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import os, sys, optparse

from exif import Image

import webbrowser

from PyPDF2 import PdfFileReader, PdfFileWriter

def convertGPScoordinate(coordinate, coordinate\_ref):

    decimal\_degrees = coordinate[0] + \

                      coordinate[1] / 60 + \

                      coordinate[2] / 3600

    if coordinate\_ref == "S" or coordinate\_ref == "W":

        decimal\_degrees = -decimal\_degrees

    return decimal\_degrees

def figMetaData(file\_path):

    img\_doc = Image(open(file\_path, "rb"))

    if not img\_doc.has\_exif:

        sys.exit(f"Image does not contain EXIF data.")

    else:

        print(f"Image contains EXIF (version {img\_doc.exif\_version}) data.")

        gps\_latitudee = convertGPScoordinate(img\_doc.gps\_latitude, img\_doc.gps\_latitude\_ref)

        gps\_longitudee = convertGPScoordinate(img\_doc.gps\_longitude, img\_doc.gps\_longitude\_ref)

        webbrowser.open\_new\_tab("http://www.google.com/maps/place/"+str(gps\_latitudee)+","+str(gps\_longitudee))

    print(f"{dir(img\_doc)}\n")

def pdfMetaData(file\_path):

    pdf\_doc = PdfFileReader(open(path, "rb"))

    if pdf\_doc.isEncrypted:

        try:

            if pdf\_doc.decrypt("PASSWORD\_GOES\_HERE") != 1:

                sys.exit("target pdf document is encrypted")

        except:

            sys.exit("target pdf document is encrypted")

    pdfWriter = PdfFileWriter()

    for pageNum in range(pdf\_doc.numPages):

        pdfWriter.addPage(pdf\_doc.getPage(pageNum))

    resultPdf = open('decrypted\_output.pdf', 'wb')

    pdfWriter.write(resultPdf)

    resultPdf.close()

if \_\_name\_\_ == "\_\_main\_\_":

    parser = optparse.OptionParser("Usage: python <script\_name> -f <file>")

    parser.add\_option("-f", dest="file", type="string", help="please provide full path to the document")

    (options, args) = parser.parse\_args()

    path = options.file

    if not path:

        print("please provide full path to the document")

        sys.exit(parser.usage)

    if any(path.endswith(ext) for ext in (".jpg", ".bmp", ".jpeg",)):

        figMetaData(path)

    elif path.endswith(".pdf"):

        pdfMetaData(path)

    else:

        print("File extension not supported/recognized... Make sure the file has the correct extension...")

