



# Warum Datenbanksysteme?

Dateien!

Library

Name	Anderungsdatum	Größe	Art
Accessibility	07.06.2012 09:09	--	Ordner
Address Book Plug-Ins	07.06.2012 09:09	--	Ordner
Automator	07.06.2012 09:11	--	Ordner
...	...	...	...
Frameworks	04.07.2012 18:33	--	Ordner
Graphics	07.06.2012 09:08	--	Ordner
Image Capture	07.06.2012 09:08	--	Ordner
Input Methods	07.06.2012 09:08	--	Ordner

72 Objekte, 47,24 GB verfügbar

bin

Name	Anderungsdatum	Größe	Art
2to3	07.06.2012 09:10	925 Byte	
2to3-	07.06.2012 09:10	925 Byte	
2to3-2.7	07.06.2012 09:10	74 Byte	Alias
2to32.6	07.06.2012 09:10	73 Byte	Alias
a2p	07.06.2012 09:10	63 KB	
a2p5.10	07.06.2012 09:10	230 KB	
a2p5.12	07.06.2012 09:10	230 KB	
addftinfo	07.06.2012 09:10	75 KB	
...	...	...	...
untitled	03.07.2010 10:44	498 Byte	Plain-Document

12 Objekte, 47,24 GB verfügbar

usr

Name	Anderungsdatum	Größe	Art
bin	22.01.2013 12:27	--	Ordner
clang-ide	09.12.2011 19:13	--	Ordner
include	21.09.2012 12:18	--	Ordner
lib	22.01.2013 12:27	--	Ordner
libexec	22.01.2013 12:28	--	Ordner
llvm-gcc-4.2	05.08.2012 04:19	--	Ordner
local	04.07.2012 18:33	--	Ordner
sbin	22.01.2013 12:27	--	Ordner
share	21.09.2012 12:18	--	Ordner
standalone	07.06.2012 09:09	--	Ordner
texbin	02.12.2008 15:40	63 Byte	Alias
tmp	26.03.2013 09:59	--	Ordner
X11	07.06.2012 09:15	--	Ordner
X11R5	07.06.2012 09:15	3 Byte	Alias

14 Objekte, 47,24 GB verfügbar

Macintosh HD

Name	Anderungsdatum	Größe	Art
Benutzer	19.12.2012 20:56	--	Ordner
Benutzerhandbücher und Informationen	17.11.2008 23:01	50 Byte	Alias
Benutzerinformationen	04.07.2012 16:12	49 Byte	Alias
data	01.12.2010 15:10	--	Ordner
Developer-old	12.10.2010 14:17	--	Ordner
Developer-old-1	07.01.2012 10:53	--	Ordner
HP installer Log file	17.11.2008 18:18	191 KB	Sampl.-Format
Library	26.03.2013 10:00	--	Ordner
MacFax Installer Shell Log	31.07.2011 15:05	140 Byte	Dokument
Programme	Vorbestern 11:24	--	Ordner
System	Heute 08:52	--	Ordner
untitled	03.07.2010 10:44	498 Byte	Plain-Document

14 Objekte, 47,24 GB verfügbar

super für viele Anwendungen

1

Anwendung

2

Dateisystem

# Beispiel:

## MS Word



# Schichtenarchitektur

Anwendung

Dateisystem

# Beispiel:

MS Excel



[Company Name] 120412  
Page 1 of 2

Customer ID	Customer Name	Product Name	Unit of Measure	Product Category	Unit	Standard Unit Measure	Product Price	Unit Weight	Total Quantity	Inventory	Product Code
1	Customer 1	Product 1	Unit 1	Category 1	Unit	Standard Unit Measure	1.000	1.000	01-01-2012 01:00:00	01-01-2012 01:00:00	Product 1
2	Customer 2	Product 2	Unit 2	Category 2	Unit	Standard Unit Measure	2.000	2.000	02-02-2012 02:00:00	02-02-2012 02:00:00	Product 2
3	Customer 3	Product 3	Unit 3	Category 3	Unit	Standard Unit Measure	3.000	3.000	03-03-2012 03:00:00	03-03-2012 03:00:00	Product 3
4	Customer 4	Product 4	Unit 4	Category 4	Unit	Standard Unit Measure	4.000	4.000	04-04-2012 04:00:00	04-04-2012 04:00:00	Product 4
5	Customer 5	Product 5	Unit 5	Category 5	Unit	Standard Unit Measure	5.000	5.000	05-05-2012 05:00:00	05-05-2012 05:00:00	Product 5
6	Customer 6	Product 6	Unit 6	Category 6	Unit	Standard Unit Measure	6.000	6.000	06-06-2012 06:00:00	06-06-2012 06:00:00	Product 6
7	Customer 7	Product 7	Unit 7	Category 7	Unit	Standard Unit Measure	7.000	7.000	07-07-2012 07:00:00	07-07-2012 07:00:00	Product 7
8	Customer 8	Product 8	Unit 8	Category 8	Unit	Standard Unit Measure	8.000	8.000	08-08-2012 08:00:00	08-08-2012 08:00:00	Product 8
9	Customer 9	Product 9	Unit 9	Category 9	Unit	Standard Unit Measure	9.000	9.000	09-09-2012 09:00:00	09-09-2012 09:00:00	Product 9
10	Customer 10	Product 10	Unit 10	Category 10	Unit	Standard Unit Measure	10.000	10.000	10-10-2012 10:00:00	10-10-2012 10:00:00	Product 10
11	Customer 11	Product 11	Unit 11	Category 11	Unit	Standard Unit Measure	11.000	11.000	11-11-2012 11:00:00	11-11-2012 11:00:00	Product 11
12	Customer 12	Product 12	Unit 12	Category 12	Unit	Standard Unit Measure	12.000	12.000	12-12-2012 12:00:00	12-12-2012 12:00:00	Product 12
13	Customer 13	Product 13	Unit 13	Category 13	Unit	Standard Unit Measure	13.000	13.000	13-13-2012 13:00:00	13-13-2012 13:00:00	Product 13
14	Customer 14	Product 14	Unit 14	Category 14	Unit	Standard Unit Measure	14.000	14.000	14-14-2012 14:00:00	14-14-2012 14:00:00	Product 14
15	Customer 15	Product 15	Unit 15	Category 15	Unit	Standard Unit Measure	15.000	15.000	15-15-2012 15:00:00	15-15-2012 15:00:00	Product 15
16	Customer 16	Product 16	Unit 16	Category 16	Unit	Standard Unit Measure	16.000	16.000	16-16-2012 16:00:00	16-16-2012 16:00:00	Product 16
17	Customer 17	Product 17	Unit 17	Category 17	Unit	Standard Unit Measure	17.000	17.000	17-17-2012 17:00:00	17-17-2012 17:00:00	Product 17
18	Customer 18	Product 18	Unit 18	Category 18	Unit	Standard Unit Measure	18.000	18.000	18-18-2012 18:00:00	18-18-2012 18:00:00	Product 18
19	Customer 19	Product 19	Unit 19	Category 19	Unit	Standard Unit Measure	19.000	19.000	19-19-2012 19:00:00	19-19-2012 19:00:00	Product 19
20	Customer 20	Product 20	Unit 20	Category 20	Unit	Standard Unit Measure	20.000	20.000	20-20-2012 20:00:00	20-20-2012 20:00:00	Product 20
21	Customer 21	Product 21	Unit 21	Category 21	Unit	Standard Unit Measure	21.000	21.000	21-21-2012 21:00:00	21-21-2012 21:00:00	Product 21
22	Customer 22	Product 22	Unit 22	Category 22	Unit	Standard Unit Measure	22.000	22.000	22-22-2012 22:00:00	22-22-2012 22:00:00	Product 22
23	Customer 23	Product 23	Unit 23	Category 23	Unit	Standard Unit Measure	23.000	23.000	23-23-2012 23:00:00	23-23-2012 23:00:00	Product 23
24	Customer 24	Product 24	Unit 24	Category 24	Unit	Standard Unit Measure	24.000	24.000	24-24-2012 24:00:00	24-24-2012 24:00:00	Product 24
25	Customer 25	Product 25	Unit 25	Category 25	Unit	Standard Unit Measure	25.000	25.000	25-25-2012 25:00:00	25-25-2012 25:00:00	Product 25
26	Customer 26	Product 26	Unit 26	Category 26	Unit	Standard Unit Measure	26.000	26.000	26-26-2012 26:00:00	26-26-2012 26:00:00	Product 26
27	Customer 27	Product 27	Unit 27	Category 27	Unit	Standard Unit Measure	27.000	27.000	27-27-2012 27:00:00	27-27-2012 27:00:00	Product 27

# Schichtenarchitektur

Anwendung

Dateisystem

Beispiel:

Adobe Photoshop



einfache Aufgaben:



einzelne Dateien schreiben und lesen?



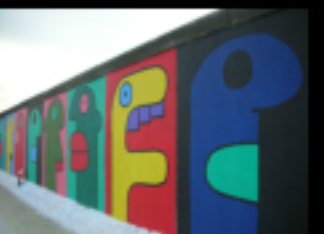
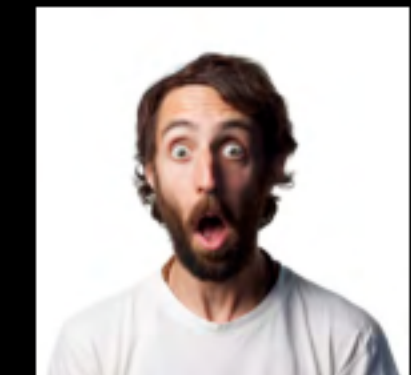
Daten in einzelnen bis wenigen Dateien  
auffinden?

Anwendung

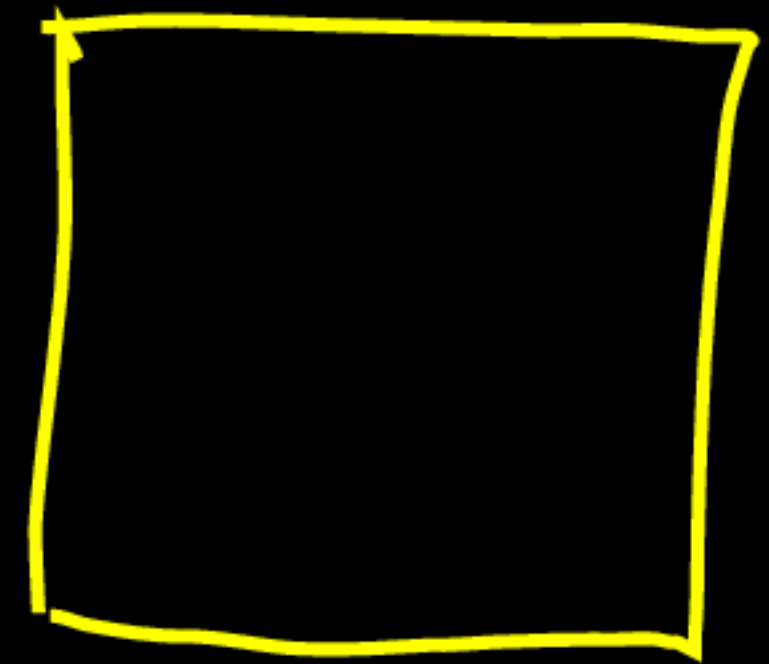
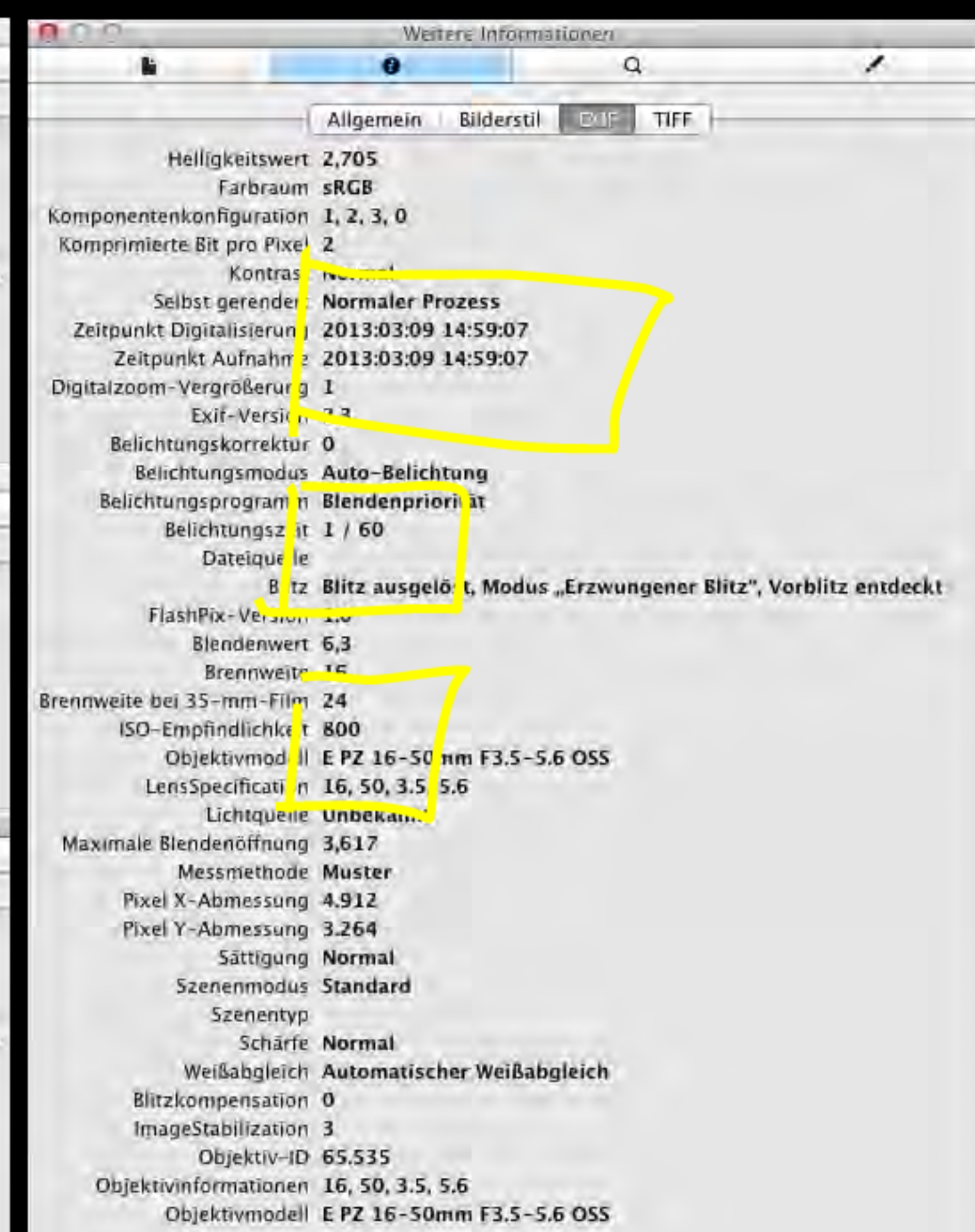
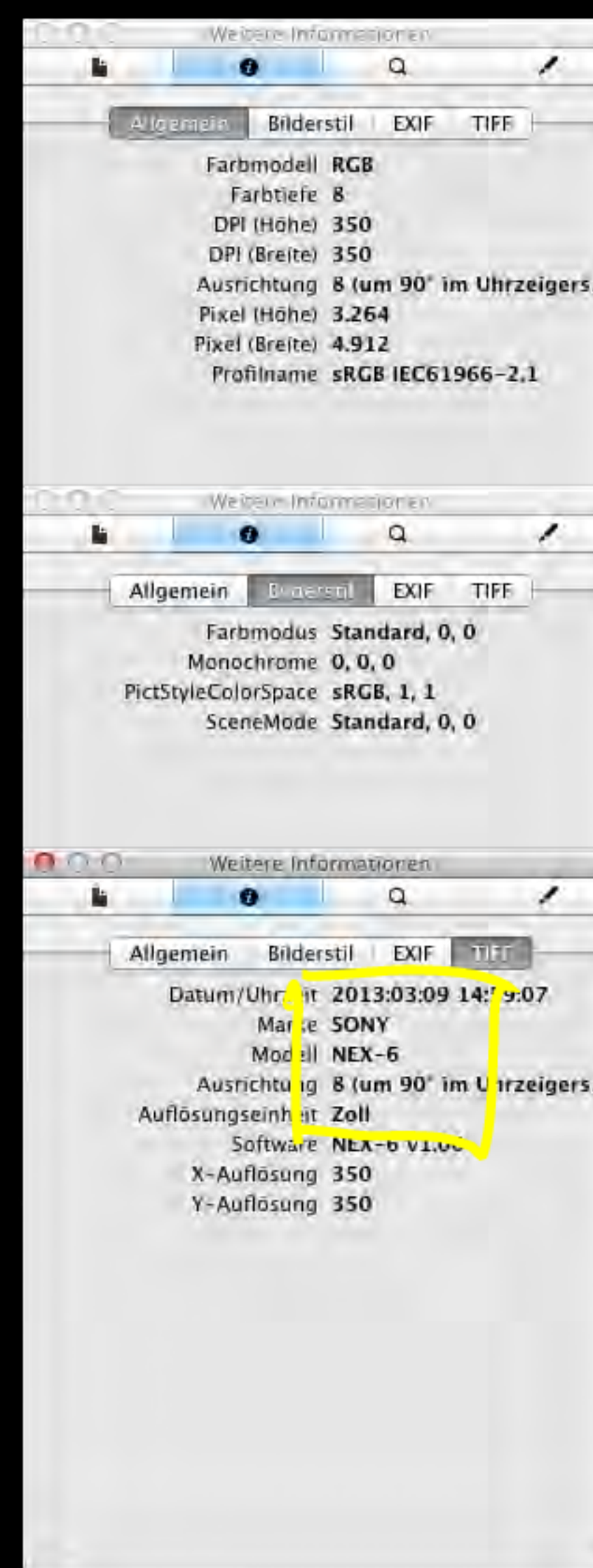
Dateisystem

Beispiel:

Foto-Verwaltung



Bilder enthalten Metadaten



MD

KB

Bilddaten vs Metadaten

Alle Bilder mit f5,6 und  
ISO 100?

GPS

Bild zeigt Eastside Gallery

UND

Fotograf = Schmidt?

Anzahl Bilder Eastside Gallery?



# Beispiel:

Foto-Verwaltung

Anwendung

Suche | Auflösung  
Index | Aggregation

Dateisystem



1a

Anwendung

1b

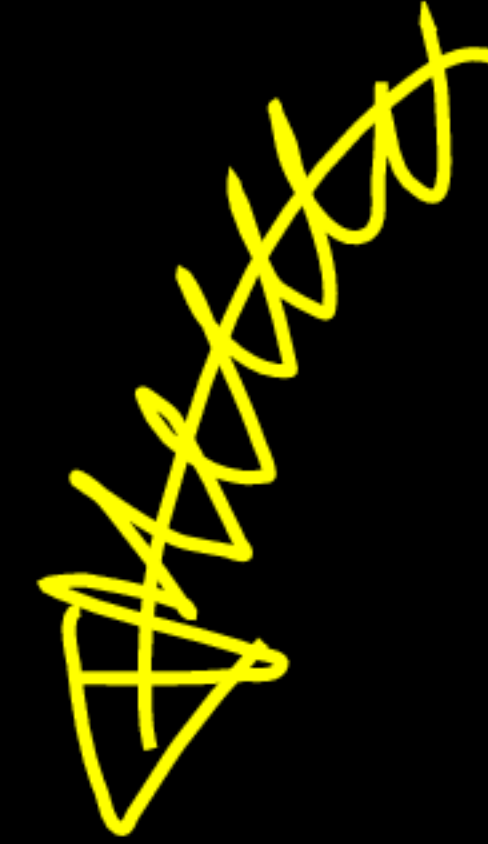
Datenmanagementsystem

2

Dateisystem

# Beispiel:

Foto-Verwaltung



DBMS



Umsatz Fotograf Schmidt in Quartal 3  
nach Bildkategorie?

Auswirkung Erfahrung und Kameramodell  
auf Downloads?

Anwendung

Anwendung

Dateisystem

# Beispiel:

Foto-Verwaltung

Fotografen-Verwaltung



Anwendung

Anwendung

Datenmanagementsystem

Dateisystem

# Beispiel:

Foto-Verwaltung

Fotografen-  
Verwaltung

DBMS

A screenshot of a database table with multiple columns and rows of data.A screenshot of a database table with multiple columns and rows of data.A screenshot of a database table with multiple columns and rows of data.A screenshot of a database table with multiple columns and rows of data.A screenshot of a database table with multiple columns and rows of data.

Vorteile:

zentrale Schnittstelle = “single point of truth“

anwendungsübergreifende Datenanalyse

effiziente Suche und Datenanalyse

effiziente Änderungen/Pflege

Datenkonsistenz





Nachteile:

Benutzen des DBMS

Import der Daten

Integration in Softwarearchitektur

Verwalten des DBMS / DBA

Lizenz- und Servicegebühren

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## other:

Jens Dittrich