Convert PDF File Text to Audio Speech using Python.

In this code, a simple implementation of PDF Audiobook is shown. PDF text is read to the user as audio using this code.

Introduction

Reading stories or essays or any text can be arduous; however an audio reading of the text is convenient and doesn't require as much concentration as reading requires. In this project, I implemented a simple PDF to audio converter. This code scans page(s) of PDF and reads it using audio, to the user. While this project is good for simple text reading, it does not perform well if a scientific paper with equations is given to it because equations are not supported to be read in pytesseract OCR library which we used to convert image to text.

Project Flow

Here is the project flow diagram:



- 1. First, we take the PDF file and convert each page into image using PyPDF2 software.
- 2. Then, we take the image(s) and scan the text in the image using Pytesseract OCR software.
- 3. Then, we use Google Text to Speech (gTTS) library to convert text to audio file.
- 4. Lastly, we get the Pygame mixer to play the audio file loud.

Prerequisite Software

The software libraries required to run this code can be installed using:

- 1. PIP Install PyPDF2
- 2. PIP Install gTTs

Conclusion:

It was seen that the code performs really well in reading straightforward PDF text files, however, if equations are involved in the text, then the reader cannot properly read the equations. Hence, the code is good for simple text but not for scientific papers as it will fumble reading the equations. However, text will be read just fine.

Please give a star to the repo to let me know if the work helped you.