

SPRINT DELIVERY 3

TEAM ID : PNT2022PMID40300

ESTABLISHING THE TEXT-TO-SPEECH SERVICE

1) INSTALLATION OF WATSON VERSION :

CODE:

Pip install—upgrade “ibm-watson>=6.1.0”

RESULTS :

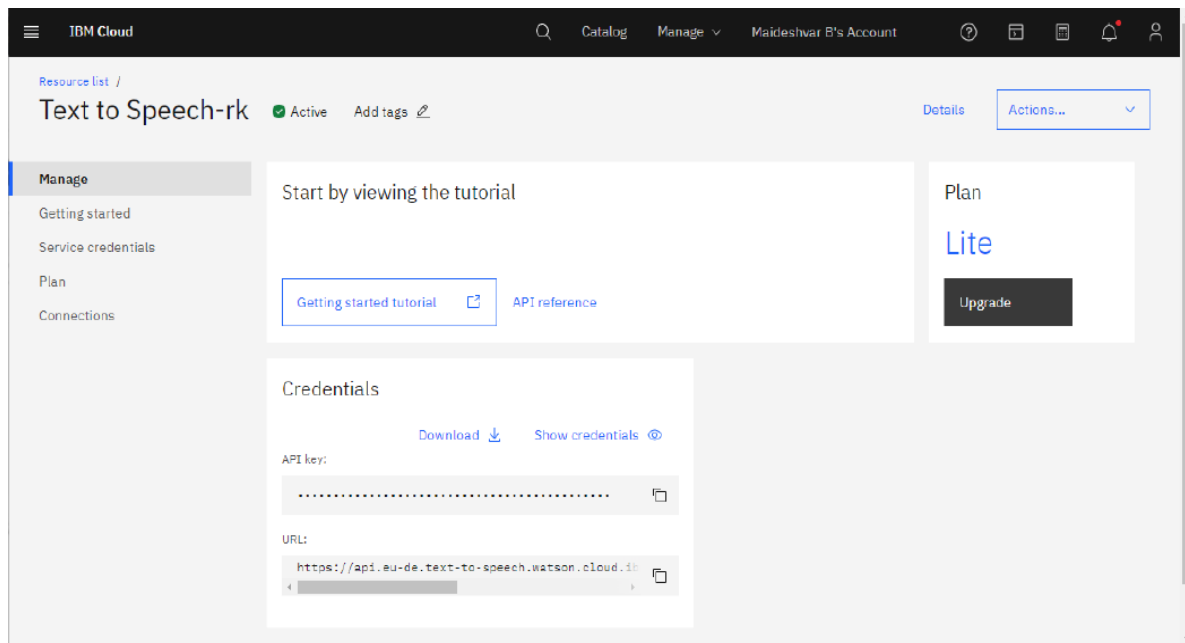
```
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\lavanya> pip install --upgrade "ibm-watson>=6.1.0"
Collecting ibm-watson>=6.1.0
  Downloading ibm-watson-6.1.0.tar.gz (373 kB)
    373 kB 273 kB/s
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting ibm-cloud-sdk-core>=1.4.0, <1.3.6
  Downloading ibm-cloud-sdk-core-1.26.0-py2.py3-none-any.whl (81 kB)
    81 kB 304 kB/s
Collecting python-dateutil>=2.5.3
  Downloading python-dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
    247 kB 726 kB/s
Collecting websocket-client>=1.1.0
  Downloading websocket-client-1.6.0-py2.py3-none-any.whl (68 kB)
    68 kB 670 kB/s
Collecting requests>=2.7.0
  Downloading requests-2.28.1-py3-none-any.whl (62 kB)
    62 kB 340 kB/s
Collecting PyJWT>=2.0.0, <2.4.0
  Downloading PyJWT-2.5.0-py2.py3-none-any.whl (39 kB)
Collecting urllib3>=2.0.0, <1.26.0
  Downloading urllib3-1.25.12-py2.py3-none-any.whl (140 kB)
    140 kB 461 kB/s
Collecting six>=1.5
  Using cached six-1.16.0-py2.py3-none-any.whl (11 kB)
Collecting charset-normalizer>=2
  Downloading charset-normalizer-2.1.1-py3-none-any.whl (39 kB)
Collecting idna>=2.5
  Downloading idna-3.4-py3-none-any.whl (61 kB)
    61 kB 770 kB/s
Collecting certifi>=2017.4.17
  Downloading certifi-2022.9.24-py3-none-any.whl (161 kB)
    161 kB 819 kB/s
Building wheels for collected packages: ibm-watson
  Building wheel for ibm-watson (pyproject.toml) ... done
  Created wheel for ibm-watson: filename=ibm_watson-6.1.0-py3-none-any.whl size=378889 sha256=305906627ee60e0d0ee750e18cd8602378545f675dc1f327bdc838c6b4f3
  Stored in directory: c:\users\lavanya\appdata\local\pip\cache\wheels\1f\69\fb\30c607bd358148352ed76fa50ab14685045018368d69
Successfully built ibm-watson
Installing collected packages: urllib3, six, idna, charset-normalizer, certifi, requests, python-dateutil, PyJWT, websocket-client, ibm-cloud-sdk-core, ibm-watson
Successfully installed PyJWT-2.5.0 certifi-2022.9.24 charset-normalizer-2.1.1 ibm-cloud-sdk-core-1.26.0 ibm-watson-6.1.0 idna-3.4 python-dateutil-2.8.2 requests-2.28.1 six-1.16.0 urllib3-1.26.12 websocket-client-1.1.0

WARNING: You are using pip version 21.3.1; however, version 22.0.1 is available.
You should consider upgrading via the 'C:\Users\lavanya\appdata\local\programs\python\python.exe -m pip install --upgrade pip' command.

C:\Users\lavanya>
```

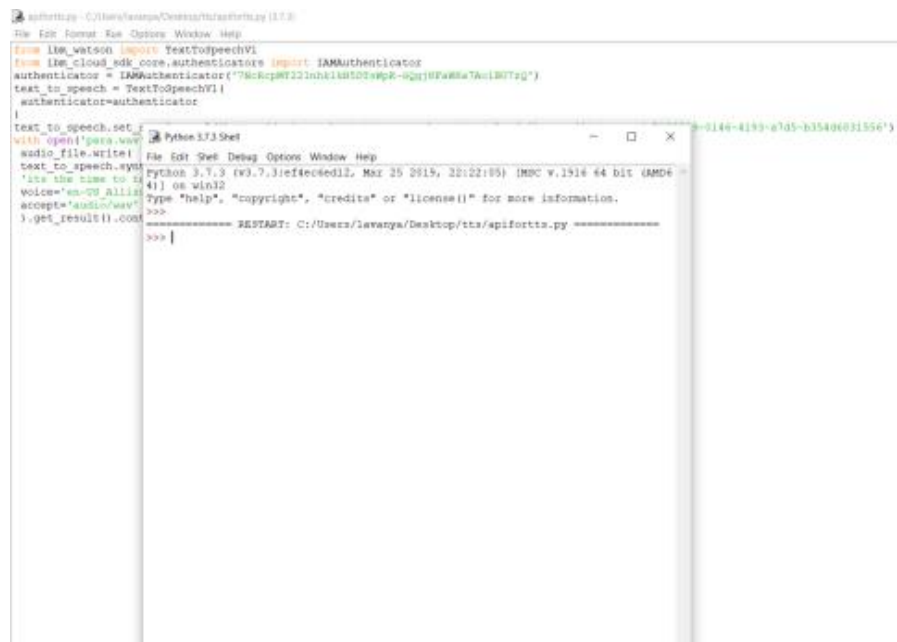
2) COPYING CREDENTIALS FOR API AND URL :



3) PROGRAM FOR ACCESSING APIs OF TTS SERVICE:

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import
IAMAuthenticator authenticator =
IAMAuthenticator('7NcRcpMT221nhk1kB5DTsWpKGOgjKFkWka
7Ao1BU7zQ') text_to_speech = TextToSpeechV1(
authenticator=authenticator )
text_to_speech.set_service_url('https://api.eu-gb.text-
tospeech.watson.cloud.ibm.com/instances/e7133289-0146-
4193-a7d5-b354d6831556') with open('para.wav', 'wb') as
audio_file: audio_file.write( text_to_speech.synthesize( 'its the
time to take paracetomal', voice='en-US_AllisonV3Voice',
accept='audio/wav' ).get_result().content)
```

EXECUTION AND RUN :



The image shows a Jupyter Notebook cell and a terminal window. The Jupyter Notebook cell contains a Python script that imports the IBM Watson Text-to-Speech API, sets up an authenticator, and uses the TextToSpeechV1 class to generate audio. The terminal window shows the execution of the script, which outputs a long alphanumeric string representing the audio file's location.

```
apiifortts.py - C:/Users/Lavanya/Desktop/tts/apiifortts.py (3.7.3)
File Edit Insert Run Options Window Help

from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator("78a8c987221nhk1k5l059p8-q2u10Fa88w7Aa1B077g")
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_api_key('a146-4193-a7d5-b35406031556')

with open('pers.wav') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'its the time to go',
            voice='en-US Allia',
            accept='audio/wav'
        ).get_result().content
    )
```

```
Python 3.7.3 Shell
File Edit View Debug Options Window Help
Python 3.7.3 (tags/v3.7.3:1ffce54d2, Mar 25 2019, 22:22:05) [AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Lavanya/Desktop/tts/apiifortts.py =====
>>> |
```