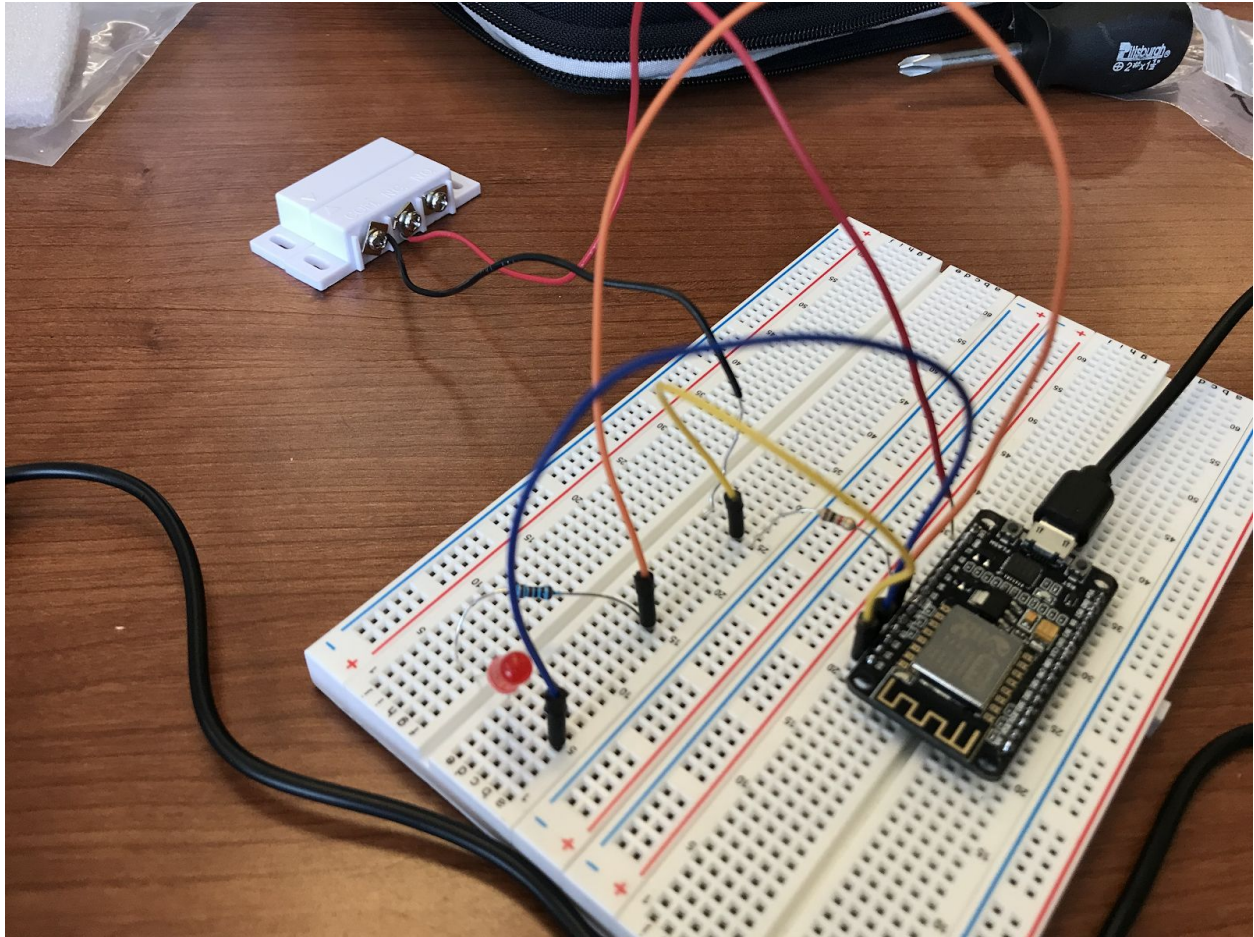In TOOLS, go to BOARD and go to NodeMCU 1.0 (ESP-12E Module)
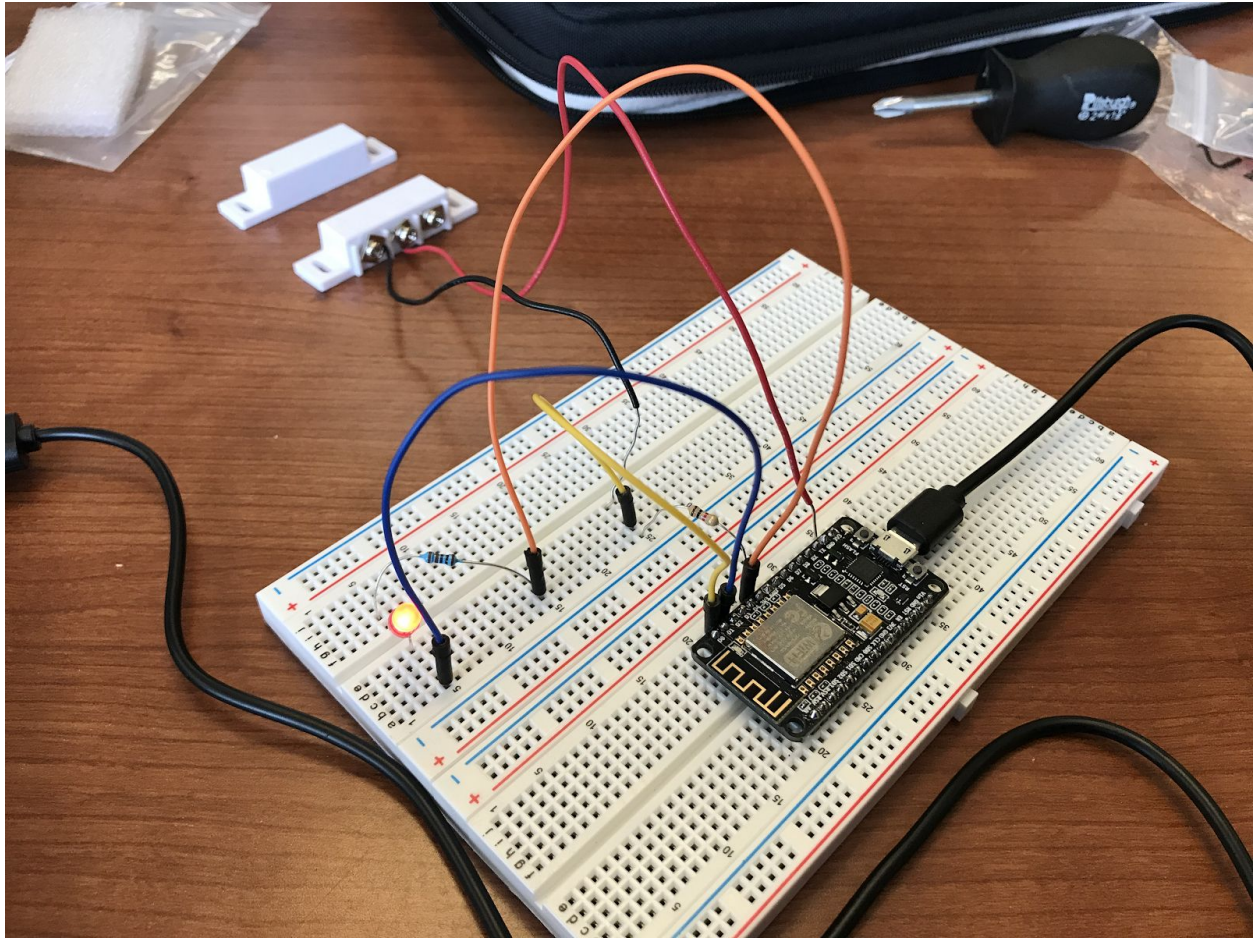//we will be using this one for the wifi module

Note: this document describes **both** the Door sensor **AND** the Garage door sensor

Door Sensor:
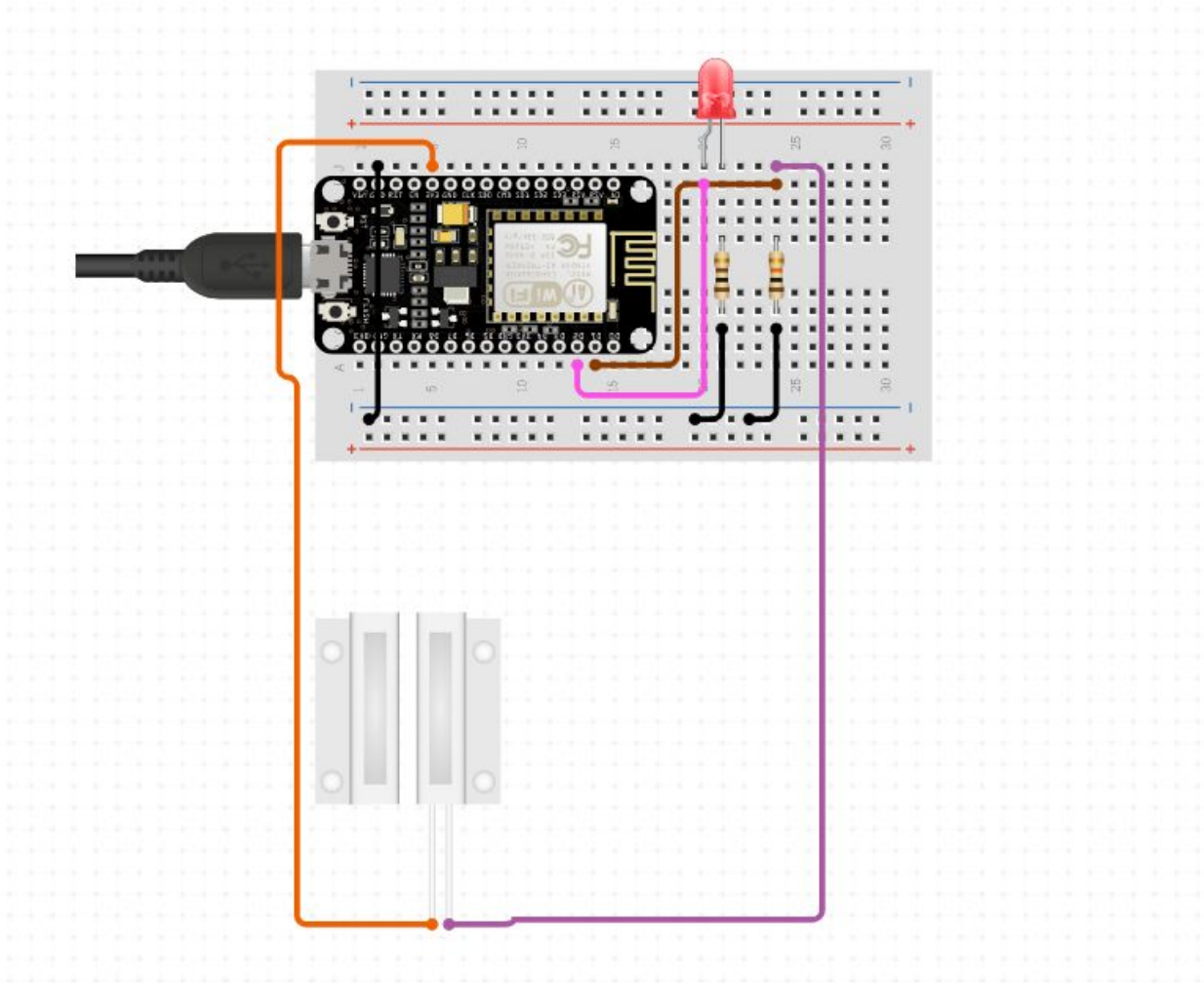THIS IS FOR CLOSED DOOR:

THIS IS FOR OPEN DOOR:

NEW SET UP:

Schematics:

Notes:

For Door Sensor, must connect the terminals COM and N.C. to the terminals on the NodeMCU D1 and 3.3 V.

The 3.3 V Terminal is connected to the N.C. terminal and the COM Terminal is connected to the D1 Terminal through a 1k-Ohm resistor.

Unit Testing:

During the start of this sensor, we had both pieces of the magnetic reed sensor together. Once WiFi had been successfully connected, the LED would light up. The start state of the door would be closed, resembled by the 2 pieces being together. The LED at this state is OFF, not glowing. When the piece is moved away from the piece connected to the circuit, the state of the door is now OPEN, and the LED is at the state ON, so glowing.

Integration Testing:

At the start of the circuit, WiFi is connected to. This will then be used to initiate a connection to the Firebase. When the state of the door is changed, only then is the Firebase updated by

sending a signal. We tested this by keeping the Firebase database open, where we would then change the states of the sensor, and would then view them on the database in real time.