PDF READER

Okay folks, gather around! It's time to learn how to create a simple PDF reader using the PyPDF2 module in Python. We'll be reading PDFs like a boss in no time!

Ready? Let's get started!

Step 1: Installing the PyPDF2 Library

First things first, we need to install PyPDF2, the library that will help us read PDF files. If you already have it installed, you can skip this step. Otherwise, open up your terminal or command prompt and type the following command:

```
Console Code
pip install PyPDF2
```

Alright, now that you have that installed, let's dive into the code!

First, we'll import the PyPDF2 module and then we'll open the PDF file that we want to read using the **open** method from the PyPDF2 module. We'll store the file in a variable so that we can reference it later.

Step 2: Importing the Library

Now that we have PyPDF2 installed, we need to import it into our Python code so we can use its functions. Add the following line to the top of your code:

```python
import PyPDF2
```

Step 3: Opening a PDF File

Next, we need to open the PDF file that we want to read. To do this, we'll use the **open()** function from the **built-in** Python library. We'll also specify the mode as **"rb"**, which stands for "read binary", since PDF files are binary files and not text files. Here's what the code for opening a PDF file looks like:

```python
pdf_file = open("example.pdf", "rb")
```

Replace "example.pdf" with the name of your PDF file, including the path to the file if it's not in the same directory as your Python script.

Step 4: Reading the PDF File

Now that we've opened the PDF file, it's time to read its contents. To do this, we'll create a **PdfFileReader** object, passing the **pdf_file** object we created in the previous step as an argument. Here's what that code looks like:

```
Python Code
pdf_reader = PyPDF2.PdfReader(pdf_file)
```

Step 5: Extracting Text from the PDF

With the **PdfReader** object, we can extract the text from the PDF file by looping through each page and calling the **extract_text()** method. Here's the code for that:

```
Python Code
for page_num in range(len(pdf_reader.pages)):
    page = pdf_reader.pages[page_num]
    print(page.extract_text())
```

Step 6: Closing the PDF File

After we're done reading the PDF file, it's important to close it. To do this, we simply call the **close()** method on the **pdf_file** object:

```
Python Code
pdf_file.close()
```

And that's it! You've just created a simple PDF reader in Python using the PyPDF2 module. It's as simple as that!

Now, you can make this code more robust by adding error handling, better formatting of the extracted text, and even UI if you'd like! The possibilities are endless!

But for now, you've got the basics down, and that's a great start! Happy coding!0