



MS Azure Module Assignment 01

Azure AI Speech Service Integration, Voice Recognition, and Translation

Overview:

Building upon your recent Azure AI Speech service and Translator service labs, your task is to integrate the Azure AI Speech service into an existing Python project. The objective is to record your voice in English, save the audio file in .wav format in the same directory as the provided sample file "time.wav," and modify the "speaking-clock.py" code to transcribe the recorded audio into text in both English and Urdu. Subsequently, you will use the Translator service to translate the English transcription into Urdu. Additionally, you will create a function to call your name, similar to the existing "TimeCall" function. Furthermore, you should translate the recorded introduction into Urdu using the Translator service. This task is graded, and all students are required to complete it.

Instructions:

1. Recording Your Voice in English:

- Using an audio recording tool, record your voice in English, including an introduction of yourself. The introduction should not exceed two minutes in duration.
- Save the recorded audio as a .wav file. Ensure that the file name is unique and meaningful, such as "yourname_intro.wav."
- Place the recorded audio file in the same directory as the provided sample file "time.wav."

2. Modifying "speaking-clock.py" Code:

- Open the "speaking-clock.py" file in a text editor or IDE.
- Utilize the Azure AI Speech service knowledge gained in recent labs to locate the code section responsible for transcribing the "time.wav" file.
- Modify this section to transcribe your recorded audio file ("yourname_intro.wav") instead.
- Ensure that the transcription results are stored separately for English.

3. Creating a Function to Call Your Name:

- Use the Azure AI Speech service knowledge to create a new Python function in the "speaking-clock.py" file.
- Name this function after your name, for example, "YourNameCall."
- Inside the function, use the Azure AI Speech service to recognize and read your name from the recorded audio.

4. Translation Using Azure Translator Service:

- Leverage the Translator service knowledge from previous labs (Translator Service) to translate the English transcription into Urdu.
- Implement this translation within the "speaking-clock.py" file.
- Store the translated audio separately.

5. Submission:

- Zip all your submissions into one zip file, named "YourName_LMSID.zip".
- Include the following in the zip file:
 1. Your modified "speaking-clock.py" file.
 2. The recorded audio file ("yourname_intro.wav").
 3. The translated audio file containing the Urdu translation ("translation.wav") of your recorded introduction audio.
 4. A text file named "GitHub_Link.txt" that contains the GitHub link to your project.
- Ensure that your code is well-documented, organized, and free from errors.

Grading Criteria:

- Successful modification of "speaking-clock.py" code.
- Accurate transcription of the recorded English audio.
- Implementation of the "YourNameCall" function.
- Accurate translation from English to Urdu using the Translator service.
- Proper documentation and organization of the code.
- Github repository for this assignment.
- Meeting the submission deadline.

Important Note:

- Utilize the Azure AI Speech service and Translator service credentials and configurations as learned in recent labs.
- Collaborative work is not permitted; each student is responsible for their own submission.
- Late submissions will not be accepted. Ensure the task is completed by the specified deadline.

Resource:

- <https://github.com/MicrosoftLearning/AI-102-AIEngineer>

Deadline: Sunday (24/09/23 11:59 PM)