PROJECT REPORT

PDF to Audiobook Converter

Introduction

In today's digital world, accessibility is a key concern. Many people prefer listening to content rather than reading it. The **PDF to Audiobook Converter** project aims to make PDF documents more accessible by converting them into spoken audio. This project provides an easy way for students, professionals, and visually impaired individuals to listen to written content on the go.

Abstract

This project is a Python-based application that extracts text from PDF files and converts it into speech. It uses **pymupdf** for text extraction, **pyttsx3** for text-to-speech conversion, and **Tkinter** to provide a simple graphical interface. The application allows users to upload a PDF, adjust settings such as volume and speed, and either play the audio directly or save it as an MP3 file.

Tools Used

- **PyMuPDF (fitz):** Extracts text from PDF files.
- **pyttsx3:** Converts text into speech (offline).
- **Tkinter:** Provides a graphical user interface (GUI).
- **Python:** Core programming language for the project.

Steps Involved in Building the Project

1. Import the required libraries (PyMuPDF, pyttsx3, Tkinter).
2. Design a simple GUI with file upload, sliders for speed/volume, and buttons for conversion.
3. Implement a function to extract text from the PDF while skipping empty pages.
4. Implement a text-to-speech function that either plays the audio or saves it as an MP3 file.
5. Link the GUI controls (upload, sliders, buttons) with the functions.
6. Test the application with sample PDF files to ensure proper conversion.

Conclusion

The **PDF to Audiobook Converter** successfully demonstrates how Python can be used to build real-world applications. It not only makes reading materials more accessible but also improves productivity by allowing users to listen to documents while multitasking. Future improvements could include support for OCR (for scanned PDFs) and additional language options.