# Računalna forenzika

## Lab 4

import os, sys, optparse

from exif import Image

import webbrowser

from pypdf import PdfReader, PdfWriter

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.")

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

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

webbrowser.open\_new\_tab(f"http://www.google.com/maps/place/{latitude},{longitude}")

print(img\_doc.gps\_timestamp)

print(f"{dir(img\_doc)}\n")

def pdfMetaData(file\_path):

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

if pdf\_doc.is\_encrypted:

pdf\_doc.decrypt("hello world")

pdfWriter = PdfWriter()

for pageNum in pdf\_doc.pages:

pdfWriter.add\_page(pageNum)

with open('decrypted\_output.pdf', 'wb') as f:

pdfWriter.write(f)

if \_\_name\_\_ == "\_\_main\_\_":

parser = optparse.OptionParser("Usage: python skriptalab4.py -f hotel.jpeg")

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

(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("Wrong extension")