

DEVELOP A PYTHON SCRIPT

Date	1 November 2022
Team ID	PNT2022TMID21391
Project Name	Personal assistance for seniors who are self-reliant
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PYTHON CODE:

```
import time
#import ibmiotf.application
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
import ibmiotf.device
import pygame
pygame.init()

config={
    "org":"k54tgp",
    "type" : "abcd",
    "id": "123",
    "auth-method": "token",
    "auth-token": "123456789"
}

url="https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/3337f7ab-eb47-4558-8344-cf4e0e94bee7"
api="ri9CfHaOitFC4s_8nN2fYhKmdVBku6yqzeedtTcCOQf1"
client= ibmiotf.device.Client (config)
client.connect()
auth=IAMAuthenticator(api)
tts=TextToSpeechV1(authenticator=auth)
tts.set_service_url(url)

def myCommandCallback (cmd):
    a=cmd.data
    instruction="Please Take following Medicine. "
    c=1
    if len(a["command"])==0:
        pass
    else:
```

```

client.disconnect()
client.connect()
for i in a["command"]:
    instruction+=str(c)+". "
    instruction+=i
    instruction+=" "
    c+=1
with open("./speech.wav","wb") as audio_file:
    res=tts.synthesize(instruction,accept="audio/mp3",voice='en-US_AllisonExpressive').get_result()
    audio_file.write(res.content)
play("speech.wav")

```

```

def play(a):
    p=pygame.mixer.Sound(a)
    pygame.mixer.Sound.play(p)
    time.sleep(20)
    pygame.mixer.Sound.play(p)
    time.sleep(20)
    pygame.mixer.Sound.play(p)
    time.sleep(20)

```

```

while True:
    client.commandCallback = myCommandCallback
client.disconnect()

```

```

D:\Project> python -u "d:\Project\tts.py"
1 from ibm_watson import TextToSpeechV1
2 from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
3 from playsound import playsound as ps
4 import time
5 url="https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/8e5bc662-02f5-4ccc-b2a3-27886673e789"
6 api="QGXbVq1lTgSFmN8_7wPTiKGvYIKHG8MLfHnC1BBXWj"
7 auth=IAMAuthenticator(api)
8 tts=TextToSpeechV1(authenticator=auth)
9 tts.set_service_url(url)
10 a=["command":["Paracetamol","Dolo 650"]]
11 instruction="Please Take following Medicine. "
12 c=1
13 for i in a["command"]:
14     instruction+=str(c)+". "
15     instruction+=i
16     instruction+=" "
17     c+=1
18 with open("./speech.wav","wb") as audio_file:
19     res=tts.synthesize(instruction,accept="audio/mp3",voice='en-US_AllisonV3Voice').get_result()
20     audio_file.write(res.content)
21

```

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS D:\Final Code> python -u "d:\Project\tts.py"

PS D:\Final Code>

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
123	Disconnected	abcd	Device	17 Nov 2022 16:04	
Identity	Device Information	Recent Events	State	Logs	
Device ID	123				
Device Type	abcd				
Date Added	17 Nov 2022 16:04				
Added By	harri@student.tce.edu				
Connection Status	Disconnected Last Connected: 17 Nov 2022 16:36 Client Address: 42.106.177.188 SecureToken Duration: 3 minutes Data Transferred: 11.2 KB				