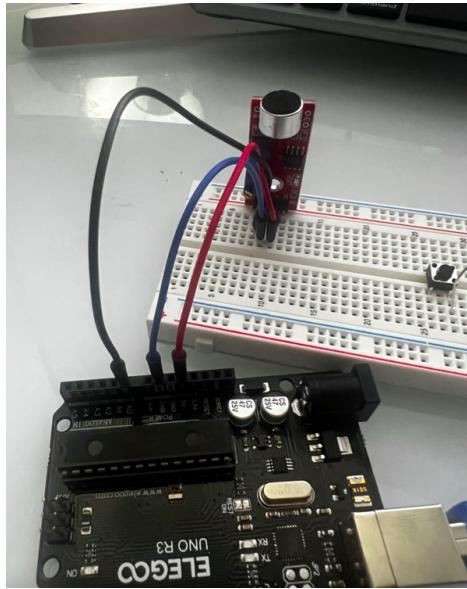
- Connect the red wire to the Arduino's pin 2.
- Connect the black wire to ground.



The sixth step is to attach the microphone.

- Use a breadboard for assistance in this connection and attach the microphone to the breadboard.

- Connect + to Arduino's 5V.
- Connect G to Arduino's GND.
- Connect A0 to Arduino's analog pin A0.
- Connect D0 to Arduino's pin 0.

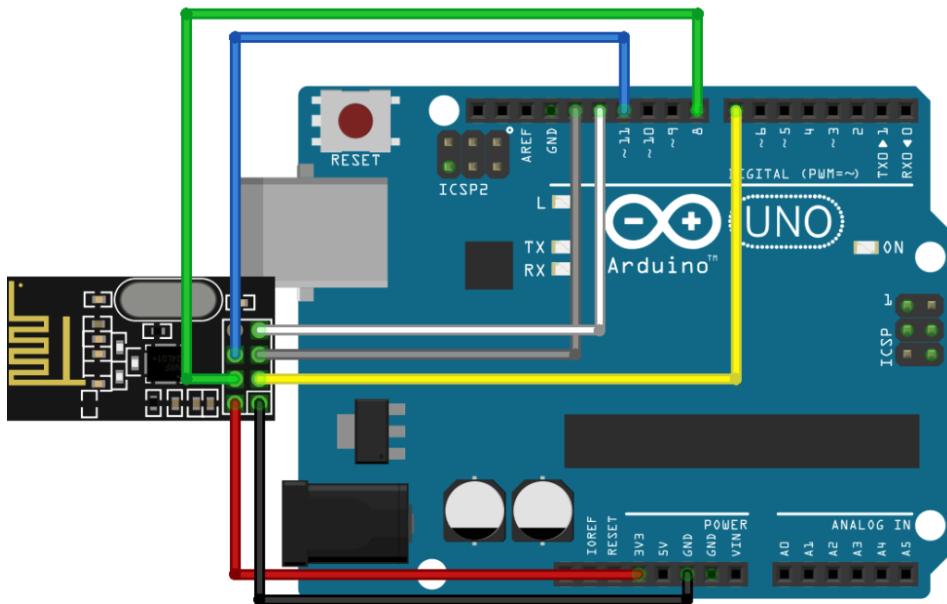


Subsystem 2

The first step in building the subsystem is to connect the NRF24L01 chip. The connections for the individual chip pins are as follows.

- Use Female to male Dupont cables for these connections.

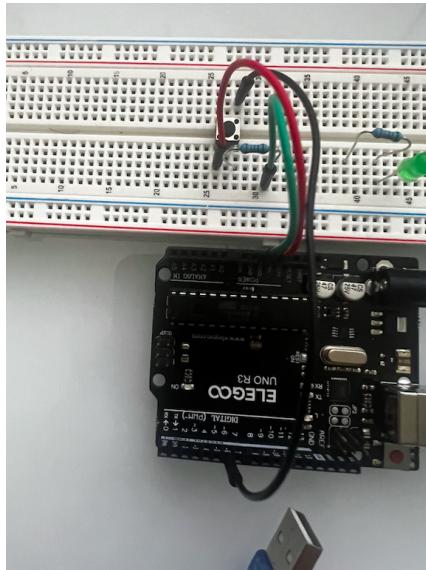
Chip GND - Arduino GND
Chip VCC - Arduino 3.3v
Chip CE - Arduino 7
Chip CS - Arduino 8
Chip SCK - Arduino 13
Chip MOSI - Arduino 11
Chip MISO - Arduino 12



The Second step is to attach the button to the system.

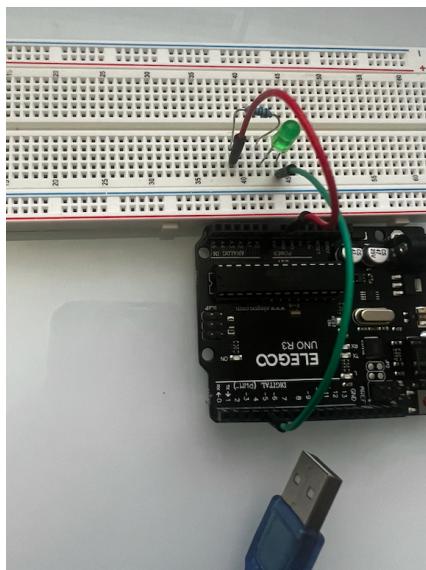
- Attach the Button to 5V with the help of a jumper cable

- Attach the 10k Ohm resistor to the button and then attach a jumper cable to ground from the resistor's other end.
- Attach the button to arduino's pin 6 using a jumper cable.



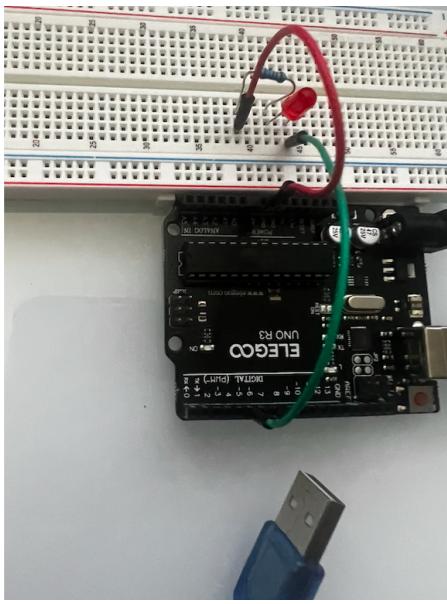
The third step is to attach the Green LED.

- Connect the longer end to the Arduinos 6 pin with the help of a jumper cable.
- Connect the other short end to the 200 Ohm resistor and then connect it to Ground.



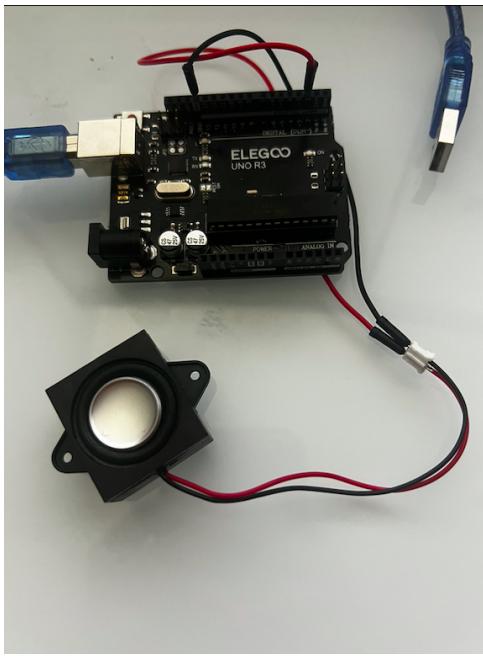
The fourth step is to attach the Red LED.

- Connect the longer end to the Arduinos 5 pin with the help of a jumper cable.
- Connect the other short end to the 200 Ohm resistor and then connect it to Ground.



The fifth step is to attach the speaker.

- Connect the red wire to the Arduino's pin 2.
- Connect the black wire to ground.



The sixth step is to attach the microphone.

- Use a breadboard for assistance in this connection and attach the microphone to the breadboard.
- Connect + to Arduino's 5V.
- Connect G to Arduino's GND.

- Connect A0 to Arduino's analog pin A0.
- Connect D0 to Arduino's pin 0.

