

Arduino Code:

```
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include <ESP8266WebServer.h>
#include "index.h" //Our HTML webpage contents with javascripts
#include "DHTesp.h" //DHT11 Library for ESP
#define LED 2 //On board LED
#define DHTpin 14 //D5 of NodeMCU is GPIO14
```

```
DHTesp dht;
```

```
// Replace with your SSID and Password here
const char* ssid = "XXXXX";
const char* password = "XXXXXXXXX";
ESP8266WebServer server(80); //Server on port 80
void handleRoot() {
String s = MAIN_page; //Read HTML contents
server.send(200, "text/html", s); //Send web page
}
```

```
float humidity, temperature;
```

```
void handleADC() {
int rain = analogRead(A0);
//Create JSON data
String data = "{\"Rain\":\":"+String(rain)+"\", \"Temperature\":\":"+ String(temperature)
+"\", \"Humidity\":\":"+ String(humidity) + "\"}";
digitalWrite(LED,!digitalRead(LED));
server.send(200, "text/plain", data);
delay(dht.getMinimumSamplingPeriod());
```

```
humidity = dht.getHumidity();
temperature = dht.getTemperature();
```

```
Serial.print("H:");
Serial.println(humidity);
Serial.print("T:");
Serial.println(temperature); //dht.toFahrenheit(temperature));
Serial.print("R:");
Serial.println(rain);
}
```

```
void setup()
```

```
{  
Serial.begin(115200);  
Serial.println();
```

```
dht.setup(DHTpin, DHTesp::DHT11); //for DHT11 Connect DHT sensor to GPIO 17
```

```
WiFi.begin(ssid, password); //Connect to your WiFi router  
Serial.println("");  
pinMode(LED,OUTPUT);  
// Wait for connection  
while (WiFi.status() != WL_CONNECTED) {  
delay(500);  
Serial.print(".");  
}
```

```
Serial.println("");  
Serial.print("Connected to ");  
Serial.println(ssid);  
Serial.print("IP address: ");  
Serial.println(WiFi.localIP()); //IP address assigned to your ESP  
server.on("/", handleRoot); //Which routine to handle at root location. This is display  
page  
server.on("/readADC", handleADC); //This page is called by java Script AJAX  
server.begin(); //Start server  
Serial.println("HTTP server started");  
}
```

```
void loop()  
{  
server.handleClient(); //Handle client requests  
}
```

1. After uploading open serial monitor and get the ip address.
2. Open IP address in Web Browser.
3. After opening it in web browser, on board blue LED will Blink.this led toggles when it receives http request from web browser.