PROJECT

Aim :-

Make Audio Book from PDF

Theory :-

Packages Used in project:

1)PyPDF2

- A Pure-Python library built as a PDF toolkit.

- It is capable of extracting document information splitting documents page by page merging documents page by page cropping pages merging multiple pages into a single page encrypting and decrypting PDF files.

- Go to terminal and type pip install PyPDF2 to install this package

2) pyttsx3

- pyttsx3 is a text-to-speech conversion library in Python.

- It works offline, and is compatible with both Python 2 and 3.

- Go to terminal and type pip install pyttsx3 to install this package

3) PySimpleGUI:

- simplegui is a simplified GUI generator using Tkinter.

- Go to terminal and type pip install PySimpleGUI to install this package

4)TKinter

- Python provides the standard library Tkinter for creating the graphical user interface for desktop based applications.

- Developing desktop based applications with python Tkinter is not a complex task.

- Go to terminal and type pip install TKinter to install this package

Skill Developed:

- Install and import packages
- Get knowledge about various packages
- Learn use of function, operators, Control statements and Built-in packages

Working of project:

1. It takes PDF as input from storage

2. It extracts all pages using pdfFileReader method of PyPDF2 package.

3. It read all context of pages using say method pyttsx3 package

Code :-

```python
from PySimpleGUI.PySimpleGUI import *
import pyttsx3
import PySimpleGUI as sg
```

```python
import PyPDF2
from tkinter.filedialog import *

#Initialize Player
player = pyttsx3.init()

#Set Voice to player
voices = player.getProperty('voices')
player.setProperty('voice', voices[1].id)

#Set Speed of Voice
player.setProperty("rate", 100)

#GUI
layout = [[sg.Text('Choose PDF File to read'),
sg.Button('Choose')],[sg.Button('Play'), sg.Button('Cancel')]]
window = sg.Window('Input', layout)

while True:
    event, values = window.read()

    #Cancle Button
    if event == 'Cancel':
        print("Closing")
        player.stop()
        window.close()

    #Choose button to get PDF
    if event == "Choose":
        book = askopenfilename()

    #Start playing PDF
    if event == "Play":
        pdfreader = PyPDF2.PdfFileReader(book)
        pages = pdfreader.numPages
        for num in range(0, pages):
            page = pdfreader.getPage(num)
            text = page.extractText()
            player.say(text)
            player.runAndWait()
```
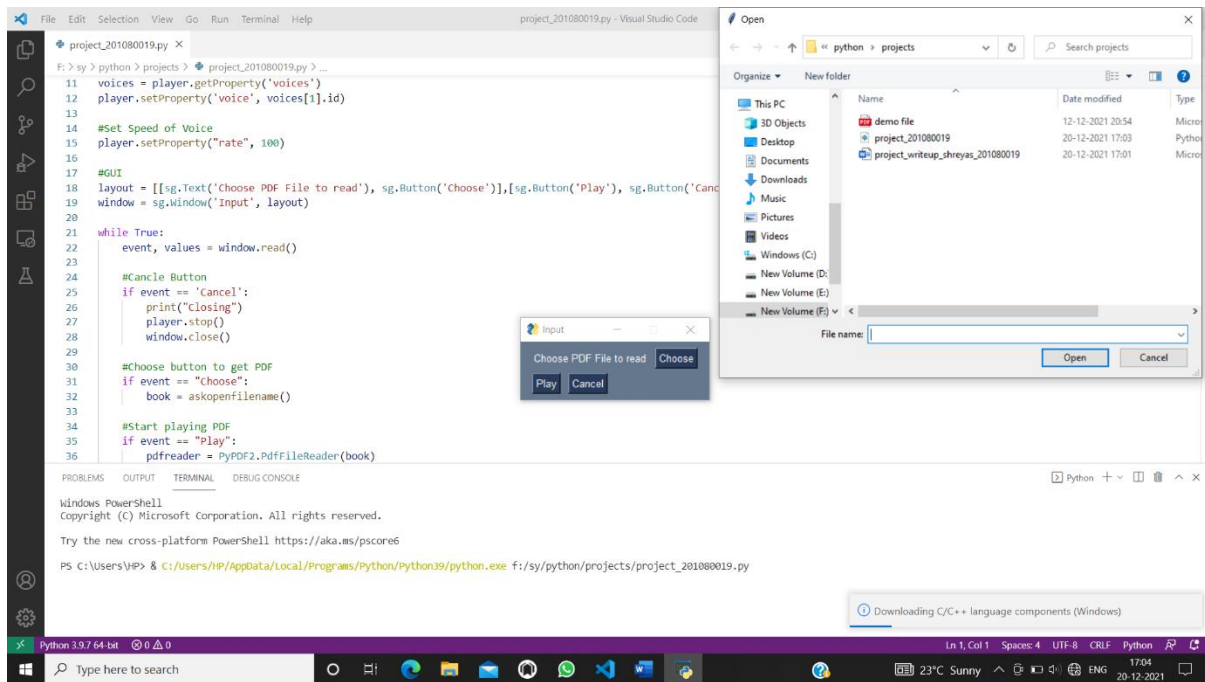
output :-

Conclusion :-

We learn about different packages in python i.e.pyttsx3,TKinter, PyPDF2 and SimpleGUI. We implement various methods of pyttsx3 to make audible our project.

We get knowledge about GUI in python. We also learn about various python concept like builtin function and packages in python. We also implemented about Control statements and operator in python.