

SPRINT-4

Date	19 November 2022
Team ID	PNT2022TMID42240
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 Remainder

Medicine Data

Enter the Medicine Name

DOLO

Time(HH:MM)

18:26

Date(YYYY-MM-DD)

2022-11-14

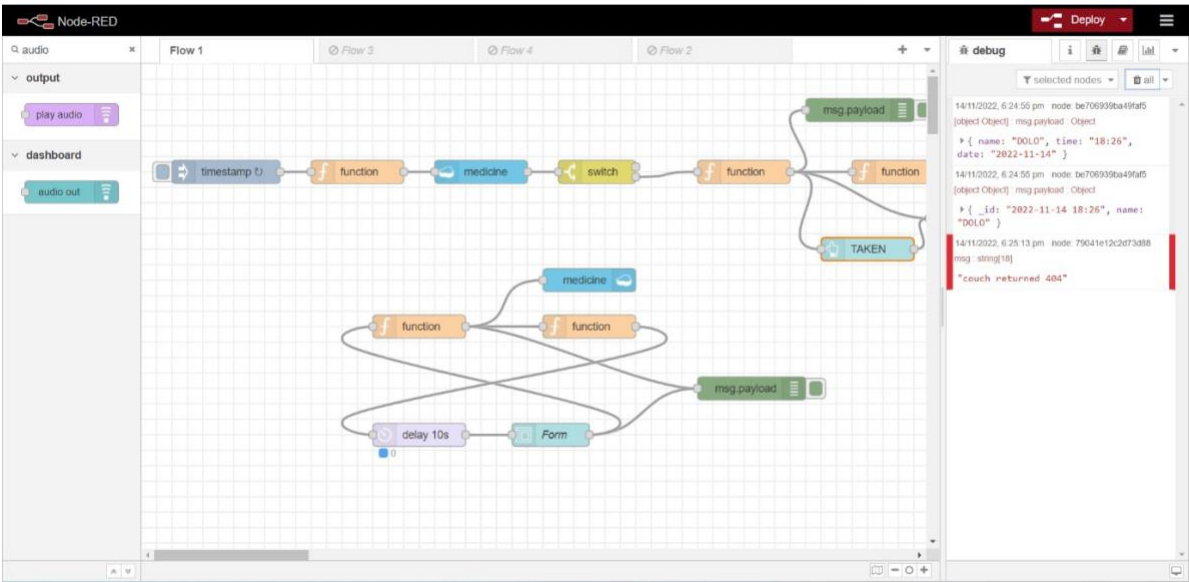
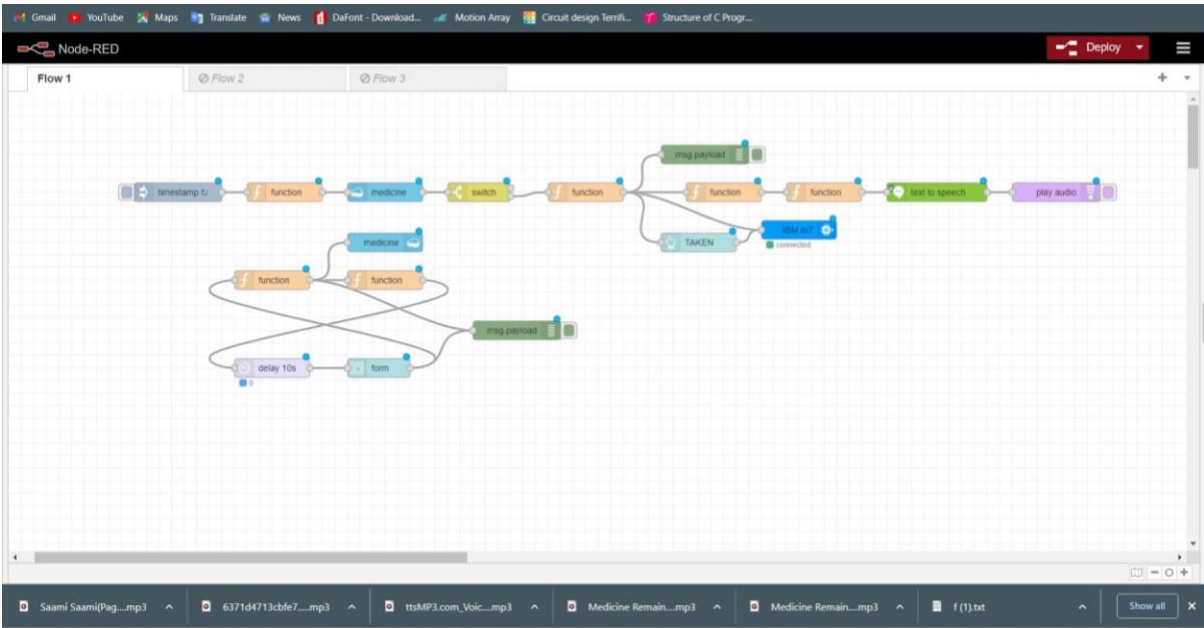
SUBMIT

CANCEL

NOTIFY US

TAKEN

NODE RED FLOW AND OUTPUT:



IoT OUTPUT:

The screenshot displays an IoT management interface. At the top, there are tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons for navigation. The main content area shows a table of devices. Device 1100 is selected, and its details are shown in a modal window. The modal has tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a list of events with columns for Event, Value, Format, and Last Received.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1000	Disconnected	Testdevice	Device	Oct 13, 2022 10:55 PM	
1100	Connected	Testdevice	Device	Nov 12, 2022 7:51 AM	

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
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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": "jwl2wf",
        "typeId": "SalmanDevice",
        "deviceId": "SalmanDevice_1"
    },
    "auth": {
        "token": "e3DwTZGGA1Y?0BD*s9"
    }
}

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\nThank You!!")
    else:
        print("*****")
        print("Take Your Medicine")
        print("*****")

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

authenticator = IAMAuthenticator('mc6GkVtcmmR8o5UIAk5-jhyvsmieCN8nhJ-Xc7awmRly')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_service_url('https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/2ff7f2d9-da46-4f46-bbda-fad6e9f83882')

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:8ojlkg: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
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*****
Take Your Medicine
*****
Message received from IBM IoT Platform: Medicine Taken
Medicine Intaken
Thank You!!
```