

1. **Arduino Code:**

- Update the Arduino code to handle JSON responses for easy parsing in JavaScript.

## **Explanation:**

1. **Wi-Fi Setup:**

- The ESP8266 connects to the specified Wi-Fi network using the SSID and password provided.

2. **Server Setup:**

- A web server is started on port 80.
- The server responds to two types of requests: the root page / and the data endpoint /data.

3. **HTML and JavaScript:**

- The HTML response contains a simple webpage with placeholders (<span> elements) for the sensor data.
- JavaScript fetches new data from the /data endpoint every second and updates the webpage.

## **Accessing the Web Dashboard:**

1. **Find the IP Address:**

- After the ESP8266 connects to the Wi-Fi network, note the IP address printed to the serial monitor (e.g., 192.168.1.100).

2. **Open Web Browser:**

- Open a web browser on any device connected to the same Wi-Fi network.
- Enter the IP address of the ESP8266 in the address bar (e.g., `http://192.168.1.100`).

3. **View Data:**

- The webpage will display the current pressure, temperature, date, and time.
- The data will automatically update every second.

This setup allows you to create a simple and continuously updating web dashboard using the NodeMCU ESP8266 and the BMP180 and Tiny RTC modules.

## **Connections:**

### **1. BMP180 Connections:**

- **BMP180 VIN to NodeMCU 3V3**
- **BMP180 GND to NodeMCU GND**
- **BMP180 SCL to NodeMCU D1 (GPIO5)**
- **BMP180 SDA to NodeMCU D2 (GPIO4)**

### **2. Tiny RTC Connections:**

- **RTC VCC to NodeMCU 3V3**
- **RTC GND to NodeMCU GND**
- **RTC SCL to NodeMCU D1 (GPIO5)**
- **RTC SDA to NodeMCU D2 (GPIO4)**