

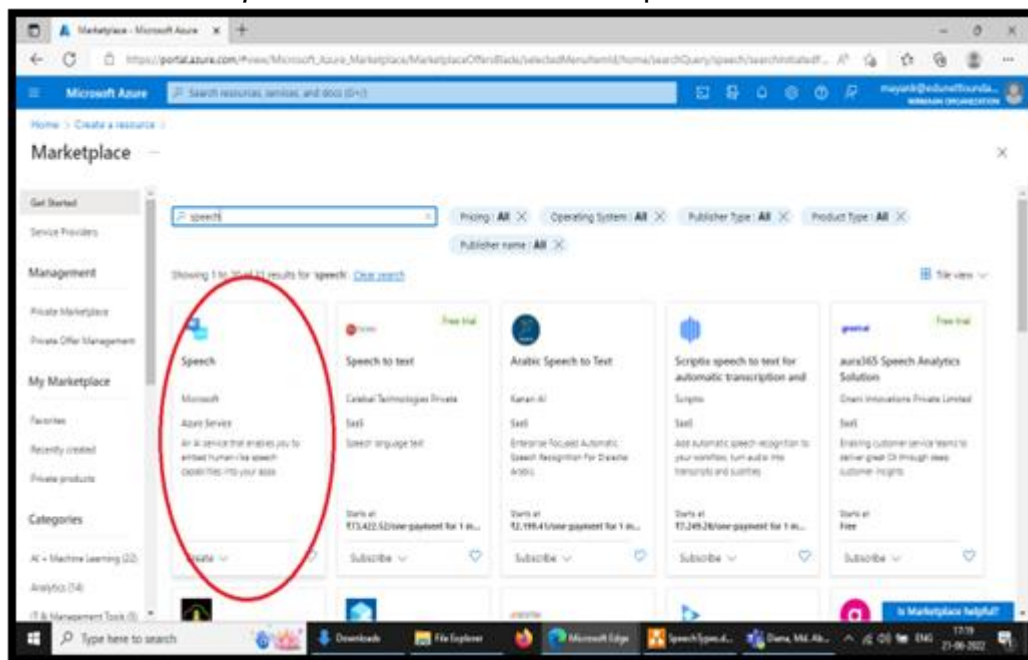
Lab 39

Self Practice Solution: Using Cognitive Services in Python Scripts

Task: Create a Speech resource in Azure and use it in python script for Speech to Text

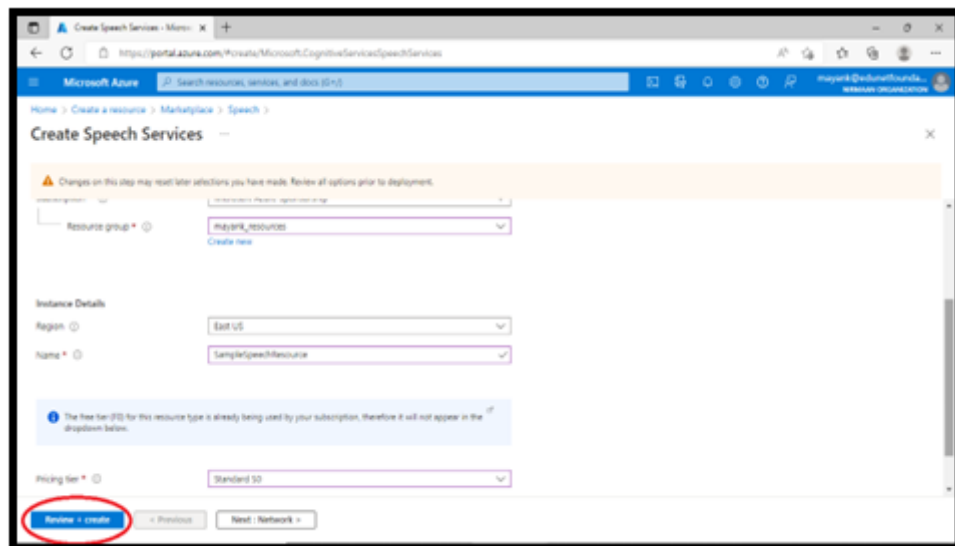
Using Speech API

1. Select *Speech* resource from marketplace.



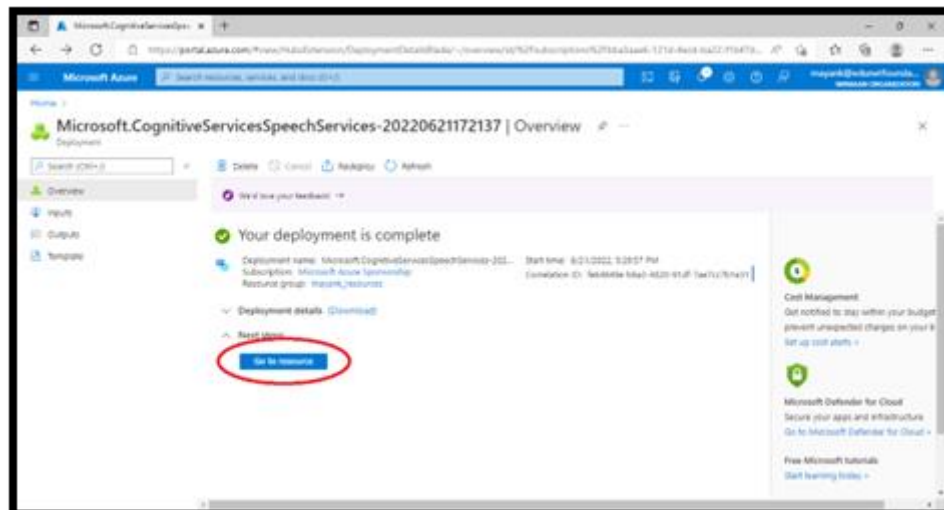
2. Fill in mandatory details, such as
 - a. Resource Group
 - b. Region
 - c. Name
 - d. Pricing Tier

Click on *Review + Create*

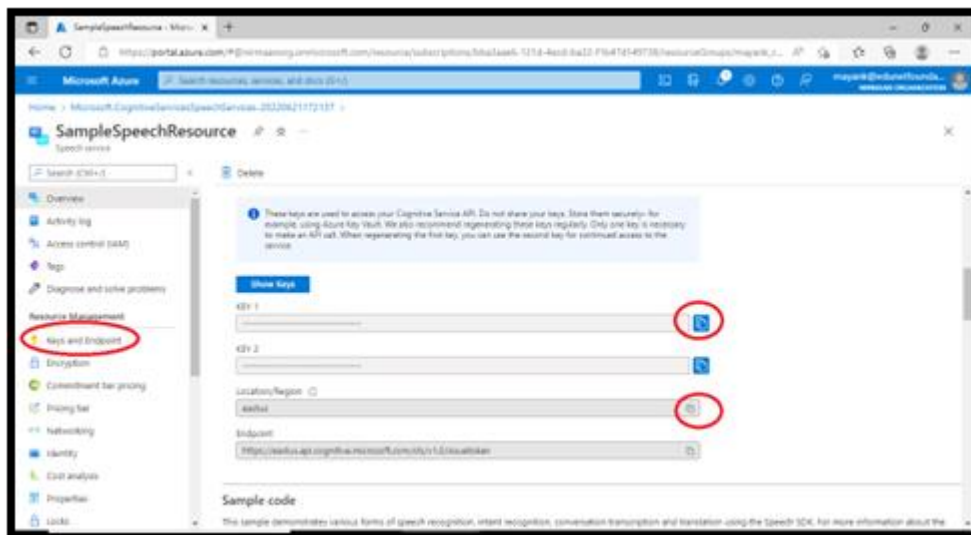


3. Let the validation pass. Click on *Create*.

4. Click on *Go to resource*



5. Scroll down. Click on *Keys and Endpoint*.
Copy *Key* and *Location/Region*.



6. Next part is creating an executable code that will take the input, process it and produce the desired output.

For this we will use Visual Studio Code.

Create a file with the provided sample code. Within sample code, use copied Service Key and Service Region

Sample Code for Speech to Text

```
import azure.cognitiveservices.speech as speechsdk

def recognize_from_microphone():
    speech_config = speechsdk.SpeechConfig(subscription="Your Service Key",
    region="Region/Location")
    speech_config.speech_recognition_language="en-US"
    audio_config = speechsdk.audio.AudioConfig(use_default_microphone=True)
    speech_recognizer = speechsdk.SpeechRecognizer(speech_config=speech_config,
    audio_config=audio_config)
    print("Speak into your microphone.")
    speech_recognition_result = speech_recognizer.recognize_once_async().get()

    if speech_recognition_result.reason == speechsdk.ResultReason.RecognizedSpeech:
        print("Recognized: {}".format(speech_recognition_result.text))
    elif speech_recognition_result.reason == speechsdk.ResultReason.NoMatch:
        print("No speech could be recognized: {}".format(speech_recognition_result.no_match_details))
    elif speech_recognition_result.reason == speechsdk.ResultReason.Canceled:
        cancellation_details = speech_recognition_result.cancellation_details
        print("Speech Recognition canceled: {}".format(cancellation_details.reason))
        if cancellation_details.reason == speechsdk.CancellationReason.Error:
            print("Error details: {}".format(cancellation_details.error_details))
        print("Did you set the speech resource key and region values?")

recognize_from_microphone()
```

Now, run this file.