MLE KI 20220428

April 28, 2022

[1]: |git clone https://github.com/fenago/MLEssentials2/

```
Cloning into 'MLEssentials2'...
    remote: Enumerating objects: 62, done.
    remote: Counting objects: 100% (62/62), done.
    remote: Compressing objects: 100% (58/58), done.
    remote: Total 62 (delta 15), reused 0 (delta 0), pack-reused 0
    Unpacking objects: 100% (62/62), 2.26 MiB | 3.10 MiB/s, done.
[3]: | pip install SpeechRecognition moviepy
    WARNING: The directory '/home/jovyan/.cache/pip' or its parent directory is
    not owned or is not writable by the current user. The cache has been disabled.
    Check the permissions and owner of that directory. If executing pip with sudo,
    you may want sudo's -H flag.
    Requirement already satisfied: SpeechRecognition in
    /opt/conda/lib/python3.8/site-packages (3.8.1)
    Requirement already satisfied: moviepy in /opt/conda/lib/python3.8/site-packages
    (1.0.3)
    Requirement already satisfied: numpy; python_version >= "2.7" in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (1.18.5)
    Requirement already satisfied: decorator<5.0,>=4.0.2 in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (4.4.2)
    Requirement already satisfied: requests<3.0,>=2.8.1 in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (2.24.0)
    Requirement already satisfied: tqdm<5.0,>=4.11.2 in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (4.51.0)
    Requirement already satisfied: imageio-ffmpeg>=0.2.0; python_version >= "3.4" in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (0.4.7)
    Requirement already satisfied: imageio<3.0,>=2.5; python_version >= "3.4" in
    /opt/conda/lib/python3.8/site-packages (from moviepy) (2.9.0)
    Requirement already satisfied: proglog<=1.0.0 in /opt/conda/lib/python3.8/site-
    packages (from moviepy) (0.1.9)
    Requirement already satisfied: chardet<4,>=3.0.2 in
    /opt/conda/lib/python3.8/site-packages (from requests<3.0,>=2.8.1->moviepy)
    (3.0.4)
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Requirement already satisfied: certifi>=2017.4.17 in
     /opt/conda/lib/python3.8/site-packages (from requests<3.0,>=2.8.1->moviepy)
     (2020.6.20)
     Requirement already satisfied: urllib3!=1.25.0,!=1.25.1,<1.26,>=1.21.1 in
     /opt/conda/lib/python3.8/site-packages (from requests<3.0,>=2.8.1->moviepy)
     (1.25.11)
     Requirement already satisfied: idna<3,>=2.5 in /opt/conda/lib/python3.8/site-
     packages (from requests<3.0,>=2.8.1->moviepy) (2.10)
     Requirement already satisfied: pillow in /opt/conda/lib/python3.8/site-packages
     (from imageio<3.0,>=2.5; python_version >= "3.4"->moviepy) (8.0.1)
 [4]: import speech_recognition as sr
      import moviepy.editor as mp
 [9]: clip = mp.VideoFileClip(r"./MLEssentials2/ErnestoSample.mp4")
      clip.audio.write_audiofile(r"converted_lesson2.wav")
     chunk: 39%|
                         | 215/550 [00:00<00:00, 2149.87it/s, now=None]
     MoviePy - Writing audio in converted_lesson2.wav
     MoviePy - Done.
[11]: # Step 2: Video to Audio Conversion
      clip = mp.VideoFileClip(r"./MLEssentials2/ErnestoSample.mp4")
      clip.audio.write_audiofile(r"./MLEssentials2/converted_lesson2.wav")
     chunk: 37%
                         | 204/550 [00:00<00:00, 1924.17it/s, now=None]
     MoviePy - Writing audio in ./MLEssentials2/converted_lesson2.wav
     MoviePy - Done.
[12]: r = sr.Recognizer()
[13]: audio = sr.AudioFile("converted_lesson2.wav")
[16]: with audio as source:
          audio file = r.record(source)
      result = r.recognize_google(audio_file)
[20]: # Export the Result
      with open('recognized.txt',mode='w') as file:
          file.write("This is what the Speech API Found: ")
```

```
file.write("\n")
file.write(result)
print('ready')
```

ready

[]:[