PDF to Speech Converter

Overview

This Python script reads a PDF file, extracts its text, and converts the extracted text into speech using the pyttsx3 library. It can also save the speech as an audio file (MP3 format).

Requirements

Before running this script, you need to install the required Python libraries:

1. **PyPDF2**: A library used to extract text from PDF files.

2. **pyttsx3**: A text-to-speech (TTS) library used to convert text into spoken audio.

Install Dependencies

To install the required libraries, run the following commands:

bash

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pip install PyPDF2 pyttsx3

If you are using Anaconda, you can use the following:

bash

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conda install -c conda-forge pyttsx3

Usage Instructions

1. **Prepare the PDF File**: Place the PDF file you want to convert to speech in the same directory as this Python script. The script currently works with a file named invoice.pdf, but you can change the file name in the script to any PDF file you wish to process.

2. **Run the Script**:

   o   After installing the required libraries and placing the PDF file, run the script.

   o   The script will open the PDF file, extract all text from it, and read it out loud using the text-to-speech engine.

   o   It will also save the spoken text to an MP3 file (audio.mp3).

Script Flow

1. **Open PDF**: The script opens the specified PDF file and initializes the PDF reader.

2. **Extract Text**: It loops through each page in the PDF, extracts the text, and combines all the text into a single string.

3. **Text-to-Speech**: It uses pyttsx3 to convert the text into speech and reads it out loud.

4. **Save Audio**: The script saves the speech as an MP3 file (audio.mp3).

Example

To run the script:

bash

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python audiobook.py

This will process invoice.pdf, convert the text to speech, and create an audio file called audio.mp3.

Notes

- Ensure the PDF file is not encrypted or password-protected. The script won't be able to extract text from encrypted PDFs.

- If the PDF has images or scanned text (OCR), the script may not extract the text correctly. Only text-based PDFs will work properly.

- Make sure you have a working audio output device to hear the speech when the script runs.