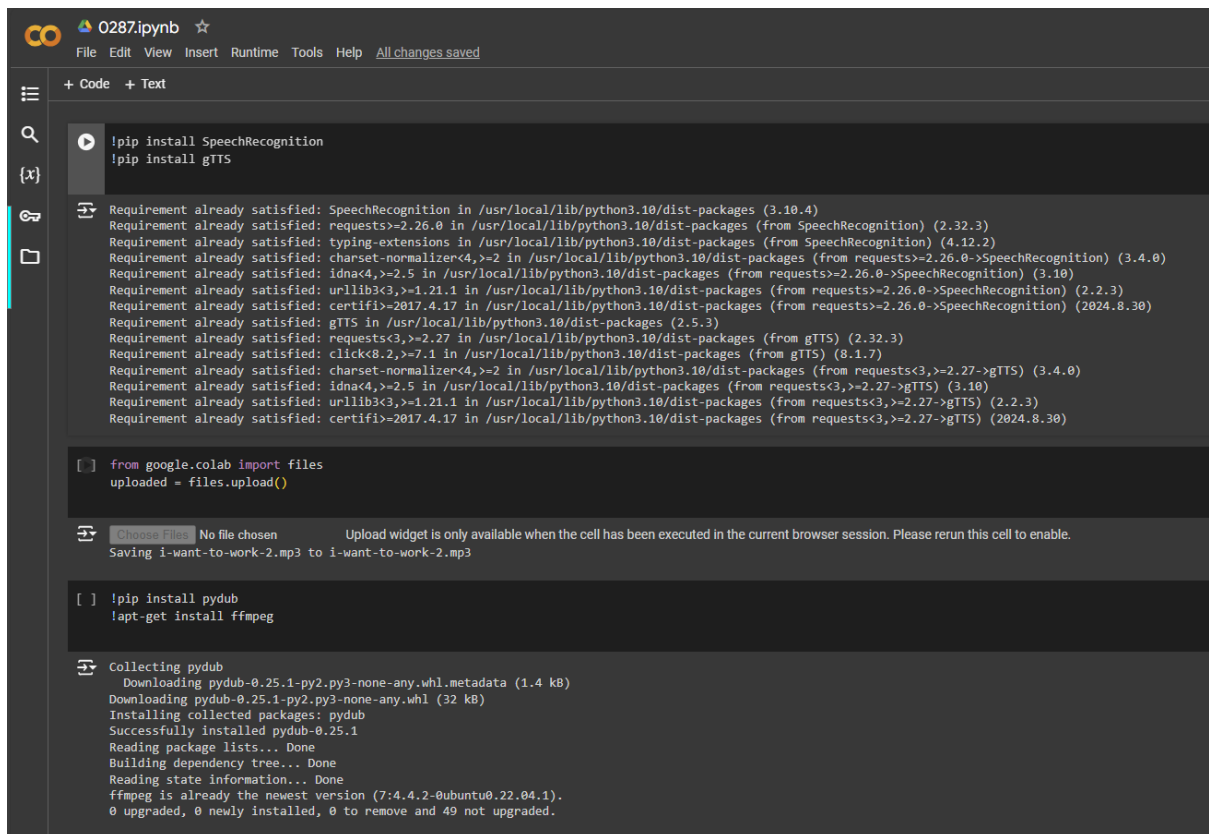


10-10-2024

Speech to Text Program

HU22CSEN0100287



```
O287.ipynb
File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

!pip install SpeechRecognition
!pip install gTTS

Requirement already satisfied: SpeechRecognition in /usr/local/lib/python3.10/dist-packages (3.10.4)
Requirement already satisfied: requests>=2.26.0 in /usr/local/lib/python3.10/dist-packages (from SpeechRecognition) (2.32.3)
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.10/dist-packages (from SpeechRecognition) (4.12.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->SpeechRecognition) (3.4.0)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->SpeechRecognition) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->SpeechRecognition) (2.2.3)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->SpeechRecognition) (2024.8.30)
Requirement already satisfied: gTTS in /usr/local/lib/python3.10/dist-packages (2.5.3)
Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.10/dist-packages (from gTTS) (2.32.3)
Requirement already satisfied: click<8.2,>=7.1 in /usr/local/lib/python3.10/dist-packages (from gTTS) (8.1.7)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (3.4.0)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (2.2.3)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (2024.8.30)

from google.colab import files
uploaded = files.upload()

Choose Files No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.
Saving i-want-to-work-2.mp3 to i-want-to-work-2.mp3

!pip install pydub
!apt-get install ffmpeg

Collecting pydub
  Downloading pydub-0.25.1-py2.py3-none-any.whl.metadata (1.4 kB)
  Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
  Installing collected packages: pydub
  Successfully installed pydub-0.25.1
  Reading package lists... Done
  Building dependency tree... Done
  Reading state information... Done
  ffmpeg is already the newest version (7:4.4.2-0ubuntu0.22.04.1).
  0 upgraded, 0 newly installed, 0 to remove and 49 not upgraded.
```

0287/jpynb

File Edit View Insert Runtime Tools Help All changes saved

Comment Share Gemini

Code Text

Connect Gemini

Python 3.10.12

```
import speech_recognition as sr
from gtts import gtts
from pydub import AudioSegment
from IPython.display import Audio
from google.colab import files

# Function to convert text to speech using gtts
def SpeakText(command):
    tts = gtts(command, lang='en')
    tts.save("output.mp3")
    return Audio("output.mp3", autoplay=True)

# Upload an MP3 audio file
print("Please upload your MP3 file")
uploaded = files.upload()

# Convert MP3 to wav using pydub
mp3_file = next(iter(uploaded)) # Get the uploaded file name
sound = AudioSegment.from_mp3(mp3_file)
wav_filename = "converted.wav"
sound.export(wav_filename, format="wav")

# Recognize speech from the converted WAV file
recognizer = sr.Recognizer()

with sr.AudioFile(wav_filename) as source:
    audio_data = recognizer.record(source)
    try:
        # Using Google Speech Recognition to convert the audio
        mytext = recognizer.recognize_google(audio_data)
        mytext = mytext.lower()
        print(f"Did you say: {mytext}")
        SpeakText(mytext) # Speak the recognized text
    except sr.UnknownValueError:
        print("Sorry, I could not understand the audio")
    except sr.RequestError as e:
        print(f"Could not request results; {e}")
```

Please upload your MP3 file

No file chosen

Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

Saving i want to work-2.mp3 to i want to work-2 (2).mp3

Did you say: listen read repeat i have my green card and i want to work i will call one company it is a small company it is not a long way for my home i think it is a nice place to work i have the phone number i will call today and .