

SPRINT-4

Date	19 September 2022
Team ID	PNT2022TMID42262
Project Name	Project – Personal Assistance for Seniors who are Self-Reliant
Maximum Marks	4 Marks

CASE:

To develop a python script to receive data from node-red by using IBM Watson IoT platform

INPUT:

Medicine Reminder

Medicine Data

Enter the Medicine Name
DOLO

Time(HH:MM)
18:26

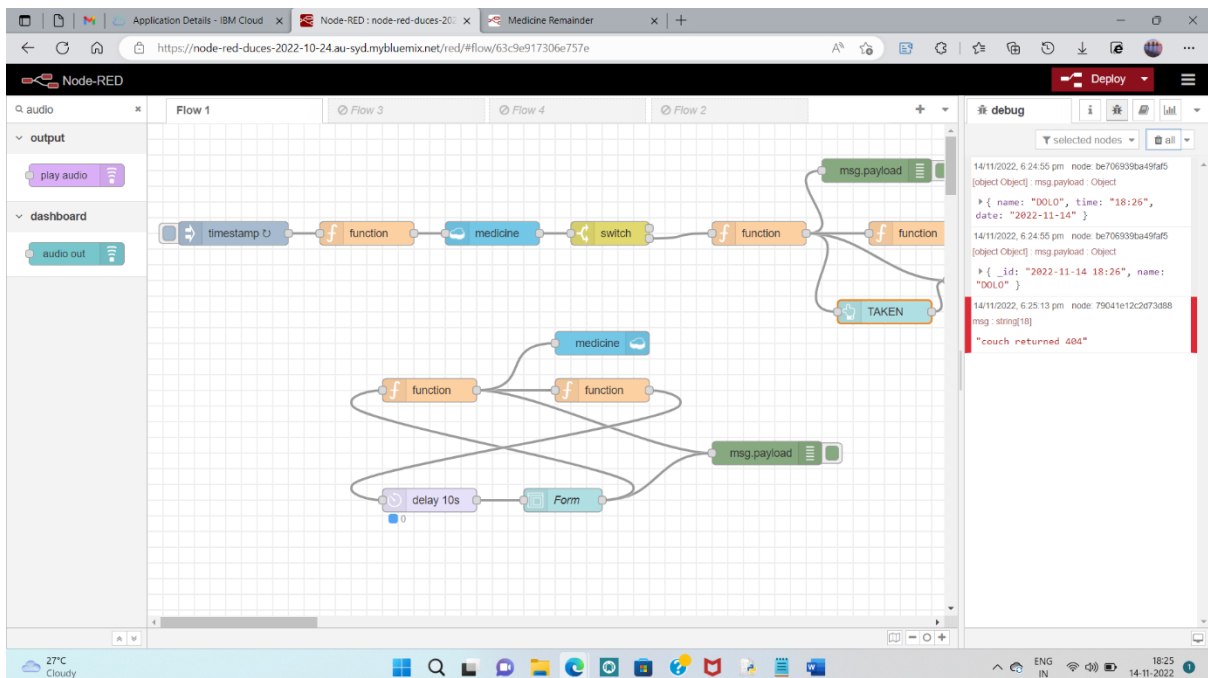
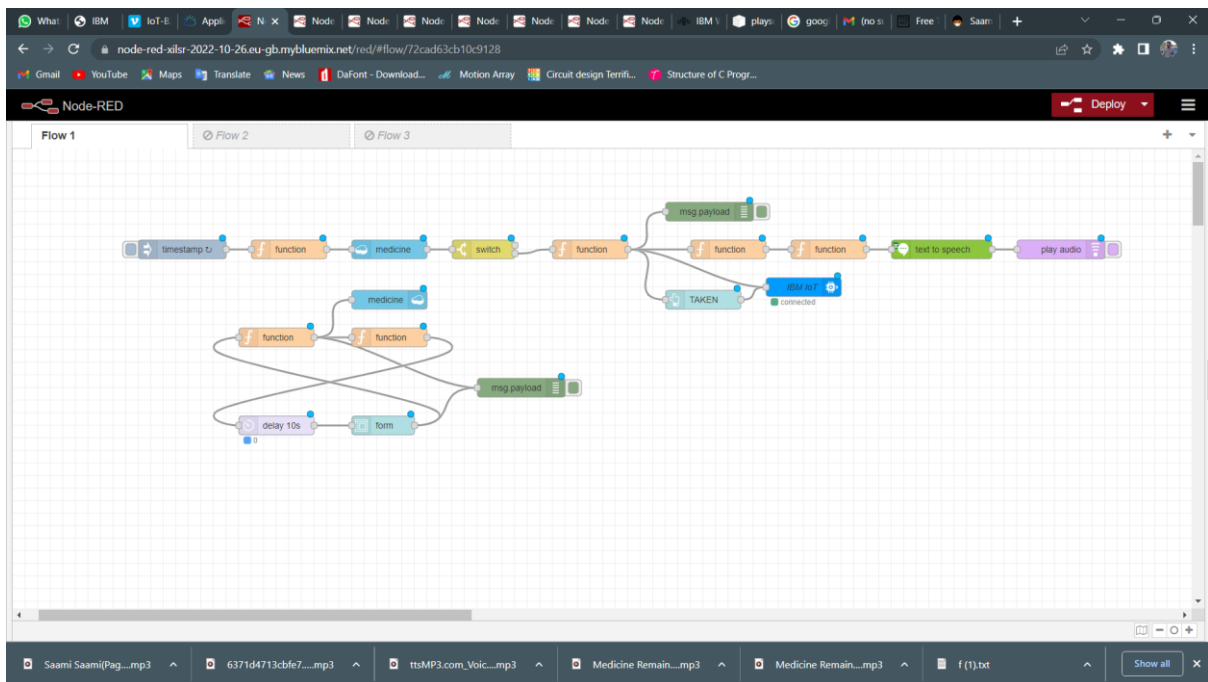
Date(YYYY-MM-DD)
2022-11-14

SUBMIT CANCEL

NOTIFY US

TAKEN

NODE RED FLOW AND OUTPUT:



IoT OUTPUT:

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons for navigation. The main content area shows a list of devices. Device 1100 is selected and highlighted in blue, showing a status of 'Connected'. Below the device list, a detailed view for device 1100 is shown, including tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, displaying a table of recent events.

Event	Value	Format	Last Received
test	{"type":"Buffer","data":{"34,122,46,109,112,51,3..."}}	json	a few seconds ago
test	{"type":"Buffer","data":{"34,122,46,109,112,51,3..."}}	json	a few seconds ago
test	{"type":"Buffer","data":{"34,122,46,109,112,51,3..."}}	json	a few seconds ago
test	{"type":"Buffer","data":{"34,122,46,109,112,51,3..."}}	json	a few seconds ago
test	{"type":"Buffer","data":{"34,122,46,109,112,51,3..."}}	json	a few seconds ago

The bottom of the screen shows a Windows taskbar with various application icons and a system tray indicating the temperature is 27°C and the time is 18:29 on 14-11-2022.

PYTHON SCRIPT:

```
import wiotp.sdk.device

import time

import random

import playsound

from datetime import datetime

from ibm_watson import TextToSpeechV1

from ibm_cloud_sdk_core.authenticators import IAMAuthenticator

myConfig = {

    "identity": {

        "orgId": "pje2x1",

        "typeId": "Test1",

        "deviceId": "555"

    },

    "auth": {

        "token": "Thiyagu@21"

    }

}


def myCommandCallback(cmd):

    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])

    m=cmd.data['command']

    if(m=="Medicine Taken"):

        print("Medicine Intaken")

    else:

        print("*****")

        print("Take Your Medicine")

        print("*****")


client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)

client.connect()
```

```
authenticator = IAMAuthenticator('07htoTDmIEv0F75vmA5YDyCz7mIINscQ0zbrT2p-vrNm')
```

```
text_to_speech = TextToSpeechV1(
```

```
    authenticator=authenticator
```

```
)
```

```
text_to_speech.set_service_url('https://api.eu-gb.text-to-  
speech.watson.cloud.ibm.com/instances/3346a3b2-4ad2-4fc1-a1f4-c78784c1e0b8')
```

```
now = datetime.now()
```

```
current_time = now.strftime("%H:%M")
```

```
print("Current Time =", current_time)
```

```
while True:
```

```
    with open('z.mp3','wb') as audio_file:
```

```
        audio_file.write(
```

```
            text_to_speech.synthesize(
```

```
                'take your respected medicine',
```

```
                voice='en-US_AllisonV3Voice',
```

```
                accept='audio/wav'
```

```
            ).get_result().content)
```

```
client.publishEvent(eventId="test", msgFormat="json", data="z.mp3", qos=0, onPublish=None)
```

```
client.commandCallback = myCommandCallback
```

```
client.disconnect()
```

OUTPUTS:

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\prime\OneDrive\Documents\IBM\fin (2).py =====
2022-11-14 18:25:36,748  wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:8oj1kg:Testdevice:1100
Current Time = 18:25
Message received from IBM IoT Platform: DOLO
=====
Take Your Medicine
=====
|
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
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Current Time = 18:25
Message received from IBM IoT Platform: DOLO
=====
Take Your Medicine
=====
Message received from IBM IoT Platform: Medicine Taken
Medicine Intaken
Thank You!!
```