Group 14

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Storage & safe Custody of Medicines using Temperature Management

The storage of many drugs, serum, and vaccines at specified temperature limits is very important. Therefore, it is necessary to read and record the ambient temperature and control the refrigerating device according to the limiting values specified by the user. Taking into account these requirements, a new PIC microprocessor-based temperature monitoring system that triggers the DHT11 temperature sensor shows the change of temperature and humidity as an initial step for the industrial level.

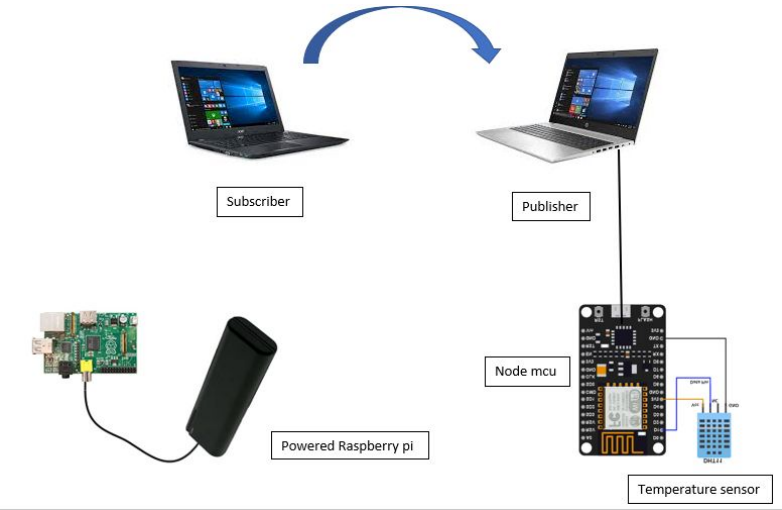
Hardware Requirements

Raspberry pi, Node MCU (ESP8266MOD), Temperature sensor (DHT11), Breadboard, Wires

Software Requirements

MQTT, Ignition, Arduino

Design



Procedure

The temperature and humidity sensor is connected to Node mcu.There is a broker in the Raspberry pi. MQTT serves it with that broker. Node mcu is used to publish the data. When the clients which have subscribed with the MQTT broker can get data relevant to each topic. When it comes to industrial level, many nodes can be added to get a considerable scale. And also PLC s can be used to publish data at the industry level.