Monday, 17 June 2019 11:44:08 AM

First Working ["ThingSpeak To App"]

Important Things of ThingSpeak

- Channel ID
- Field ID
- Read API Key
- Write API Key

References

- Simple Viewer

Second Working ["Arduino To ThingSpeak"]

Pin Cofiguration

- Link

Basics

- Add the ThingSpeak Library for Arduino and ESP8266
- Add the ESP8266 Board Package. Under File > Preferences, enter http://arduino.esp8266.com/stable/package_esp8266com_index.json into Additional Board Manager URLs.
  - Choose Tools > Boards > Board Manager.
  - Enter ESP8266 in the search bar and install the package.
- Select the appropriate port and board in the Arduino IDE
- Be sure to change the wireless network information, the channel IDs (you can use a single channel), the Read API Key, and the Write API Key.

Function To Update An Field

```
int writeTSData( long TSChannel, unsigned int TSField, float data ) {

    int  writeSuccess = ThingSpeak.writeField( TSChannel, TSField,
data, writeAPIKey );

    if ( writeSuccess )   {
        Serial.println( String(data) + " written to Thingspeak." );
    }
    return writeSuccess;
```

}

Connection

- Connecting ESP8266 to your WiFi Router
  - "AT+CWJAP="wifi*name", "wifi*password""
- Establishing TCP connection
  - "AT+CIPSTART=\"TCP\",\"""184.106.153.149""\",80"; api.thingspeak.com = "184.106.153.149" port = 80
- Send The Data
  - Example: (https://api.thingspeak.com/update?api_key=YOUR WRITE API KEY&field6=0.002039)
  - getStr = "GET /update?api_key="OX9T8Y9OL9HD0UBP"&field1="String(state1)"&field2="String(state2)"\r\n\r\n";
  - cmd = "AT+CIPSEND="String(getStr.length())

Codes

- First One To Upload
- Second One To Upload

References

- Read And Write To ThingSpeak
- A Project Used in Project
- Full Project Thought