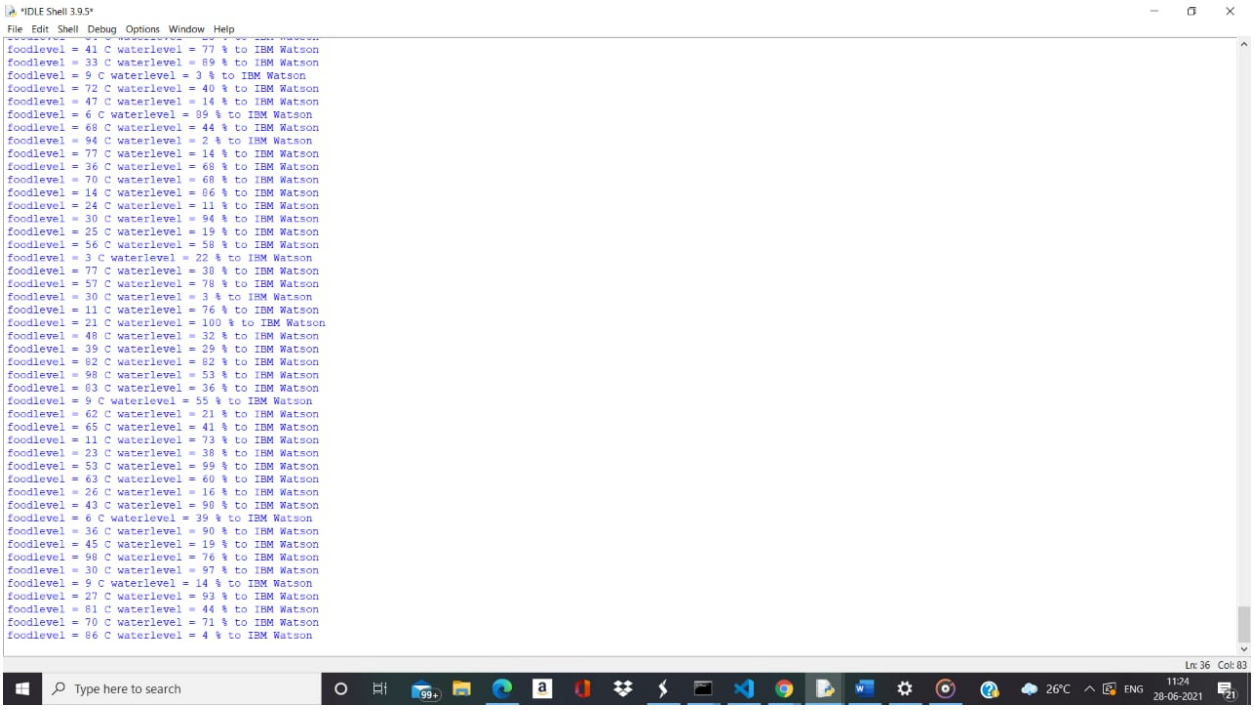
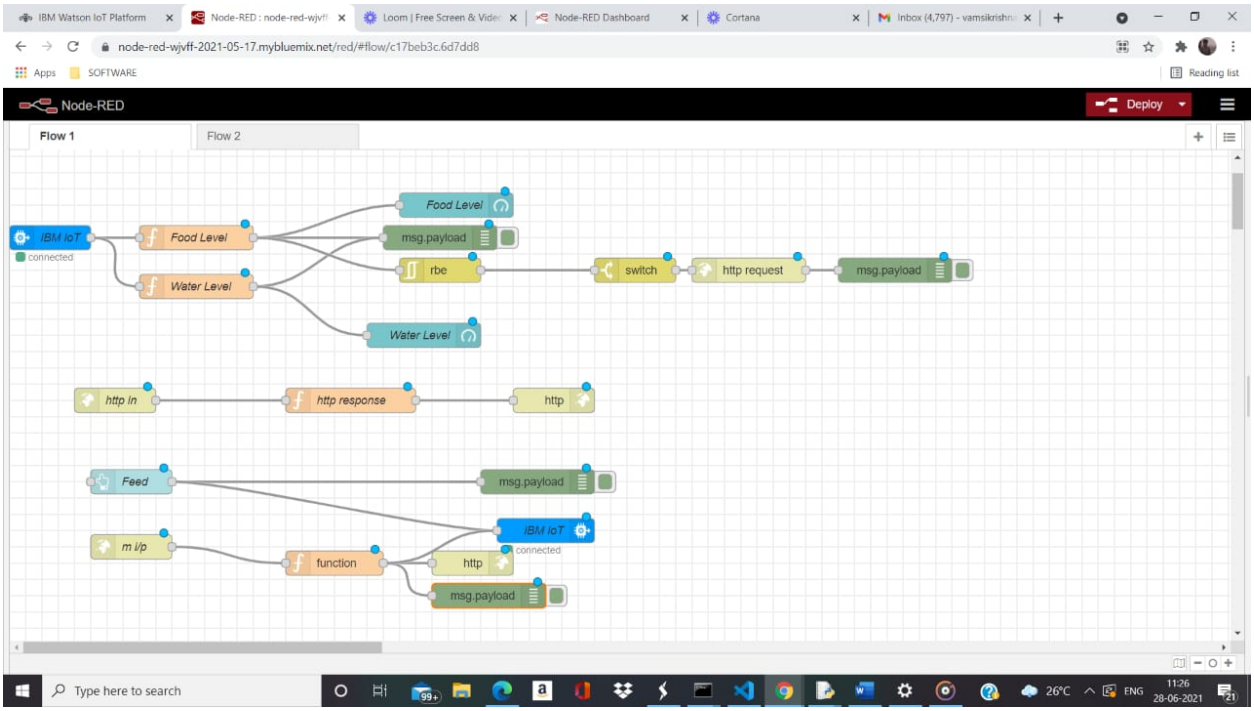
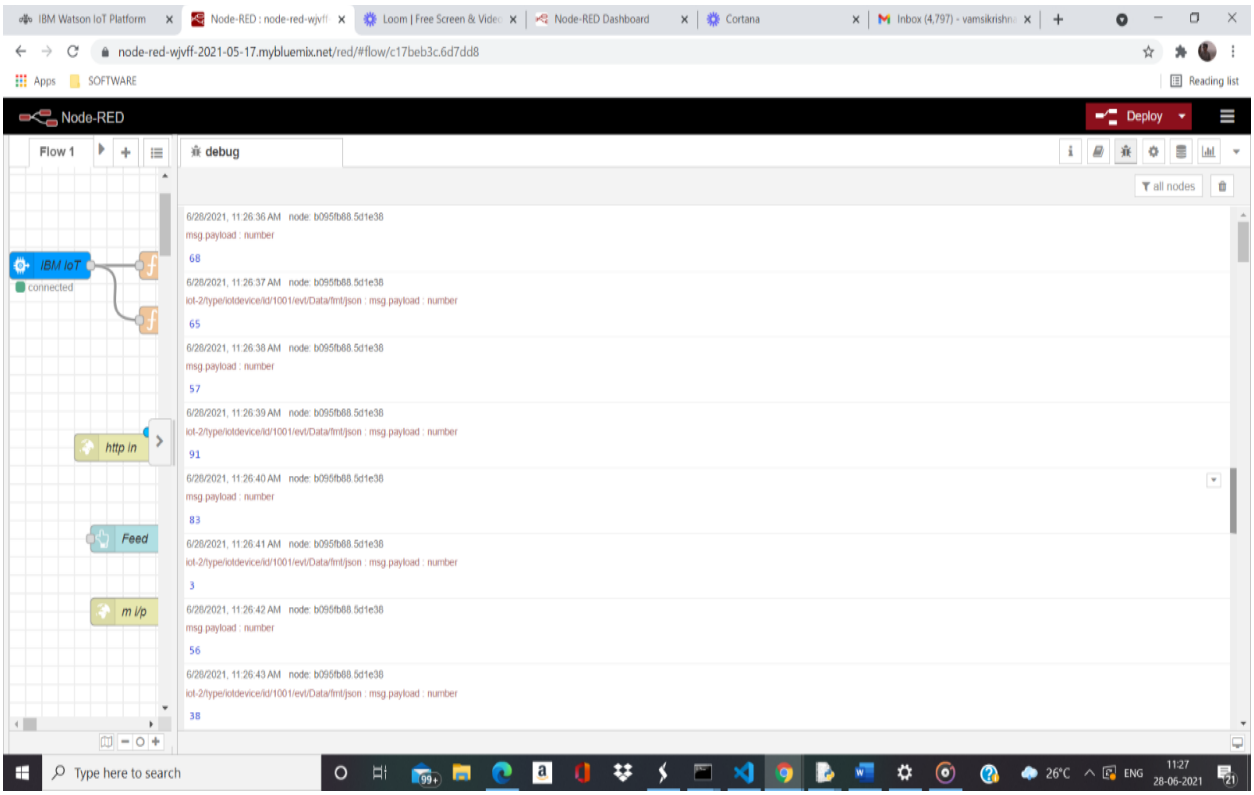
```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
import json
from gtts import gTTS
import os


#Provide your IBM Watson Device Credentials
organization = "1zqjlv"
deviceType = "iotdevice"
deviceId = "1001"
authMethod = "token"
authToken = "1234567890"


# Initialize the device client.
T=0
H=0
S=0

def myCommandCallback(cmd):
        print("Command received: %s" % cmd.data['command'])



    if cmd.data['command']=='feed':
            print("FEED")
    if cmd.data['command']=='feedon':


            text="feeding device is activated"
            language='en'

            output=gTTS(text=text, lang=language,slow=False)


            output.save("feedon.mp3")


            os.system("start feedon.mp3")
    if cmd.data['command']=='feedoff':


            text="feeding device is diactivated"
            language='en'

            output=gTTS(text=text, lang=language,slow=False)


            output.save("feedoff.mp3")


            os.system("start feedoff.mp3")
```

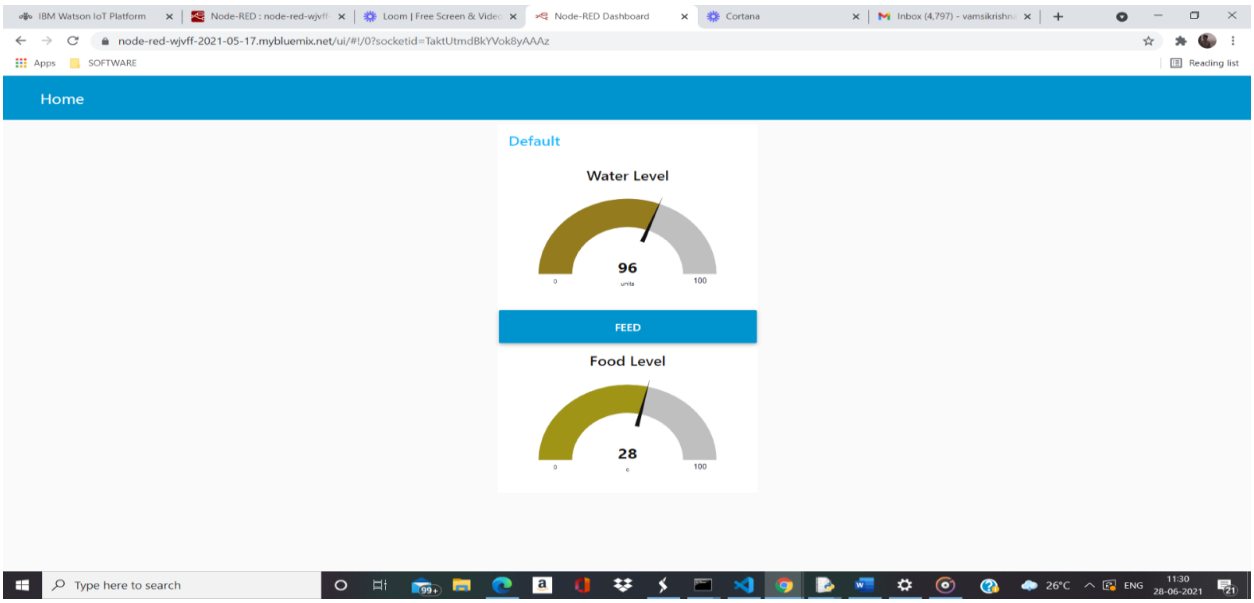
```
        if cmd.command == "setInterval":
                if 'interval' not in cmd.data:
                        print("Error - command is missing required information: 'interval'")
                else:
                        interval = cmd.data['interval']
        elif cmd.command == "print":
                if 'message' not in cmd.data:
                        print("Error - command is missing required information: 'message'")
                else:
                        print(cmd.data['message'])

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:
        T=random.randint(0,100)
        H=random.randint(0,100)
```

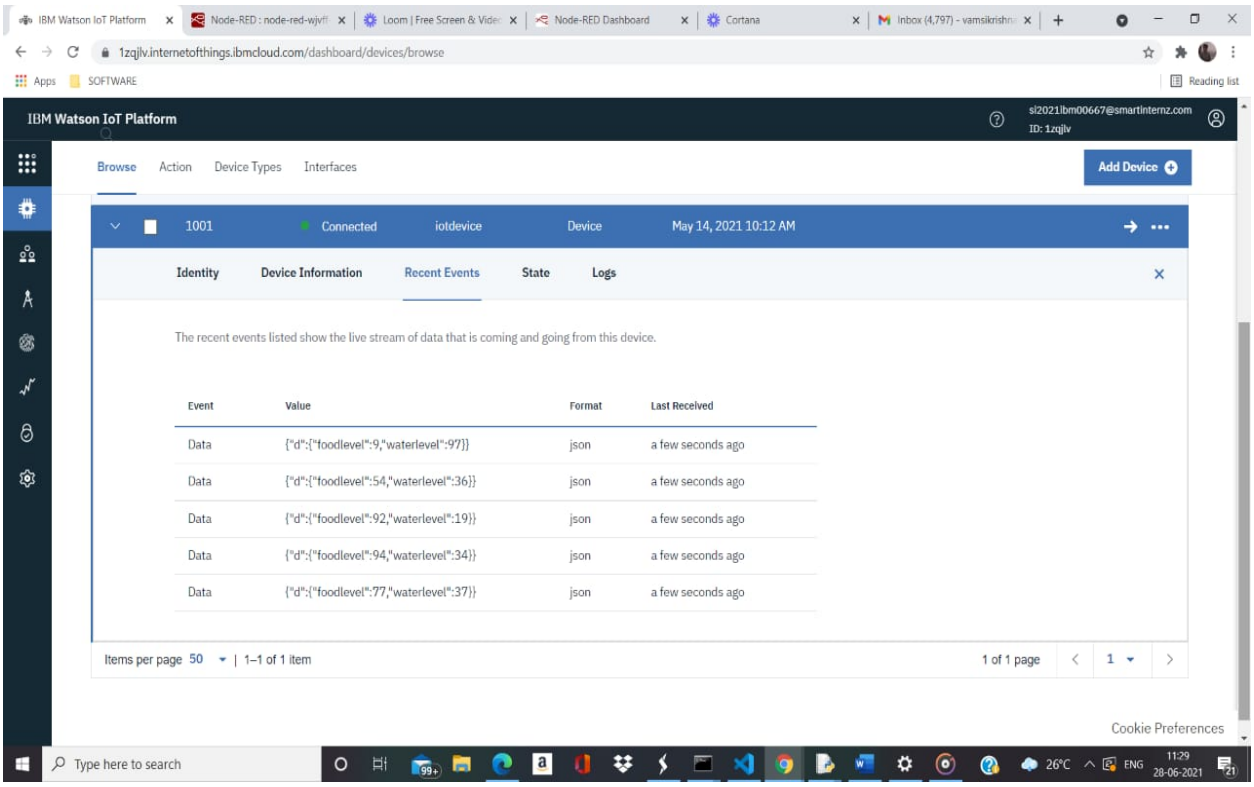
```
while True:
        T=random.randint(0,100)
        H=random.randint(0,100)
        #Send Temperature & Humidity to IBM Watson
        data = {"d":{ 'foodlevel' : T, 'waterlevel': H, }}
        #print data
        def myOnPublishCallback():
            print ("foodlevel = %s C" % T, "waterlevel = %s %%" % H,"to IBM Watson")

        success = deviceCli.publishEvent("Data", "json", data, qos=0, on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(1)

        deviceCli.commandCallback = myCommandCallback

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

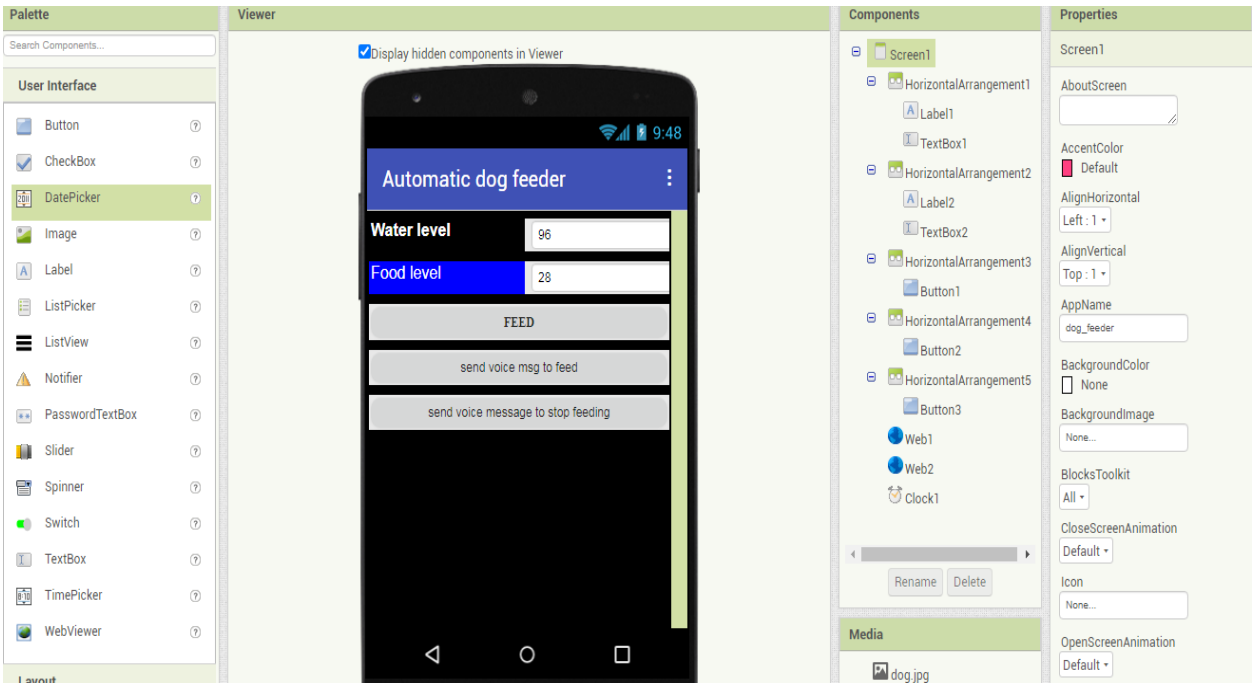

IDLE Shell 3.9.5
File Edit Shell Debug Options Window Help
foodlevel = 41 C waterlevel = 77 % to IBM Watson
foodlevel = 33 C waterlevel = 89 % to IBM Watson
foodlevel = 9 C waterlevel = 3 % to IBM Watson
foodlevel = 72 C waterlevel = 40 % to IBM Watson
foodlevel = 47 C waterlevel = 14 % to IBM Watson
foodlevel = 6 C waterlevel = 09 % to IBM Watson
foodlevel = 68 C waterlevel = 44 % to IBM Watson
foodlevel = 94 C waterlevel = 2 % to IBM Watson
foodlevel = 77 C waterlevel = 14 % to IBM Watson
foodlevel = 36 C waterlevel = 68 % to IBM Watson
foodlevel = 70 C waterlevel = 68 % to IBM Watson
foodlevel = 14 C waterlevel = 06 % to IBM Watson
foodlevel = 24 C waterlevel = 11 % to IBM Watson
foodlevel = 30 C waterlevel = 94 % to IBM Watson
foodlevel = 25 C waterlevel = 19 % to IBM Watson
foodlevel = 56 C waterlevel = 58 % to IBM Watson
foodlevel = 3 C waterlevel = 22 % to IBM Watson
foodlevel = 77 C waterlevel = 30 % to IBM Watson
foodlevel = 57 C waterlevel = 78 % to IBM Watson
foodlevel = 30 C waterlevel = 3 % to IBM Watson
foodlevel = 11 C waterlevel = 76 % to IBM Watson
foodlevel = 21 C waterlevel = 100 % to IBM Watson
foodlevel = 48 C waterlevel = 32 % to IBM Watson
foodlevel = 39 C waterlevel = 29 % to IBM Watson
foodlevel = 82 C waterlevel = 82 % to IBM Watson
foodlevel = 98 C waterlevel = 53 % to IBM Watson
foodlevel = 83 C waterlevel = 36 % to IBM Watson
foodlevel = 9 C waterlevel = 55 % to IBM Watson
foodlevel = 62 C waterlevel = 21 % to IBM Watson
foodlevel = 65 C waterlevel = 41 % to IBM Watson
foodlevel = 11 C waterlevel = 73 % to IBM Watson
foodlevel = 23 C waterlevel = 38 % to IBM Watson
foodlevel = 53 C waterlevel = 99 % to IBM Watson
foodlevel = 63 C waterlevel = 60 % to IBM Watson
foodlevel = 26 C waterlevel = 16 % to IBM Watson
foodlevel = 43 C waterlevel = 98 % to IBM Watson
foodlevel = 6 C waterlevel = 39 % to IBM Watson
foodlevel = 36 C waterlevel = 90 % to IBM Watson
foodlevel = 45 C waterlevel = 19 % to IBM Watson
foodlevel = 98 C waterlevel = 76 % to IBM Watson
foodlevel = 30 C waterlevel = 97 % to IBM Watson
foodlevel = 9 C waterlevel = 14 % to IBM Watson
foodlevel = 27 C waterlevel = 93 % to IBM Watson
foodlevel = 81 C waterlevel = 44 % to IBM Watson
foodlevel = 70 C waterlevel = 71 % to IBM Watson
foodlevel = 86 C waterlevel = 4 % to IBM Watson
Ln: 36 Col: 83
Type here to search
26°C
ENG
11:24
28-06-2021

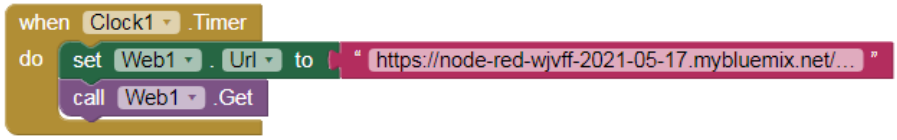

IBM Watson IoT Platform
Node-RED : node-red-wjvff
Loom | Free Screen & Video
Node-RED Dashboard
Cortana
Inbox (4,797) - vamsikrishna
node-red-wjvff-2021-05-17.mybluemix.net/red/#flow/c17beb3c.6d7dd8
Apps
SOFTWARE
Reading list
Node-RED
Deploy
Flow 1
Flow 2
IBM IoT
connected
Food Level
Water Level
Food Level
msg.payload
rbe
switch
http request
msg.payload
Water Level
http In
http response
http
Feed
msg.payload
IBM IoT
connected
m i/p
function
http
msg.payload
Type here to search
26°C
ENG
11:26
28-06-2021

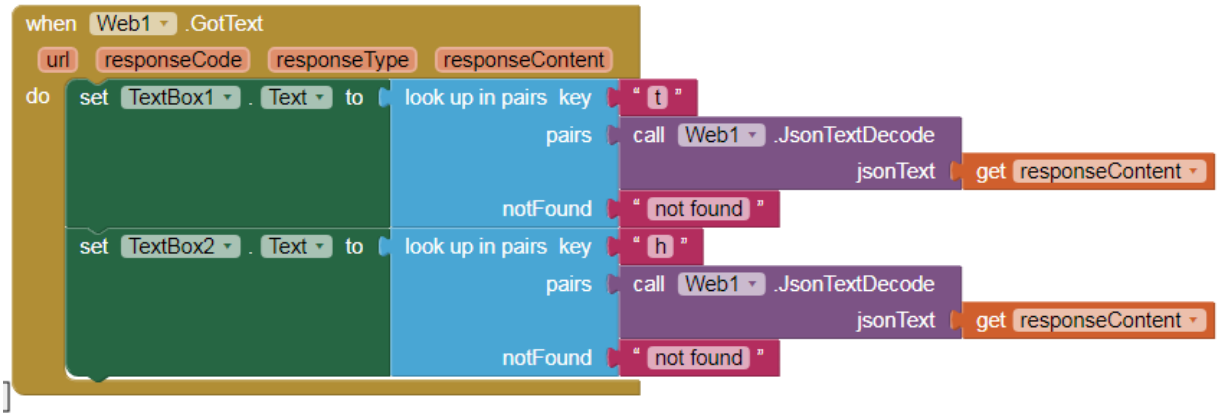

IBM Watson IoT Platform
Node-RED : node-red-wjvff
Loom | Free Screen & Video
Node-RED Dashboard
Cortana
Inbox (4,797) - vamsikrishna
node-red-wjvff-2021-05-17.mybluemix.net/red/#flow/c17beb3c.6d7dd8
Apps
SOFTWARE
Reading list
Node-RED
Deploy
Flow 1
debug
all nodes
6/28/2021, 11:26:36 AM node: b095fb88.5d1e38
msg.payload : number
68
6/28/2021, 11:26:37 AM node: b095fb88.5d1e38
iot-2/type/iotdevice/id/1001/evt/Data/fmt/json : msg.payload : number
65
6/28/2021, 11:26:38 AM node: b095fb88.5d1e38
msg.payload : number
57
6/28/2021, 11:26:39 AM node: b095fb88.5d1e38
iot-2/type/iotdevice/id/1001/evt/Data/fmt/json : msg.payload : number
91
6/28/2021, 11:26:40 AM node: b095fb88.5d1e38
msg.payload : number
83
6/28/2021, 11:26:41 AM node: b095fb88.5d1e38
iot-2/type/iotdevice/id/1001/evt/Data/fmt/json : msg.payload : number
3
6/28/2021, 11:26:42 AM node: b095fb88.5d1e38
msg.payload : number
56
6/28/2021, 11:26:43 AM node: b095fb88.5d1e38
iot-2/type/iotdevice/id/1001/evt/Data/fmt/json : msg.payload : number
38
IBM IoT
connected
http in
Feed
m i/p
Type here to search
26°C
ENG
11:27
28-06-2021

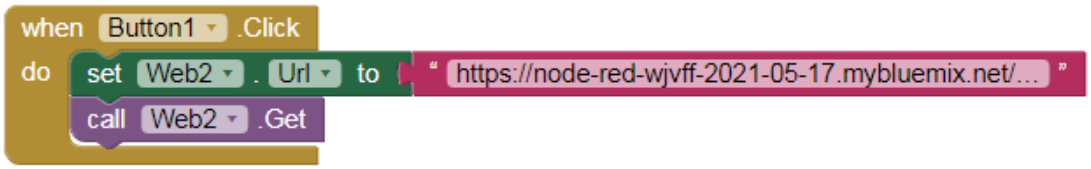

IBM Watson IoT Platform
Node-RED : node-red-wjvff
Loom | Free Screen & Video
Node-RED Dashboard
Cortana
Inbox (4,797) - vamsikrishna
node-red-wjvff-2021-05-17.mybluemix.net/ui/#!/0?socketid=TaktUtmdBkYVok8yAAAz
Apps
SOFTWARE
Reading list
Home
Default
Water Level
96
0
100
FEED
Food Level
28
0
100
Type here to search
26°C
ENG
11:30
28-06-2021

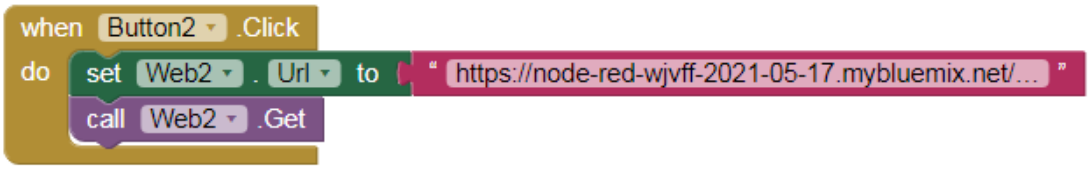

IBM Watson IoT Platform
1zqjlv.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
si2021ibm00667@smartinternz.com
ID: 1zqjlv
Browse
Action
Device Types
Interfaces
Add Device
1001
Connected
iotdevice
Device
May 14, 2021 10:12 AM
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
Data
{"d":{"foodlevel":9,"waterlevel":97}}
json
a few seconds ago
Data
{"d":{"foodlevel":54,"waterlevel":36}}
json
a few seconds ago
Data
{"d":{"foodlevel":92,"waterlevel":19}}
json
a few seconds ago
Data
{"d":{"foodlevel":94,"waterlevel":34}}
json
a few seconds ago
Data
{"d":{"foodlevel":77,"waterlevel":37}}
json
a few seconds ago
Items per page 50
1–1 of 1 item
1 of 1 page
Cookie Preferences
Type here to search

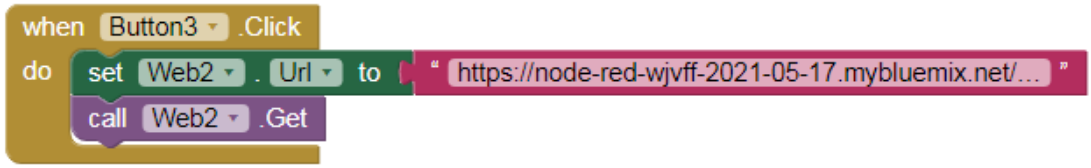

Palette
Search Components...
User Interface
Button
CheckBox
DatePicker
Image
Label
ListPicker
ListView
Notifier
PasswordTextBox
Slider
Spinner
Switch
TextBox
TimePicker
WebViewer
Viewer
Display hidden components in Viewer
9:48
Automatic dog feeder
Water level
96
Food level
28
FEED
send voice msg to feed
send voice message to stop feeding
Components
Screen1
HorizontalArrangement1
Label1
TextBox1
HorizontalArrangement2
Label2
TextBox2
HorizontalArrangement3
Button1
HorizontalArrangement4
Button2
HorizontalArrangement5
Button3
Web1
Web2
Clock1
Rename
Delete
Media
dog.jpg
Properties
Screen1
AboutScreen
AccentColor
Default
AlignHorizontal
Left : 1
AlignVertical
Top : 1
AppName
dog_feeder
BackgroundColor
None
BackgroundImage
None...
BlocksToolkit
All
CloseScreenAnimation
Default
Icon
None...
OpenScreenAnimation
Default

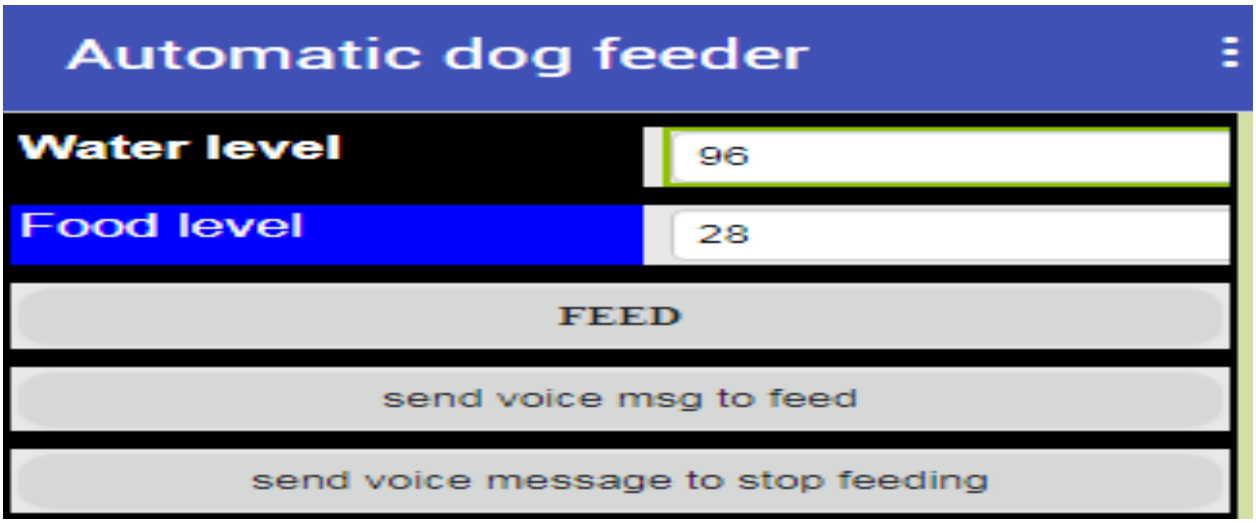

when Clock1 .Timer
do set Web1 . Url to " https://node-red-wjvff-2021-05-17.mybluemix.net/... "
call Web1 .Get


when Web1 .GotText
url responseCode responseType responseContent
do set TextBox1 . Text to look up in pairs key " t "
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound " not found "
set TextBox2 . Text to look up in pairs key " h "
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound " not found "


when Button1 .Click
do set Web2 . Url to " https://node-red-wjvff-2021-05-17.mybluemix.net/... "
call Web2 .Get


when Button2 .Click
do set Web2 . Url to " https://node-red-wjvff-2021-05-17.mybluemix.net/... "
call Web2 .Get


when Button3 .Click
do set Web2 . Url to " https://node-red-wjvff-2021-05-17.mybluemix.net/... "
call Web2 .Get


Automatic dog feeder
Water level
96
Food level
28
FEED
send voice msg to feed
send voice message to stop feeding