

Weather Monitoring System

Code

```
#include <DHT.h> // Include the DHT sensor library

#define DHT11_PIN 4 // DHT11 sensor data pin
#define RAINDROP_PIN A0 // Raindrop sensor pin

DHT dht(DHT11_PIN, DHT11); // Initialize DHT11 sensor

void setup() {
  Serial.begin(9600); // Start serial communication at 9600 baud rate
  dht.begin(); // Initialize DHT sensor
  Serial.println("Weather Monitoring System Started...");
}

void loop() {
  // Read the temperature and humidity from the DHT11 sensor
  float temp = dht.readTemperature(); // Get temperature in Celsius
  float humidity = dht.readHumidity(); // Get humidity in percentage

  // Read the raindrop sensor value (analog)
  int raindropValue = analogRead(RAINDROP_PIN); // Raindrop sensor value

  // Check for DHT11 reading errors
  if (isnan(temp) || isnan(humidity)) {
    Serial.println("Failed to read from DHT11 sensor.");
    return;
  }
}
```

```
// Print DHT11 sensor readings

Serial.print("Temperature (DHT11): ");
Serial.print(temp);
Serial.print((char)223); // Degree symbol (°)
Serial.print("C ");

Serial.print("Humidity: ");
Serial.print(humidity);
Serial.println("%");

// Print Raindrop sensor readings
Serial.print("Raindrop Sensor Value: ");
Serial.println(raindropValue);

if (raindropValue < 500) {
    Serial.println("Rain Detected!");
} else {
    Serial.println("No Rain.");
}

delay(2000); // Wait for 2 seconds before the next loop
}
```