

CREATE & CONFIGURE IBM CLOUD SERVICE

CREATE THE TEXT-TO-SPEECH SERVICE

Installation of Watson-TTS Client library Provided for Python:

Code:

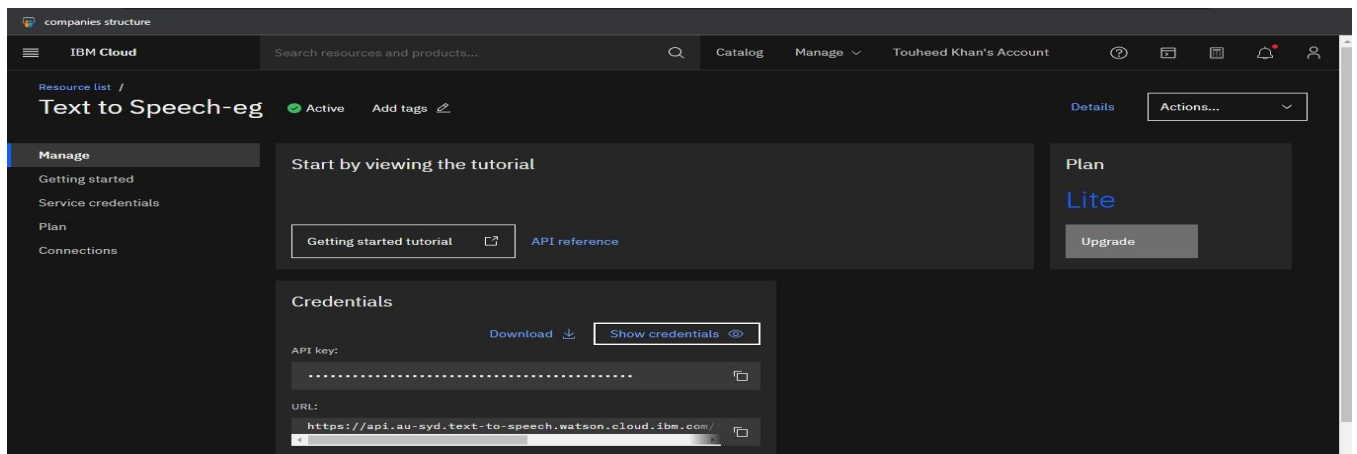
Pip install -upgrade "ibm-watson">=6.1.0"

```
EX Command Prompt
(C) Microsoft Corporation. All rights reserved.

C:\Users\TOUHEED KHAN>pip install --upgrade "ibm-watson">=6.1.0"
Requirement already satisfied: ibm-watson>=6.1.0 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-watson>=6.1.0) (1.1.0)
Requirement already satisfied: websocket-client==1.1.0 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-watson>=6.1.0) (1.1.0)
Requirement already satisfied: python-dateutil>=2.5.3 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-watson>=6.1.0) (2.8.2)
Requirement already satisfied: ibm-cloud-sdk-core==3.*,>=3.3.6 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-watson>=6.1.0) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.0 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-watson>=6.1.0) (2.28.1)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (1.26.12)
Requirement already satisfied: PyJWT<3.0.0,>=2.4.0 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (2.6.0)
Requirement already satisfied: six>=1.5 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from python-dateutil>=2.5.3->ibm-watson>=6.1.0) (1.16.0)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2.1.1)
Requirement already satisfied: idna<4,>=2.5 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (3.4)
Requirement already satisfied: certifi<=2017.4.17 in c:\users\touheed khan\appdata\local\programs\python\python38\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2022.9.24)
WARNING: You are using pip version 21.1.1; however, version 22.3 is available.
You should consider upgrading via the 'c:\users\touheed khan\appdata\local\programs\python\python38\python.exe -m pip install --upgrade pip' command.

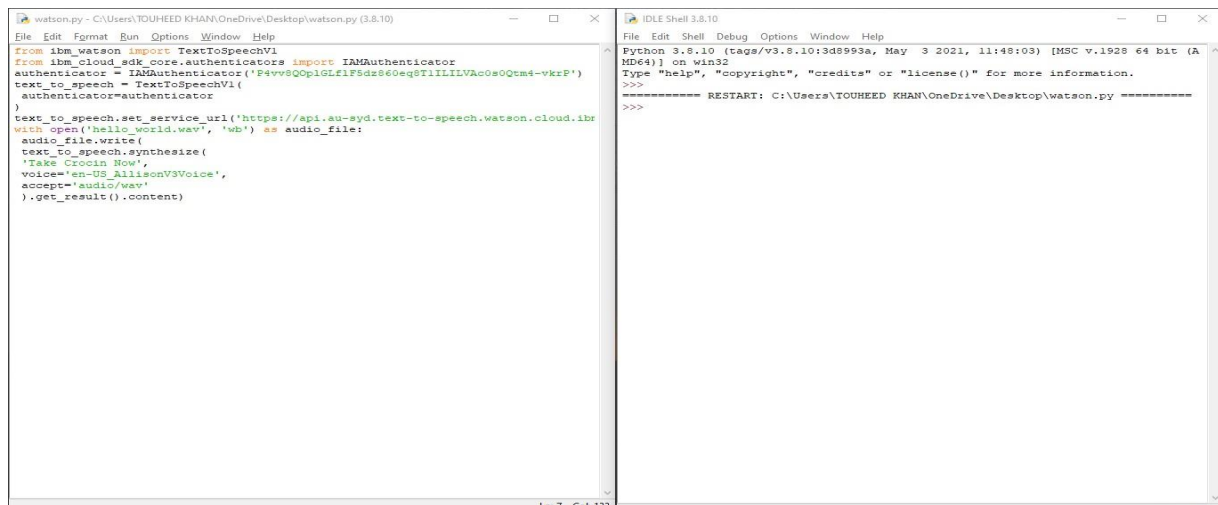
C:\Users\TOUHEED KHAN>
```

Service Creation Status & Credential Details:



STATUS: ACTIVE

Execution & Test Run of Program to Access TTS:



The image shows two windows from the IDLE Python environment. The left window, titled 'watson.py', contains a Python script that uses the IBM Watson Text-to-Speech API. The script imports the necessary modules, sets up an IAMAuthenticator with an API key, and uses the TextToSpeechV1 class to synthesize the text 'Take Care in Now' into an audio file named 'hello_world.wav'. The right window, titled 'IDLE Shell 3.8.10', shows the execution output, which includes the Python version and architecture information, followed by a restart message.

```
File Edit Format Run Options Window Help
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
authenticator = IAMAuthenticator('P4vv9QOp1GLf1P8dz860eq8T111L1LVAc0s0Qtm4-vkrP')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)
text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm
with open('hello_world.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'Take Care in Now',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content
    )
```

```
File Edit Shell Debug Options Window Help
Python 3.8.10 (tags/v3.8.10:3d8993a, May 3 2021, 11:48:03) [MSC v.1928 64 bit (A
MD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\TOUHEED KHAN\OneDrive\Desktop\watson.py =====
>>>
```

RESULT : SUCCESSFULLY CREATED