

# Smart Farmer-IOT Enabled Smart Farming Application

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## Source Code

<b>TITLE</b>	Smart Farmer-IOT Enabled Smart Farming Application
<b>DOMAIN NAME</b>	INTERNET OF THINGS
<b>TEAM ID</b>	PNT2022TMID29912

## SOURCE CODE

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

#Provide your IBM Watson Device Credentials
organization = "nckdv7" deviceType = "NodeMCU"
deviceId = "12345" authMethod = "token" authToken =
"12345678" # Initialize GPIO def
myCommandCallback(cmd): print("Command received:
%s" % cmd.data['command'])
status=cmd.data['command'] if status=="motoron":
print("Motor is ON") else:
print("Motor is OFF")
#print(cmd) try:
deviceOptions = {"org": organization, "type": deviceType,
"id": deviceId, "auth-method": authMethod, "auth-token":
authToken} deviceCli =
ibmiotf.device.Client(deviceOptions)
#..... except
Exception as e:
print("Caught exception connecting device: %s" % str(e)) sys.exit()
# Connect and send a datapoint "hello" with value "world" into the
cloud as an event of type "greeting" 10 times deviceCli.connect()
while True:
```

```

#Get Sensor Data from DHT11
temp=random.randint(0,100) pulse=random.randint(0,100)
moisture= random.randint(0,100)
humidity=random.randint(0,100); lat = 17 lon = 18 data = {
'temp' : temp, 'humidity' : humidity, 'Soil Moisture' :
moisture} #print data def
myOnPublishCallback():
print ("Published Temperature = %s C" % temp, "Humidity = %s
%%" % humidity, "Soil Moisture = %s %%" % moisture,"to IBM
Watson") success = deviceCli.publishEvent("IoTSensor",
"json", data,qos=0,
on_publish=myOnPublishCallback) if not success:
print("Not connected to IoTTF") time.sleep(1)
deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()

```