WAS IST EXIFTOOL?

```
$ man exiftool
```

```
NAME

exiftool - Read and write meta information in files

SYNOPSIS
    Reading
        exiftool [OPTIONS] [-TAG...] [--TAG...] FILE...

    Writing
        exiftool [OPTIONS] -TAG[+-<]=[VALUE]... FILE...
```

```
$ exiftool 1424c.pdf
```

```
$ exiftool 1424c.pdf

File Name                       : 1424c.pdf
Directory                       : .
File Size                       : 2009 kB
File Modification Date/Time     : 2018:11:11 19:01:57+01:00
File Access Date/Time           : 2018:11:11 19:03:19+01:00
File Inode Change Date/Time     : 2018:11:11 19:03:12+01:00
File Permissions                : rw-r--r--
File Type                       : PDF
File Type Extension             : pdf
MIME Type                       : application/pdf
PDF Version                     : 1.4
Linearized                      : No
Page Count                      : 59
Language                        : de-DE
Tagged PDF                      : Yes
XMP Toolkit                     : 3.1-701
Producer                        : Microsoft® Office Word 2007
Title                           : Hewlett-Packard LaserJet MFP w/Jetdirect Inside
Creator                         : James Smith
Description                     : Example File
Creator Tool                    : Microsoft® Office Word 2007
Create Date                     : 2013:11:04 08:29:01+01:00
Modify Date                     : 2013:11:04 11:42:01+01:00
Part                            : 1
Conformance                     : B
Author                          : James Smith
Last Modified By                : Grover Palmer
Subject                         : Example File
```

WELCHE INFORAMTION SIND VERFÜGBAR?

Datum:

```
Create Date                    : 2013:11:04 08:29:01+01:00
Modify Date                    : 2013:11:04 11:42:01+01:00
```

Software:

```
Producer                       : Microsoft® Office Word 2007
Creator Tool                   : Adobe InDesign CC 2017 (Windows)
Producer                       : PDF-XChange 3.60.0102 (Windows XP)
```

Benutzer:

```
Author                         : James Smith
Last Modified By               : Grover Palmer
Tag Author Email               : nicole.crawford@omurphy.com
Creator                        : ouser15
```

EXIFTOOL + WEBCRAWLER?

1. DOWNLOAD DER SEITE MIT EINEM WEBCRAWLER

```
wget --wait 1 \
      --recursive \
      --no-clobber  \
      --convert-links \
      --restrict-file-names=windows \
      https://www.example.com
```

1. DOWNLOAD DER SEITE MIT EINEM WEBCRAWLER

```
$ ls
www.example.com
```

2. METADATEN MIT EXIFTOOL EXTRAHIEREN

```bash
#!/bin/bash

for i in $(find . -type f)
  do
    hashsum=$(md5sum $i | cut -d' ' -f 1)
    exiftool $i > ./exiftooloutput/"$hashsum"
done
```

2. METADATEN MIT EXIFTOOL EXTRAHIEREN

```
$ ls exiftooloutput/
001b3189f0c4cfecf39c65ebc8a4bcfc
001b76592c46baeb82acb2b3d8ad8676
0055b7b0301916a8a163b3db7619a033
00e0526d701f51090e5246a523c75bd3
01a2139b37fc491eb8ab856d6da6094f
06748ea233120d7536e68c6288bd3015
06e990c7599fd46588473b21657171d0
08a6c32020588ed77ff0598c4049530c
0ab246be3c697664eae6be1830809e6f
0c06cfeb9c26a66fcae53e83c3c47ca6
....
```

3. DATEN AUSWERTEN?
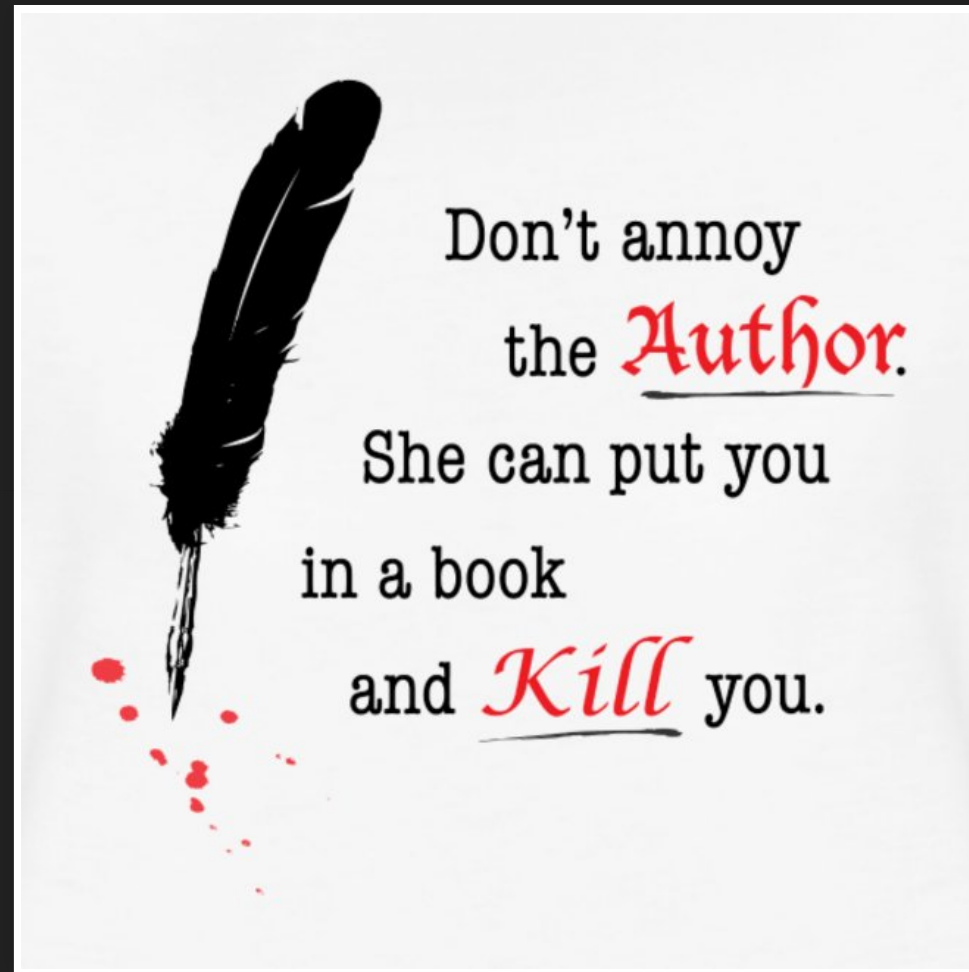
WELCHE SOFTWARE KOMMT ZUM EINSATZ?
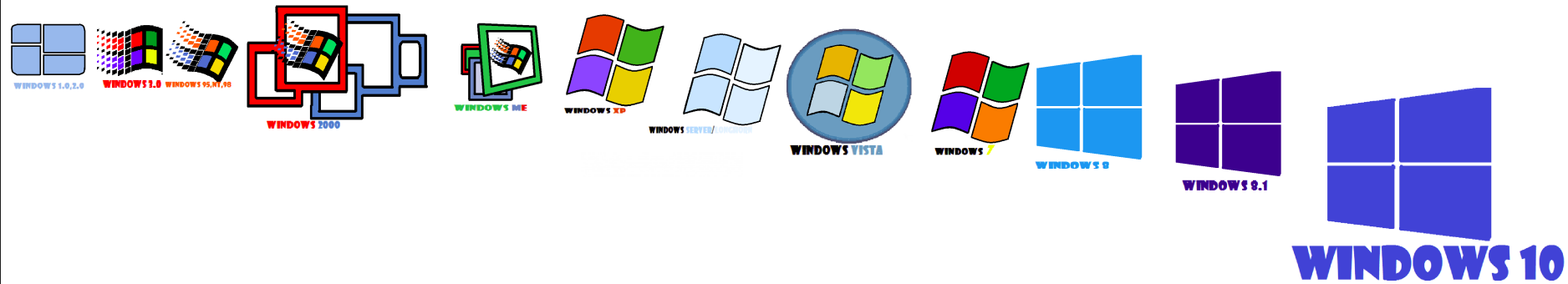
```
$ grep -i -r -E 'software|tool|creator|producer' | cut -d : -f 2-3 | sort | uniq -c | sort -rn

121 Producer                    : PDFCreator ***********************
121 Creator Tool                : PDFCreator ***********************
```

WER ERSTELLT DIE INHALTE?

Don't annoy the **Author**. She can put you in a book and ***Kill*** you.

```
$ grep -i -r -E 'Author' | cut -d : -f 2-3 | sort | uniq -c | sort -nr

94 Author                       : *****************
```

WELCHE KAMERA WIRD VERWENDET?

```
$ grep -i -r -E 'camera' | cut -d : -f 2-3 | sort | uniq -c | sort -nr

67 Camera Model Name            : *********************
58 Camera Orientation           : *********************
```

GPS POSITION DER DATEIEN ERMITTELN

```
$ grep -i -r -E 'camera' | cut -d : -f 2-3 | sort | uniq -c | sort -n

  1 GPS Position                    : ********************
  1 GPS Position                    : *******************

  ...
```

GEGENMASSNAHMEN

```
$ exiftool -all= foo.jpg
```

FRAGEN?