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#include <WiFi.h>
#include "DHT.h"

// GPIO the DHT11 is attached to
#define DHTPIN 4     // Pin where the DHT11 is connected
#define DHTTYPE DHT11   // DHT 11

DHT dht(DHTPIN, DHTTYPE);

// Replace with your network credentials
const char* ssid = "Bap";
const char* password = "1234512345";

// Set web server port number to 80
WiFiServer server(80);

// Variable to store the HTTP request
String header;

// Current time
unsigned long currentTime = millis();
// Previous time
unsigned long previousTime = 0;
// Define timeout time in milliseconds (example: 2000ms = 2s)
const long timeoutTime = 2000;

void setup() {
  Serial.begin(115200);
  dht.begin(); // Initialize the DHT sensor
```

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  // Connect to Wi-Fi network with SSID and password
  Serial.print("Connecting to ");
  Serial.println(ssid);
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }
  // Print local IP address and start web server
  Serial.println("");
  Serial.println("WiFi connected.");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
  server.begin();
}


void loop(){
  WiFiClient client = server.available();   // Listen for incoming clients


  if (client) {                     // If a new client connects,
    currentTime = millis();
    previousTime = currentTime;
    Serial.println("New Client.");         // print a message out in the serial port
    String currentLine = "";               // make a String to hold incoming data from the client
    while (client.connected() && currentTime - previousTime <= timeoutTime) { // loop while the client's
connected
      currentTime = millis();
      if (client.available()) {            // if there's bytes to read from the client,
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        char c = client.read();             // read a byte, then
        Serial.write(c);                    // print it out the serial monitor
        header += c;
        if (c == '\n') {                    // if the byte is a newline character
          if (currentLine.length() == 0) {
            // Read temperature and humidity values from DHT11
            float temperature = dht.readTemperature();
            float humidity = dht.readHumidity();

            // HTTP headers
            client.println("HTTP/1.1 200 OK");
            client.println("Content-type:text/html");
            client.println("Connection: close");
            client.println();

            // Display the HTML web page
            client.println("<!DOCTYPE html><html>");
            client.println("<head><meta name=\"viewport\" content=\"width=device-width, initial-scale=1\">");
            client.println("<link rel=\"icon\" href=\"data:,\">");
            client.println("<style>body { text-align: center; font-family: \"Trebuchet MS\", Arial; margin-left:auto; margin-right:auto;}</style>");

            // Web Page Content
            client.println("</head><body><h1>ESP32 with DHT11</h1>");
            client.println("<p>Temperature: "+ String(temperature) +"°C</p>");
            client.println("<p>Humidity: " + String(humidity) + "%</p>");
            client.println("</body></html>");
```

```
            client.println();
            break;
          } else {
            currentLine = "";
          }
        } else if (c != '\r') {
          currentLine += c;
        }
      }
    }
    header = "";
    client.stop();
    Serial.println("Client disconnected.");
    Serial.println("");
  }
}
```