

# **LIVE TEMPERATURE AND HUMIDITY MONITORING OVER THE INTERNET**

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## **IDEA**

In this project we are going to Monitor Humidity and Temperature over the internet using Arduino and ESP8266 Wifi module where we will show the current Humidity & Temperature data over the Internet using the Thing Speak server. It is accomplished by the data communications between Arduino, DHT11 Sensor Module, ESP8266 WIFI module and LCD. Celsius scale thermometer and percentage scale humidity meter displays the ambient temperature and humidity through a LCD display and also sends it to Thing Speak server for live monitoring from anywhere in the world.

## **COMPONENTS**

- Arduino Uno
- ESP8266 WIFI module
- DHT11 Sensor Module
- LCD
- Resistors
- Connecting wires
- Arduino IDE (Software)

## **IMPLEMENTATION**

This IoT based project having four sections, first Humidity and Temperature Sensor DHT11 senses the Humidity and Temperature Data. Secondly, Arduino Uno extracts the DHT11 sensor's data as suitable number in percentage and Celsius scale, and sends it to Wi-Fi Module. Thirdly, Wi-Fi Module ESP8266 sends the data to Thing Speak's Sever. And finally Thing Speak analyses the data and shows it in a Graph form. Finally, LCD is also used to display the Temperature and Humidity.

## **TIME FLOW**

I will get all the required components within a week. In the second week, I will get familiar with the working of all components and the coding that is required. By the first week of August, I will start with the connections of the projects and implement the code. Hence, I will be able to complete this project and show its complete working by mid of August.