

WORKSHEET 3.1

IOT

Class:-26 B

Group No:-5

Group Members Details

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Task:

Design a wireless network signal strength logging system for IoT devices.

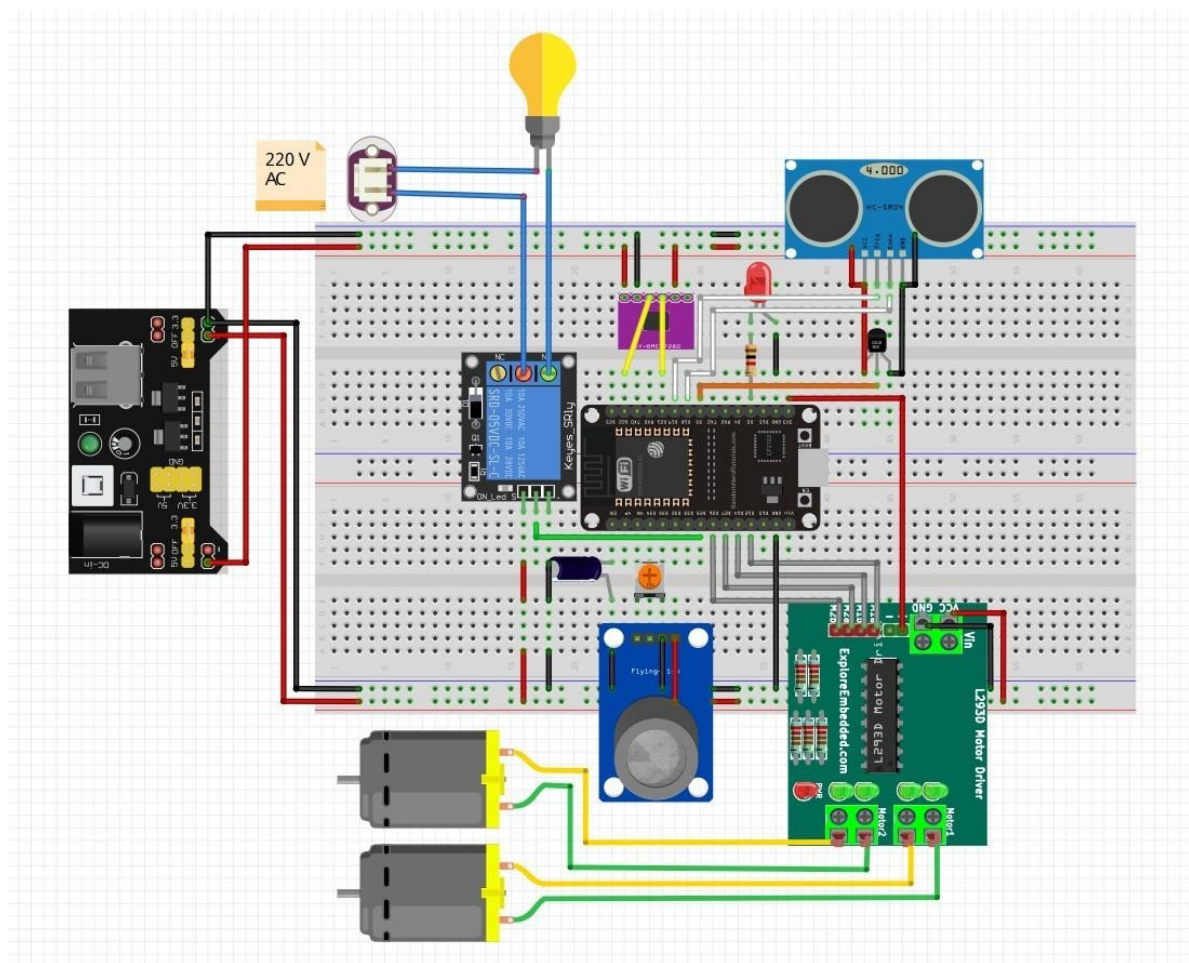
Requirements:

Write the apparatus/components/equipment requirements here.

1. PC with Arduino
2. Connecting Wires
3. Breadboard

4. DOIT ESP32 DEVKIT V1
5. 10uF Electrolytic Capacitor
6. Wire Clipper
7. USB Type A to Micro USB Cable
8. DC 5V Power Supply
9. DC 3.3V Power Supply

Circuit Diagram:





CODE IF ANY

```
/*  
Board: DOIT ESP32 DEVKIT V1  
*/  
#include <WiFi.h>  
#include <IFTTTWebhook.h>  
  
#define WIFISSID "" // Your WiFi Name #define PASSWORD "" // Your WiFi  
Password  
  
#define IFTTT_EVENT_NAME " data_log "  
#define IFTTT_API_KEY " d5SAZEMDI5cq3_1RgASjNTiZgpUr74zzP-  
EfeVk3ufh "  
  
IFTTTWebhook ifttt_webhook(IFTTT_API_KEY, IFTTT_EVENT_NAME);  
  
void setup() {  
// Initializing Serial communication.  
Serial.begin(9600); Serial.println("Init... T7_Signal_Log");  
  
// Setup up WiFi and Connecting to an active hotspot.  
Serial.print("\n\nConnecting to "); Serial.println(WIFISSID);  
  
WiFi.begin(WIFISSID, PASSWORD);  
while (WiFi.status() != WL_CONNECTED) { // Waiting for successful connection  
delay(500);
```



```
Serial.print(".");  
}
```

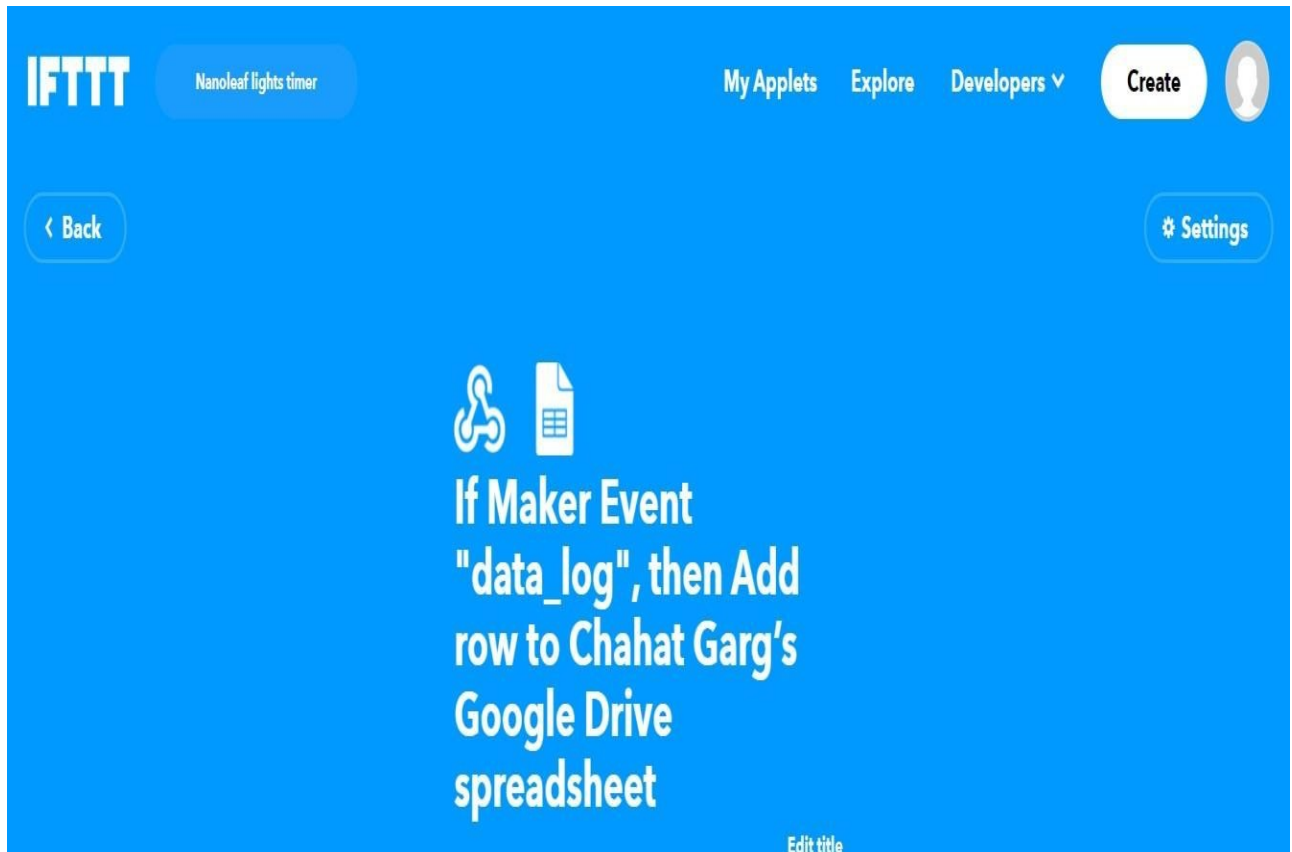
```
Serial.print("\nRSSI: "); Serial.println(WiFi.RSSI ());
```

```
Serial.print("WiFi connected. IP address: "); Serial.println(WiFi.localIP());  
}
```

```
// the loop function runs over and over again forever void loop() {  
int rssi = WiFi.RSSI(); ifttt_webhook.trigger(String(rssi).c_str ());  
Serial.print("\nRSSI: "); Serial.println(rssi);  
delay(5000);  
}
```

Dashboard Snippet (if any):

Paste your dashboard's snapshots here.



Outcome:

Write your observations and learnings here.

- To us IFTTT site.
- Understand RSSI.