

## PDF TO AUDIO CONVERTER

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### ABSTRACT

The PDF to Audio Converter project provides an alternative way to access the PDF books for blind, lazy, readers and others. Using this PDF to Audio Converter the user will be able to listen to his/her favorite PDF and can do their daily routine. The application can be used to read any PDF which has page numbers. The following application can be used to convert text from PDF to audio using Python predefined libraries.

**Keywords:** Python, PyQt5, User-Interface, Text to Speech, converter.

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### I. INTRODUCTION

In the current busy routine people do not have time to take book and spend time reading it, instead every one needs an alternative access to read the content. If a person is travelling, he/she cannot read a book, instead of reading they can listen to it. Reading stories or essays or any text can be arduous however an audio book would make the task easy, by reading the text. However, an audio reading of text is convenient and does not require much concentration as reading requires. When a person tends to read a book, it requires to invest his/her time in reading. Whereas the audio book makes the task easy and user can perform their own task as well as listening to the audio. In this project, I have implemented a simple pdf to audio converter using python. This code will ask the user to select any pdf file and will count the pages in the pdf and extract data from the pdf page by page and read the extracted data to the user.

### II. OBJECTIVE

In the current generation students, researchers, authors don't find time to read a book on an electronic device as that might strain their eyes and might face other issues (headache, itchiness in eye). So, to overcome those problems I have designed an application which extracts the text from selected PDF and reads out to the user.

### III. LITERATURE REVIEW

This section is an overview of different computer solutions to provide audiotexts. Each solution has its unique navigation techniques between pages, sections, paragraphs etc. and its special features.

Books on tape is the oldest form of audio books started in 1970's and continued to be provided by the Recordings for Blind and Dyslexic (RFB) [1]. Readings of a book are stored on tapes. A special tape recorder is used to listen to the four sides of the tape; besides the two sides of a normal tape, two more sides are available by reversing the play

direction. The tape recorder also provides a dial to vary the playback speed; listeners familiar with the text or just skimming it can increase the tape speed. The inconvenience of using books on tape is that one book requires a large volume of tapes and it is tedious to flip and rewind/fast-forward the tape to find the desired section. However, to assist

with the navigation, beeps are used while fast-forwarding or rewinding to indicate page transitions. The listener finds relevant information with an index card accompanying the tapes, which indicates which tape, side and direction pages are on. Digital talking book (DTB) is a standard for audio books developed by the Digital Accessible Information System (DAISY) [2] consortium and standardized in 2002 by the National Information Standards Organization (NISO). The DTB standard describes how multimedia information, such as audio files, text files and images, are composed to create

an audio book. The standard is flexible and combines variable amounts of audio and corresponding text, which enables text searches. Having complete audio and text is not needed, for example, in a dictionary, which might have the complete text and audio only for pronunciations. A DTB viewer program can use the text to display word definitions to

a Braille display. Also with a DTB viewer the reader can efficiently navigate between or within sections, because of the hierarchical document structure defined by the DTB standard. Blind people rely on screen reader software, such as JAWS, to use a PC and read electronic documents. The screen reader reads all text that appears on a screen. Navigating the PC desktop and applications is possible with a series of keystrokes. Electronic documents, such as web pages, are also navigated with keystrokes, which enable moving between pages, lines, and words. The navigation, however, is limited Dorian Miller \* Assistive technology\* 4/26/2003 3

because there are no direct keystrokes to find the beginning of sections, paragraphs, or sentences. The original motivation for this project was to provide access to PDF files, which until recently were not accessible with screen readers. In the meanwhile, however, Adobe has released Acrobat Reader 5.1, the standard PDF viewer, with screen reader accessibility. Regardless of Adobe's recent development, the solution to listening to audiotexts on an MP3 player provides a unique and convenient access to text material.

#### **IV. EXISTING SYSTEM**

The Blind and Dyslexic people would find it difficult to read, to support those people different computer solutions have provided many alternative ways to convert text to audio. [1]. Readings of a book are stored on tapes. consortium and standardized in 2002 by the National Information Standards Organization (NISO). The DTB standard describes how multimedia information, such as audio files, text files and images, are composed to create an audio book. Many other solutions are to convert PDF files to MP3 players using third party applications or web applications.

#### **ISSUES**

In this section we are discussing the issues faced in the above section, they are [3] Readings of a book are stored on tapes, the inconvenience of using books on tape is that one book requires a large volume of tapes and it is tedious to flip and rewind/fast-forward the tape to find the desired section.

#### **V. PROPOSED SYSTEM**

In this current busy routine people do not find time to read a book, or to convert the PDF file into MP3 player using third party applications or web application. In this system I am developing an application using python to convert the PDF file into audio format and read out to the user. The application is more used friendly as it not requires any audio file or MP3 player. The user will have to select the PDF file which user wants to listen.

#### **VI. PROBLEM STATEMENT & ARCHITECTURE**

The above section (related work) we have discussed the way audio book was used. This section(issues) describes the drawback of the older versions of audio book. To overcome the(issues) the project PDF to Audio Converter has been developed to extract data from the pdf selected by the user, and to extract the data from the pdf, convert it to audio format to read out loud.

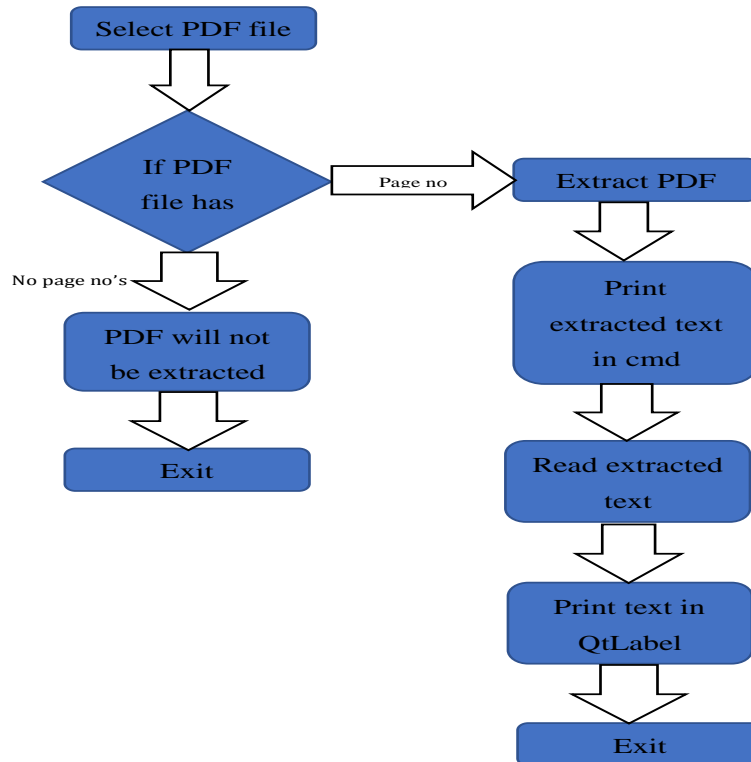
#### **ARCHITECTURE**

PDF to Audio Converter is a GUI application contains play, pause(buttons) and label to display text which allows the user to select the PDF files and the user has to click on the play button in order to extract text from PDF file and will read the text. The application has been developed in a way that the until the speaker read's out the extracted text the player cannot be paused. The GUI is also, provided with a label to display the text, the text will only be displayed only after reading the extracted text.

#### **VII. WORK FLOW**

- In this PDF to Audio Converter the user needs to select any PDF file from the desired location.
- After selecting the PDF file, the user needs to click play button.
- If the PDF file contains page numbers, the PDF file will be extracted.
- The extracted text will be printed on the console.
- The extracted text will be then read.
- Now, after reading the text the text will be printed on the QLabel which is provided in GUI.
- If the PDF file do not contain page numbers the above operations will not be performed.

## FLOWCHART



## VIII. ALGORITHM

- Step1: Start
- Step2: Select a PDF file
- Step3: Extract the PDF
- Step4: Display extracted text in the console
- Step5: Read out the text
- Step6: Read text will be printed on QLabel
- Step7: Exit

## IX. CONCLUSION

The main purpose of the application is to help students of Master of Computer Application understands the basics knowledge of the programming languages. The following results were achieved after completing the system and relate back to the system's objective.

- Should enable Master of Computer Application students to browse through the code and application: This can be achieved when students are able to run and install the application. When they run the application, they can use through the implementation of different objects.
- Should enable users to select the desired PDF and convert it to audio and display text in (PyQt5: Label), so the user can understand that particular text has been read.
- Should enable students with the reading disability (Dyslexia).

## FUTURE SCOPE

- The current application can only read text from PDF which has page numbers, adding PDF without page numbers, word, ppt with navigation will make the application more user friendly and easy to access.
- Pause button can be made more user friendly, as it to pause the speaker when user requests and to play from the paused word.

- The text will be added in (PyQt5: Label) only after reading the entire extracted content, it can be further developed to display text as the speaker is reading the extracted text with makes easy for students to understand.

## **X. REFERENCES**

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