

Lab Report: Experiment 10

Send Email

Group 2

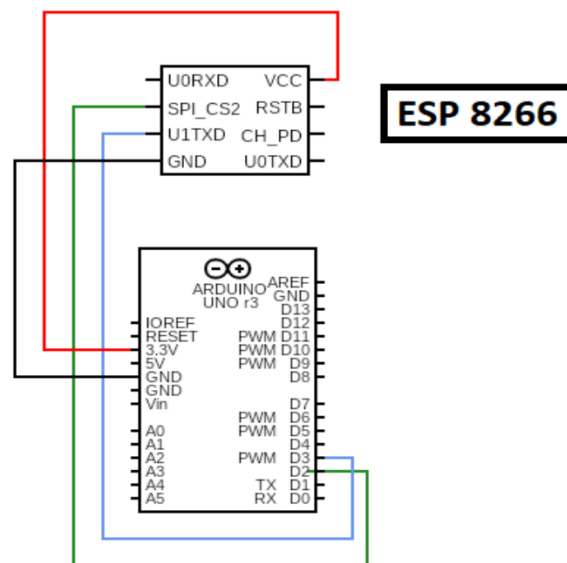
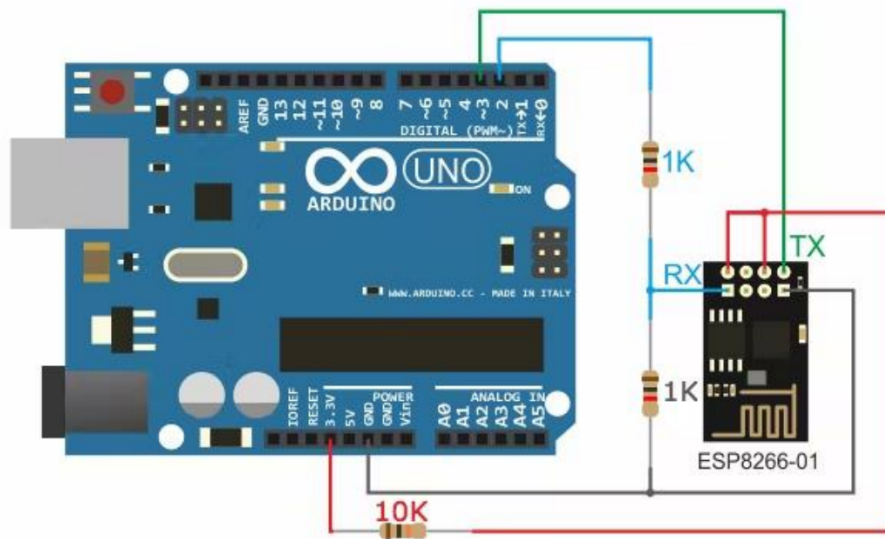
This experiment was about developing the capability to send an email using the Arduino and ESP-8266 wireless module. Our setup was very similar to the one of the previous experiment, where we had the exact same connections to the Arduino board from the wireless module and also with the same number of resistors. The difference is mostly on the software side, where we have to use SMTP protocol to specify the certain body parts of an email that we are going to send. The SMTP service was provided for free by www.smtp2go.com, which is the suggested provider from the 21 IOT Experiments textbook.

Assignment 10 Components

ESP8266	Resistor	Arduino Uno
GND		GND
VCC/3.3V/Power	10K	3.3V
CH_EN/Enable	10K	3.3V
TX		PIN 3
RX	1K	PIN 2
RX	1K	GND

Follow these steps.

- connect both ESP's VCC/3.3V/Power Pin and Enable Pin (red wires) to 10K resistor then to Uno's +3.3V power pin.
- connect ESP's Ground/GND Pin (Black Wire) to Uno's Ground/GND Pin.
- connect ESP's TX (green wire) to Uno's Pin 3
- connect ESP's RX (blue wire) to 1K resistor then to Uno's Pin 2.
- connect ESP's RX (blue wire) to 1K resistor then to Uno's GND Pin.



What we learned:

We learned that when using the arduino to send email to someone else, we have to utilize the specific SMTP syntax, which includes “ehlo”, “auth”, “mail from”, “rcpt to”, “data”, etc. Just like the previous experiment, the software serial library was used to allow serial communication on pins on the arduino other than 1 and 0. We also learned the process of setting up the ESP-8266 module before being able to send the email. The module has to be configured to receive multiple connections and also to act as a TCP server and to be listening on port 80. This

experiment was a good real life example of the concepts that were taught in CS 341 networking class.