Smart Farmer - IOT Enabled Smart Farming

Application

Sprint - 1

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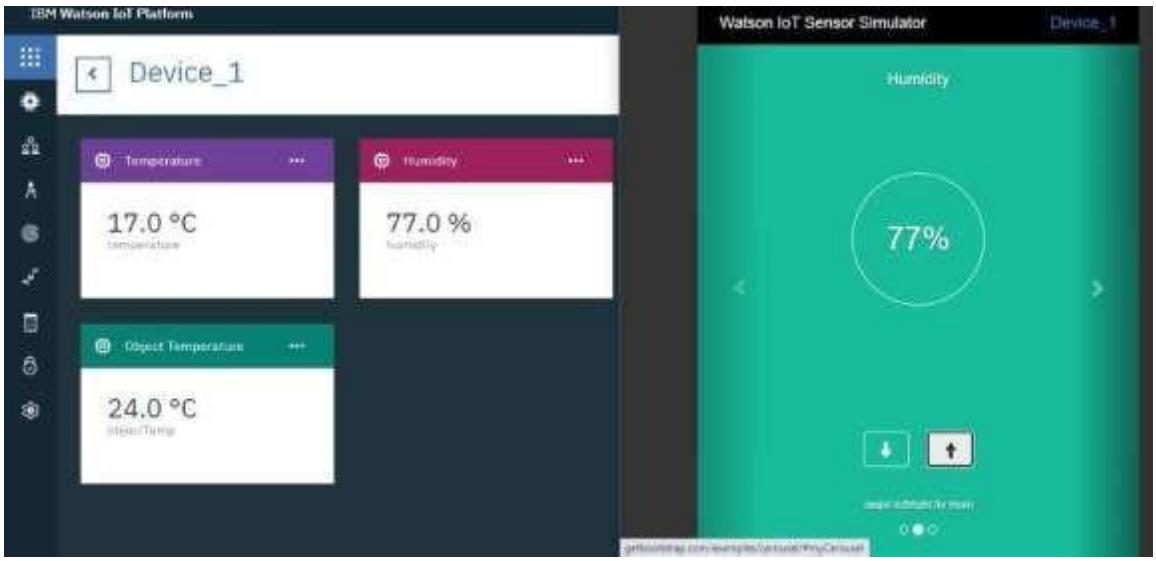
Python Code:-

```
import time
import sys
import ibmiotf.application # to install pip install ibmiotf
import ibmiotf.device


#Provide your IBM Watson Device Credentials
organization = "0lsrz8" # repalce it with organization ID
deviceType = "Agriculture_1" #replace it with device type
deviceId = "Device_2" #repalce with device id
authMethod = "token"
```

```
authToken = "Surideni@123"#repalce with token


def myCommandCallback(cmd): # function for Callback print("Command
received: %s" % cmd.data)
 if cmd.data['command']=='motoron'
  print("Turn Motor ON")
  elif cmd.data['command']=='motoroff':
  print("Turn Motor OFF")
  elif cmd.data['command']=='lighton':
  print("Turn Light ON")
  elif cmd.data['command']=='lightoff':
  print("Turn Light OFF")
  if cmd.command == "setInterval":
   if 'interval' not in cmd.data:
   print("Error - command is missing required information: 'interval'")
   else:
   interval = cmd.data['interval']
   elif cmd.command ==
   "print":
   if 'message' not in cmd.data:
   print("Error - command is missing required information: 'message'")
   else:
      output=cmd.data['message'
   ] print(output)
```

```
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:
 deviceCli.commandCallback = myCommandCallback


# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

Output:-


IBM Watson IoT Platform
Device_1
Temperature
17.0 °C
Humidity
77.0 %
Object Temperature
24.0 °C
Watson IoT Sensor Simulator
Device_1
Humidity
77%