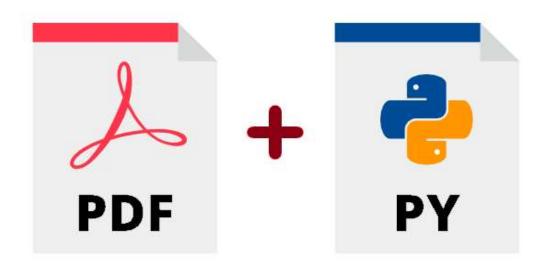
Pdf in Python by PyPDF3



What is PyPDF3?

PyPDF3 is a pure-python library for working with PDF files.

We can use PyPDF3 to:

- Extract document information from a PDF file in Python
- Rotate pages
- Merge PDFs
- Split PDFs

- Add watermarks
- Encrypt a PDF

1. How to install and use the PyPDF3

```
In the pip write => pip install PyPDF3
Using PyPDF3 => import PyPDF3 as MyPdf
```

2. Extracting document information (Title, Author, ...)

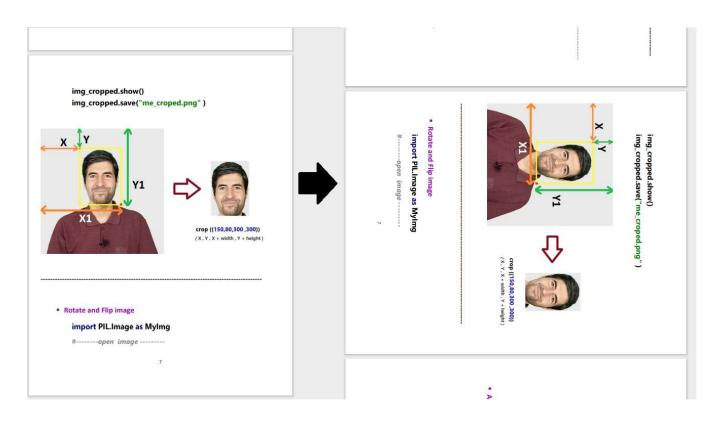
We can extract these information from Pdf file:

- Number of pages
- Author
- Creator
- Producer
- Subject
- Title
- •

```
import PyPDF3 as MyPdf
#----- open pdf file & create pdf reader object -----
MyPdfFile = open("files/test.pdf", "rb")
pdf reader=MyPdf.PdfFileReader(MyPdfFile, strict=True )
#-----get data from pdf file -----
print(pdf_reader.getNumPages() )
doc info=pdf reader.getDocumentInfo()
print(doc info)
#----- Go through all data-----
for item in doc info:
  print("Item: ",item)
  print("Value: ", doc info[str(item)] )
  #-----
  FullInfo=str(item).removeprefix("/")+":"+doc_info[str(item)]
  print(FullInfo)
#-----Get info one by one-----
DocAuthor=doc info['/Author']
DocCreator=doc_info['/Creator']
DocProducer=doc info['/Producer']
```

```
DocSubject=doc_info['/Subject']
DocTitle=doc_info['/Title']
DocCreationDate=doc info['/CreationDate']
#-----Combile all info -----
info=f"""
Author:{DocAuthor} _
Creator:{DocCreator} _
Producer:{DocProducer} _
Subject:{DocSubject} _
Title:{DocTitle} _
CreationDate:{DocCreationDate}
#-----
print(info)
MyPdfFile.close()
```

2. Rotating PDF pages



#-----

import PyPDF3 as MyPdf

#-----open pdf file & create pdf reader object -----

OrgPdfFile = open("files/test.pdf","rb")

pdf_reader=MyPdf.PdfFileReader(OrgPdfFile , strict=False)

---- create a pdf writer for new pdf file ---

PdfWriter = MyPdf.PdfFileWriter()

---- rotate all pages one by one ----

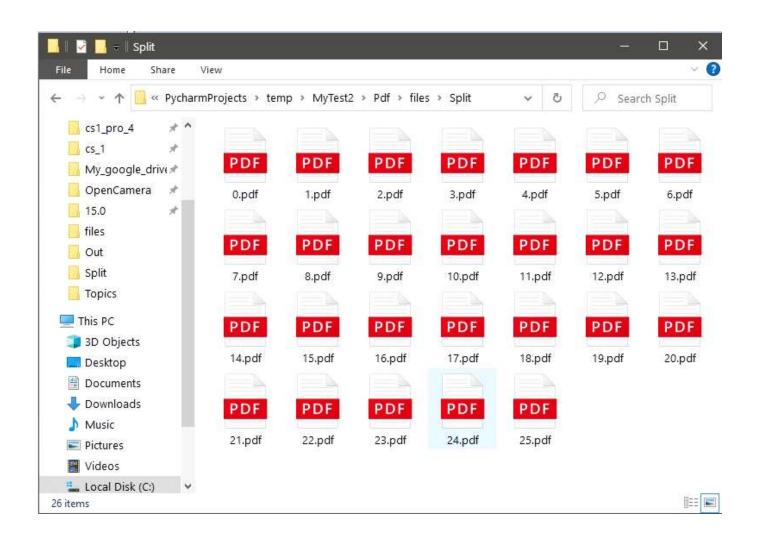
for page in range(pdf_reader.numPages):

```
# ----- create rotated page object -----
    pageObj = pdf_reader.getPage(page)
    pageObj.rotateClockwise(90) # rotation degree
   #---- add rotated page object to pdf writer-----
    PdfWriter.addPage( pageObj )
#----- create new pdf file object -----
NewPdfFile = open( "files/rotated_Pdf_File.pdf", "wb")
# ---- write rotated pages to new pdf file----
PdfWriter.write( NewPdfFile )
# ----close the original pdf file -----
OrgPdfFile.close()
# -----close the new pdf file -----
NewPdfFile.close()
```

3. Merging PDF files

```
#-----
   import PyPDF3 as MyPdf
   # ---- create pdf file merger object -----
   PdfMerger = MyPdf.PdfFileMerger(strict=False)
   # ----- append pdf files one by one -----
   PdfMerger.append("files/Test_Pillow.pdf")
   PdfMerger.append("files/test.pdf")
   # ---- write the combined pdf to output pdf file -----
   MergedPdfFile=open("files/MergedPdf.pdf", "wb")
   PdfMerger.write(MergedPdfFile)
   PdfMerger.close()
   MergedPdfFile.close()
_______
```

4. Splitting PDF file

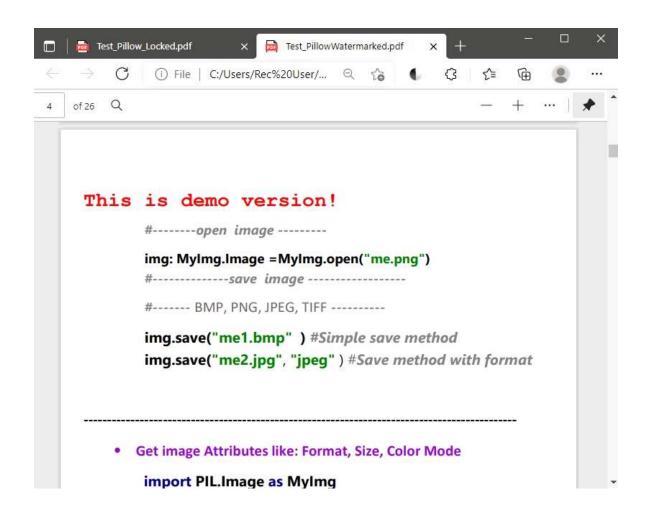


import PyPDF3 as MyPdf

#-----open pdf file & create pdf reader object ----OrgPdfFile = open("files/Test_Pillow.pdf", "rb")

```
pdf_reader=MyPdf.PdfFileReader( OrgPdfFile , strict=False )
#----split all pages one by one -----
for page in range(pdf_reader.getNumPages()):
  # -----create pdf reader object -----
  pdf_reader = MyPdf.PdfFileReader(OrgPdfFile, strict=False)
  # ---- create a pdf writer for new pdf file ---
  PdfWriter = MyPdf.PdfFileWriter()
  PdfWriter.addPage(pdf_reader.getPage(page))
  # -----create splitted file name -----
  SplittedPdfFileName = str(page)+".pdf"
  # ----- create new pdf file object -----
  SplitPdfFile = open("files/split/"+SplittedPdfFileName, "wb")
  PdfWriter.write(SplitPdfFile)
  SplitPdfFile.close()
_______
```

5. Adding watermark to PDF pages



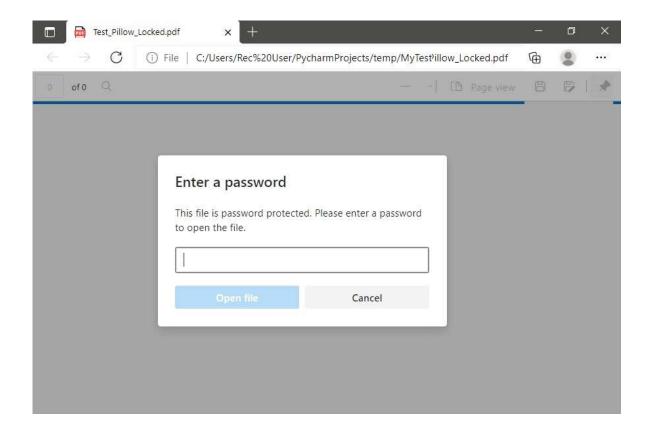
import PyPDF3 as MyPdf

```
#-----Open watermark pdf file -----
watermark = "files/test.pdf"
WmPdfFile = open(watermark, "rb")
#------Create pdf reader file for watermark-----
WmFileReader = MyPdf.PdfFileReader(WmPdfFile, strict=False)
```

```
WaterMarkPage = WmFileReader.getPage(0)
#-----opern original pdf file & create reader--
originalfile = "files/Test_Pillow.pdf"
OrgPdfFile = open(originalfile, "rb")
OrgPdfReader = MyPdf.PdfFileReader(OrgPdfFile,strict=False)
#----create pdf writer for out file-----
PdfOutWrite = MyPdf.PdfFileWriter()
#-----
for page in range(OrgPdfReader.getNumPages()):
  #---- get the current page of original pdf -----
  OrgPdfPage:MyPdf.pdf.PageObject=OrgPdfReader.getPage(page)
  #----merger vm to current page of original pdf ---
  OrgPdfPage.mergePage(WaterMarkPage)
  #----
  PdfOutWrite.addPage(OrgPdfPage)
#----save watermarked file -----
watermarkedfile = "files/Test_PillowWatermarked.pdf"
OutPdfFile=open(watermarkedfile, 'wb')
PdfOutWrite.write(OutPdfFile)
#----close all open files ----
WmPdfFile.close()
OrgPdfFile.close()
```

OutPdfFile.close()

6. How to Encrypt a PDF



#-----

import PyPDF3 as MyPdf

#-----open pdf file & create pdf reader object -----

```
OrgPdfFile = open("files/test.pdf","rb")
pdf_reader=MyPdf.PdfFileReader( OrgPdfFile , strict=False )
# ---- create a pdf writer for new pdf file ---
PdfWriter = MyPdf.PdfFileWriter()
#---- Copy source Pdf to Pdf writer -----
for page in range(pdf_reader.getNumPages()):
  PdfWriter.addPage(pdf_reader.getPage(page))
#-----Encrypt Pdf file-----
# owner pwd => No restrictions
# user_pwd => Custom restrictions
PdfWriter.encrypt(user_pwd="111", owner_pwd=None,
use_128bit=True)
#-----Save Encrypted file -----
output_pdf_file= open("files/Test_Pillow_Locked.pdf", 'wb')
PdfWriter.write(output_pdf_file)
OrgPdfFile.close()
```

This is only test Pdf!!!