

Develop The Web Application Using Node-RED

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TEAM ID	PNT2022TMID48690
PROJECT NAME	HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IOT

- The Node-RED flow to receive data from the IBM IoT platform.

The screenshot displays the IBM Watson IoT Platform dashboard on the left and a Python script in a code editor on the right. The dashboard shows a table of recent events with columns 'Event' and 'Value'. The events are IoTSensor data points with temperature and humidity values. The Python script, located at C:\Users\dives\AppData\Local\Programs\Python\Python37\IBM project.py, imports necessary modules and defines a callback function to handle incoming commands. It also shows the output of the script in a terminal window, displaying the connection status and the received data.

Event	Value
IoTSensor	{ "temp":99,"Humid":91 }
IoTSensor	{ "temp":107,"Humid":76 }
IoTSensor	{ "temp":108,"Humid":67 }
IoTSensor	{ "temp":98,"Humid":93 }
IoTSensor	{ "temp":95,"Humid":88 }

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "7xapma"
deviceType = "demo-1"
deviceId = "12345"
authMethod = "token"
authToken = "sq7FNdgf5rnYgpUs_E"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    elif status == "lightoff":
        print ("led is off")
```

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\dives\AppData\Local\Programs\Python\Python37\IBM project.py
2022-11-15 14:07:15,078 ibmiotf.device.Client INFO Connected successfully: d:7xapma
a:demo-1:12345
Published Temperature = 92 C Humidity = 77 % to IBM Watson
Published Temperature = 92 C Humidity = 97 % to IBM Watson
Published Temperature = 93 C Humidity = 71 % to IBM Watson
Published Temperature = 97 C Humidity = 84 % to IBM Watson
Published Temperature = 100 C Humidity = 73 % to IBM Watson
Published Temperature = 101 C Humidity = 91 % to IBM Watson
Published Temperature = 93 C Humidity = 95 % to IBM Watson
Published Temperature = 92 C Humidity = 66 % to IBM Watson
Published Temperature = 95 C Humidity = 88 % to IBM Watson
Published Temperature = 98 C Humidity = 93 % to IBM Watson
Published Temperature = 108 C Humidity = 67 % to IBM Watson
Published Temperature = 107 C Humidity = 76 % to IBM Watson
Published Temperature = 99 C Humidity = 91 % to IBM Watson
```

- The received sensor data in the Cloudant DB.

(20) WhatsAppIBM(66) Cloudbant DB - Database C...Service Details - IBM CloudCloudbant Dashboard

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Your Databases

Name	Size	# of Docs	Partitioned	Actions
nodered	16.3 KB	3	No	<div>🔄🔒🗑️</div>

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