

Personalized online VC demo

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Outline

個人化離線語音裝置-線上版本

- Online VC 實作進度

- Python SpeechRecognition 套件

- Python 有提供已經打包好的套件 (SpeechRecognition) 供使用
 - 為免費版，但無法自動偵測語言、說話者分段標記等功能
 - 已經完成使用麥克風輸入，轉換成文字再轉換成 Google 小姐的語音
 - 1. Demo 影片：<https://youtu.be/HYQNHAK2Eco>
 - 實作過程
 - 1. 寫入語音檔，並轉成文字
 - 2. 使用麥克風輸入，然後將語音變成文字
 - 3. 寫入文字檔，並轉成 Google 小姐的聲音
 - 4. 將2、3點整合，使用麥克風錄音，並將聲音轉換成 Google 小姐的聲音

- Google API

- 成功將 Google 提供的範例程式改成放入音檔並輸出文字
 - 目前使用音檔格式為 wav 檔，無法順利將 mp3 檔轉換

- 下週規劃

- Google API

- 使用麥克風輸入，並將語音變成文字

附錄－API 實作結果

Debug

```
return wrapped_func(*args, **kwargs)
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/retry.py", line 286, in retry_wrapped_func
    on_error=on_error,
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/retry.py", line 184, in retry_target
    return target()
File "/home/fg6ts30/env/lib/python3.7/site-packages/google/api_core/grpc_helpers.py", line 75, in error_remapped_callable
    six.raise_from(exceptions.from_grpc_error(exc), exc)
File "<string>", line 3, in raise_from
google.api_core.exceptions.PermissionDenied: 403 Your application has authenticated using end user credentials from the Google Cloud SDK or Google Cloud Shell which are not supported by the speech.googleapis.com. We recommend configuring the billing/quota_project setting in gcloud or using a service account through the auth/impersonate_service_account setting. For more information about service accounts and how to use them in your application, see https://cloud.google.com/docs/authentication/.
(env) fg6ts30@cloudshell:~/python-speech/samples/snippets$
```

使用了第一種方法

Method 1:

Create a service account and set up the Cloud SDK to use the service account.

Example command:

```
gcloud auth activate-service-account test@development-123456.iam.gserviceaccount.com --key-
```

Method 2:

Set the environment variable `GOOGLE_APPLICATION_CREDENTIALS` to point to your service account JSON file.

```
set GOOGLE_APPLICATION_CREDENTIALS=/fullpath/service-account.json
```

Method 3:

<https://stackoverflow.com/questions/56823383/your-application-has-authenticated-using-end-user-credentials-from-the-google-cl/56826028>

ux No one is clicking my improved?

Pe What's the political re genocide is such a 'b

Attending Group Mee

Is Feudal Elective be Partition?

Mergesort Criticism ir

Is chess a good gam

Exporting merged lay same CRS using QG

Will a combo afci/gfci neutral issue

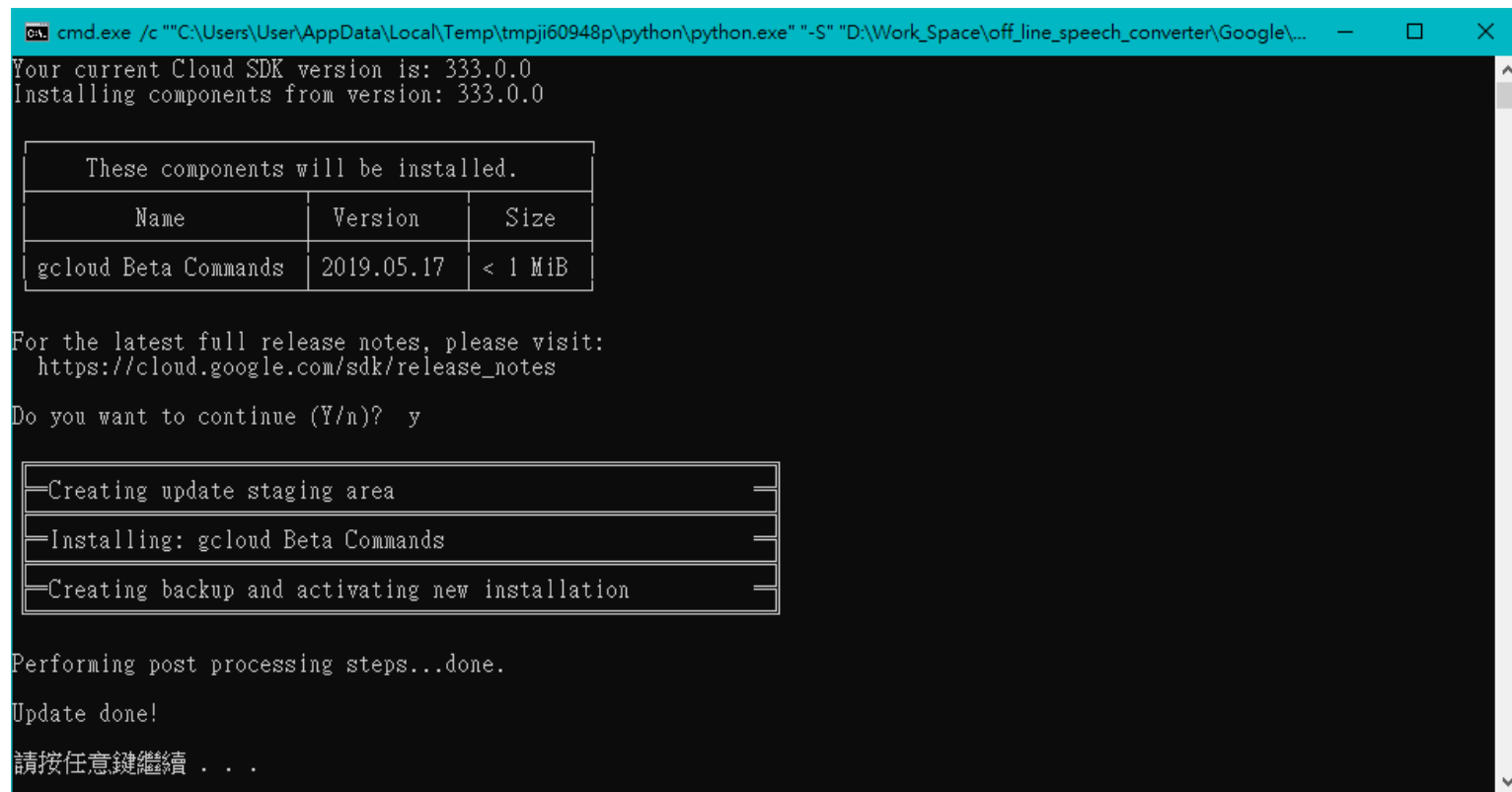
Why do we ask for *a series to define the n variable?

If I pull a metal bar fo

Debug

<https://cloud.google.com/sdk/gcloud/reference/auth/application-default/set-quota-project?hl=zh-TW>

輸入以下指令：`gcloud beta auth application-default set-quota-project`



```
cmd.exe /c "C:\Users\User\AppData\Local\Temp\tmpji60948p\python\python.exe" "-S" "D:\Work_Space\off_line_speech_converter\Google\..."
Your current Cloud SDK version is: 333.0.0
Installing components from version: 333.0.0

  These components will be installed.
  +-----+
  | Name                | Version   | Size   |
  +-----+-----+-----+
  | gcloud Beta Commands | 2019.05.17 | < 1 MiB |
  +-----+-----+-----+

For the latest full release notes, please visit:
https://cloud.google.com/sdk/release_notes

Do you want to continue (Y/n)? y

  --Creating update staging area
  --Installing: gcloud Beta Commands
  --Creating backup and activating new installation

Performing post processing steps...done.
Update done!
請按任意鍵繼續 . . .
```

執行完成解決問題

Debug

要求 gcs_uri 位置，出現錯誤：

400 Audio URI `D:/Work_Space/off_line_speech_converter/SpeechRecognition/output.mp3` is an invalid GCS path.

在轉換前需要將音檔上傳至 google，要求的路徑為 google 另一項服務

創建 bucket

Google Cloud Platform

Cloud Storage

瀏覽器

Monitoring

設定

瀏覽者

+ 建立值區

刪除

重新整理

篩選

篩選值區

名稱 ↑

chullin_bucket

建立時間

2021年5月1日 下午1:44:25

位置類型

Multi-region

建立值區

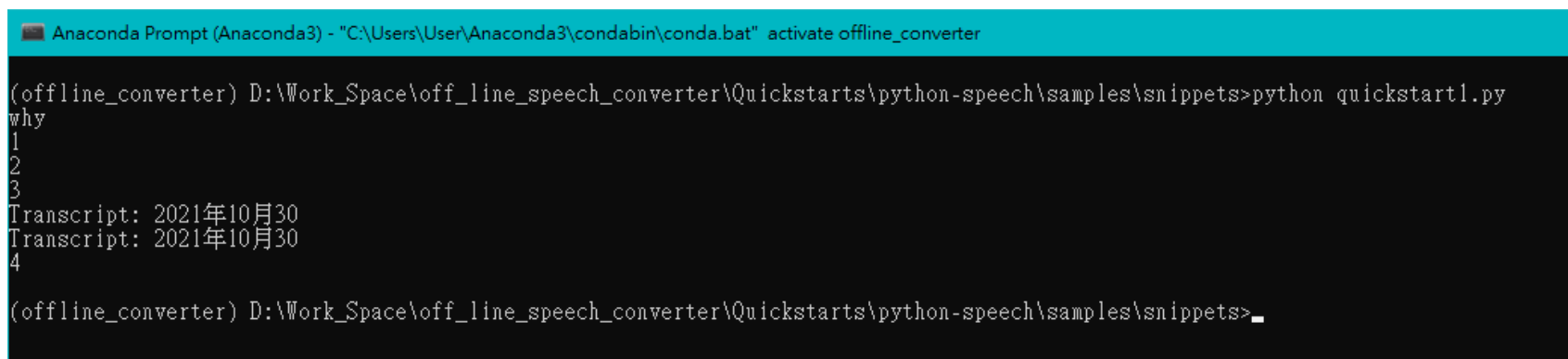
- 為值區命名
 - 請挑選一個全域不重複的永久名稱。命名規範
 - 例如：「example」、「example_bucket-1」或「example.com」
 - 提示：請勿包含任何機密資訊
 - 繼續
- 選擇資料的儲存位置
- 為資料選擇預設儲存空間級別
- 選擇如何控制物件的存取權
- 進階設定 (選用)

建立 取消

<https://blog.gcp.expert/cloud-storage-application-website/>

Debug (最後結果)

音檔內容為：
2021年4月30日，但4辨識錯誤



```
Anaconda Prompt (Anaconda3) - "C:\Users\User\Anaconda3\condabin\conda.bat" activate offline_converter

(offline_converter) D:\Work_Space\off_line_speech_converter\Quickstarts\python-speech\samples\snippets>python quickstart1.py
why
1
2
3
Transcript: 2021年10月30
Transcript: 2021年10月30
4
(offline_converter) D:\Work_Space\off_line_speech_converter\Quickstarts\python-speech\samples\snippets>_
```

音檔無法為 mp3 檔 (原因尚待查明)，wav 檔為雙聲道須多做設定 (預設為單聲道)