

## **Wireless temperature & humidity monitor and control system Using IOT**

The main aim of the project is to design a wireless temperature and humidity control system based on the Arduino microcontroller, Wi-Fi module and DHT11 temperature and humidity sensor is designed.

In daily production and life, we often need to know the temperature and humidity value of the certain place. If we use cable to transmit data, it will cost a lot, but the wireless communication costs less, it establishes a connection between the buildings in a very short time, and error rate is quite low. Therefore, in the environment which cable can't be used, the wireless communication is more practical. And if the receiver is made into hand-held, the flexibility will increase greatly.

The whole controller of the project is Arduino microcontroller. In this project DHT11, Wi-Fi module, light, fan and relay are interfaced to microcontroller. Here, temperature and humidity are monitored and controlled using Android mobile. The data of DHT11 is sent to android mobile through Wi-Fi module. The controlling of parameters is done using some devices to be ON/OFF from Android mobile. If Temperature is high the DC fan is ON through relay to reduce temperature. If humidity is low the light is ON through relay to decrease moisture level.

### **The major building blocks of the project:**

1. Arduino microcontroller
2. RPS
3. DHT11 sensor
4. Relay
5. Light
6. Fan
7. Wi-Fi module
8. Android mobile

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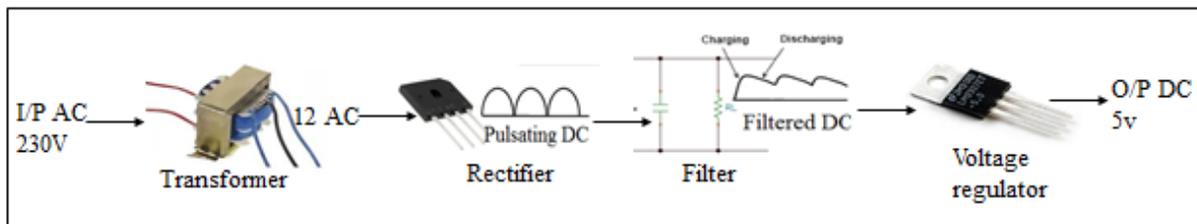
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**Software's used:**

1. Arduino IDE studio compiler for dumping program.
2. Express SCH for Circuit design.

**Regulated Power Supply:**



**Block diagram:**

**BLOCK DIAGRAM:**

