

LAMPIRAN

Lampiran 1 *Sourcecode* pembacaan sensor dan pengiriman data ke *server* pada modul *wi-fi*

```
#include <Arduino.h>
#include <ESP8266WiFi.h>
#include <ESP8266WiFiMulti.h>
#include <ESP8266HTTPClient.h>
#include <WiFiClient.h>

ESP8266WiFiMulti WiFiMulti;

void setup() {

  Serial.begin(115200);
  Serial.setDebugOutput(true);

  Serial.println();
  Serial.println();
  Serial.println();

  for (uint8_t t = 4; t > 0; t--) {
    Serial.printf("[SETUP] WAIT %d...\n", t);
    Serial.flush();
    delay(1000);
  }

  WiFi.mode(WIFI_STA);
  WiFiMulti.addAP("SPASy", "12345678");
```

```
pinMode(D0, INPUT);  
pinMode(D1, INPUT);  
pinMode(D2, INPUT);  
pinMode(D3, INPUT);  
pinMode(D4, INPUT);  
pinMode(D5, INPUT);  
pinMode(D6, INPUT);  
pinMode(D7, INPUT);  
pinMode(D8, INPUT);  
  
}  
  
void loop() {  
    // wait for WiFi connection  
    if ((WiFiMulti.run() == WL_CONNECTED)) {  
  
        int ap1;  
        int ap2;  
        int ap3;  
        int ap4;  
        int ap5;  
        int ap6;  
        int ap7;  
        int ap8;  
        int ap9;  
  
        //AP1  
        if(digitalRead(D0) == HIGH) {  
            Serial.print("ap1= ");
```

```
Serial.print("1");

ap1=1;

} else {

Serial.print("ap1= ");

Serial.print("0");

ap1=0;

}

Serial.println("");

//AP2

if(digitalRead(D5) == HIGH) {

    Serial.print("ap2= ");

    Serial.print("1");

    ap2=1;

} else {

    Serial.print("ap2= ");

    Serial.print("0");

    ap2=0;

}

Serial.println("");

//AP3

if(digitalRead(D6) == HIGH) {

    Serial.print("ap3= ");

    Serial.print("1");

    ap3=1;

} else {

    Serial.print("ap3= ");
```

```
    Serial.print("0");  
    ap3=0;  
}  
  
Serial.println("");  
  
//AP4  
if(digitalRead(D7) == HIGH) {  
    Serial.print("ap4= ");  
    Serial.print("1");  
    ap4=1;  
} else {  
    Serial.print("ap4= ");  
    Serial.print("0");  
    ap4=0;  
}  
  
Serial.println("");  
  
//AP5  
if(digitalRead(D8) == HIGH) {  
    Serial.print("ap5= ");  
    Serial.print("1");  
    ap5=1;  
} else {  
    Serial.print("ap5= ");  
    Serial.print("0");  
    ap5=0;  
}
```

```
Serial.println("");

//AP6
if(digitalRead(D1) == HIGH) {
    Serial.print("ap6= ");
    Serial.print("1");
    ap6=1;
} else {
    Serial.print("ap6= ");
    Serial.print("0");
    ap6=0;
}

Serial.println("");

//AP7
if(digitalRead(D2) == HIGH) {
    Serial.print("ap7= ");
    Serial.print("1");
    ap7=1;
} else {
    Serial.print("ap7= ");
    Serial.print("0");
    ap7=0;
}

Serial.println("");

//AP8
if(digitalRead(D3) == HIGH) {
```

```

    Serial.print("ap8= ");
    Serial.print("1");
    ap8=1;
  } else {
    Serial.print("ap8= ");
    Serial.print("0");
    ap8=0;
  }

  Serial.println("");

  //AP9
  if(digitalRead(D4) == HIGH) {
    Serial.print("ap9= ");
    Serial.print("1");
    ap9=1;
  } else {
    Serial.print("ap9= ");
    Serial.print("0");
    ap9=0;
  }

  WiFiClient client;
  HTTPClient http;

  //Serial.print("[HTTP] begin...\n");
  Serial.println("");

  String dan, a, b, c, d, e, f, g, h, i ;

```

```

dan = "&";

a = "ap1="+String(ap1);
b = "&ap2="+String(ap2);
c = "&ap3="+String(ap3);
d = "&ap4="+String(ap4);
e = "&ap5="+String(ap5);
f = "&ap6="+String(ap6);
g = "&ap7="+String(ap7);
h = "&ap8="+String(ap8);
i = "&ap9="+String(ap9);

    if (http.begin(client, "http://192.168.0.151/web/wpu-
login/arduino/sensor_ldr/test5/test5.php?" + a + dan + b + dan + c + dan + d + dan + e
+ dan + f + dan + g + dan + h + dan + i  ))

    { // HTTP

//      Serial.print("[HTTP] GET...\n");
// start connection and send HTTP header

int httpCode = http.GET();

// httpCode will be negative on error

if (httpCode > 0) {

    // HTTP header has been send and Server response header has
    been handled

//      Serial.printf("[HTTP] GET... code: %d\n", httpCode);

// file found at server

    if (httpCode == HTTP_CODE_OK || httpCode ==
HTTP_CODE_MOVED_PERMANENTLY) {

        String payload = http.getString();

        Serial.println(payload);
    }
}

```

```
        Serial.println("");
    }
    } else {
        Serial.printf("[HTTP] GET... failed, error: %s\n",
http.errorToString(httpCode).c_str());
    }

    http.end();
    // delay(1000);
} else {
    Serial.printf("[HTTP] Unable to connect\n");
}

}

delay(250);
}
```