Tugas Pertemuan 11

(Evy Nur Imamah / IoT 1)

Tugas IoT: 11-HTTP menggunakan ESP32

Buatlah sebuah program Arduino untuk ESP32 untuk melakukan HTTP request dengan method POST pada API: https://api.restful-api.dev/objects
Dengan data yang di-post adalah:

```
{
   "name": "temperature_sensor",
   "data": {
      "celcius": 25,
      "fahrenheit": 77
   }
}
```

Jawaban :

```
#include <WiFi.h>
#include <HTTPClient.h>

const char* ssid = "YourWiFiSSID";
const char* password = "YourWiFiPassword";

void setup() {
  Serial.begin(115200);
  delay(100);

  // Connect ke WiFi
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(1000);
    Serial.println("Connecting to WiFi..");
  }
  Serial.println("Connected to WiFi");

  // Mengirimkan request pada HTTP
  sendPostRequest();
}

void loop() {
  //
}

void sendPostRequest() {
```

```
  if (WiFi.status() == WL_CONNECTED) {
    HTTPClient http;

    // Endpoint API
    String serverAddress = "https://api.restful-
api.dev/objects";

    // Data akan di upload
    String postData = "{\"name\": \"temperature_sensor\",
\"data\": {\"celcius\": 25, \"fahrenheit\": 77}}";

    // memulai request HTTP Post
    http.begin(serverAddress);

    // atur type content - pakai Json saja
    http.addHeader("Content-Type", "application/json");

    // Kirim HTTP Respons
    int httpResponseCode = http.POST(postData);

    if (httpResponseCode > 0) {
      Serial.print("HTTP Response code: ");
      Serial.println(httpResponseCode);
      String response = http.getString();
      Serial.println(response);
    } else {
      Serial.print("Error code: ");
      Serial.println(httpResponseCode);
    }

    http.end();
  } else {
    Serial.println("Error in WiFi connection");
  }
}
```