

Lab 2

ECE 568

an141

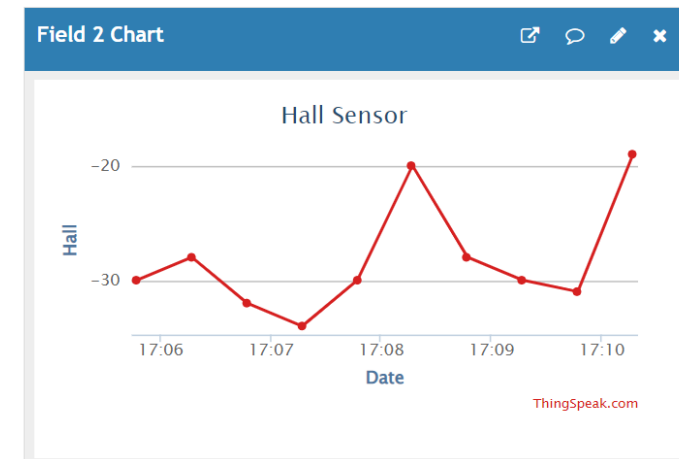
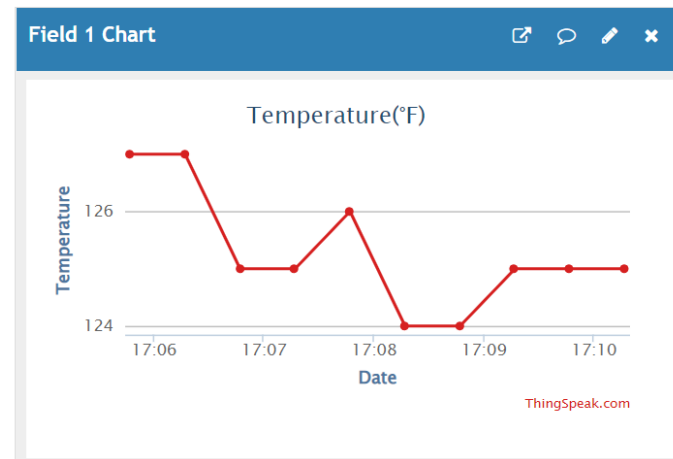
espclient

- The client uses the wifi to send ESP32's temperature sensor and hall sensor to the thingspeak.com
- The video is shown in this link: https://youtu.be/_9GKTP7rZzs
- The result is shown below:
 - Ten data sets are collected
 - There are 30 secs period controlled by a timer interrupt

Channel Stats

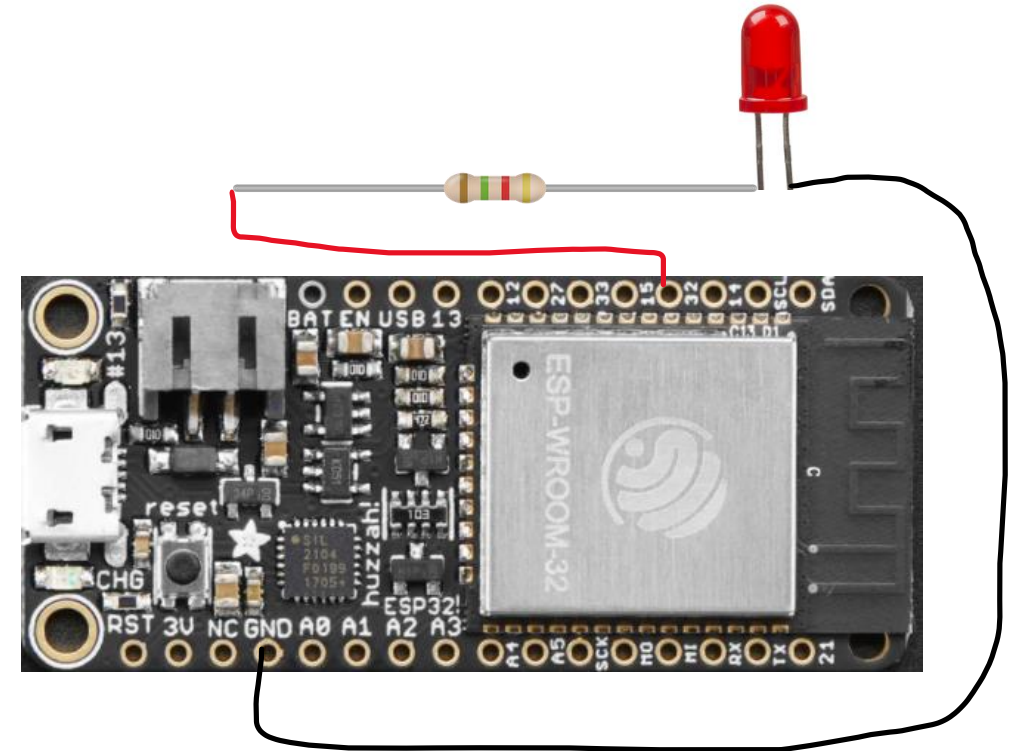
Created: 2 days ago

Entries: 10



espserver

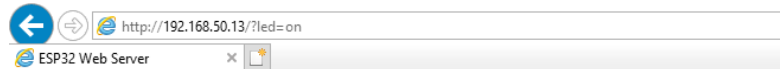
- Schematics:
 - The pin 32 generates an on/off signal to drive the LED
 - A 220Ω resistor is used to protect the LED from burn out
 - The black wire is connected to the ground from the LED
- The detailed video is from this link below:
https://youtu.be/WDW4A_5UYaI
- The ESP board will serve as a server. It will receive and send data
- The browser will show the interaction between the client and the ESP32 server



espserver

- The webpage result is shown in the below image:

RED ON button was clicked



ESP32 WEB Server

🌡 Temperature 123 °F

⚡ Hall 57 ^v

RED LED Current State: **ON**

RED ON

RED OFF

RED OFF button was clicked



ESP32 WEB Server

🌡 Temperature 124 °F

⚡ Hall 65 ^v

RED LED Current State: **OFF**

RED ON

RED OFF