What (Gestalt-)Psychology Has To Do With Software Development

Jochen Wolters



What your users think they purchase

Image by Flickr/Philips Communications

What your users may experience

Image by Flickr/*Crazy Diamond*



Then again, sometimes...

Image by Flickr/El_Enigma

What makes the Difference?

UI = System

To the user,
the UI is the system

Gestalt

*-noun, [guh-**shtahlt**, **-shtawlt**], (German):*

The essence or shape of an entity's complete form.

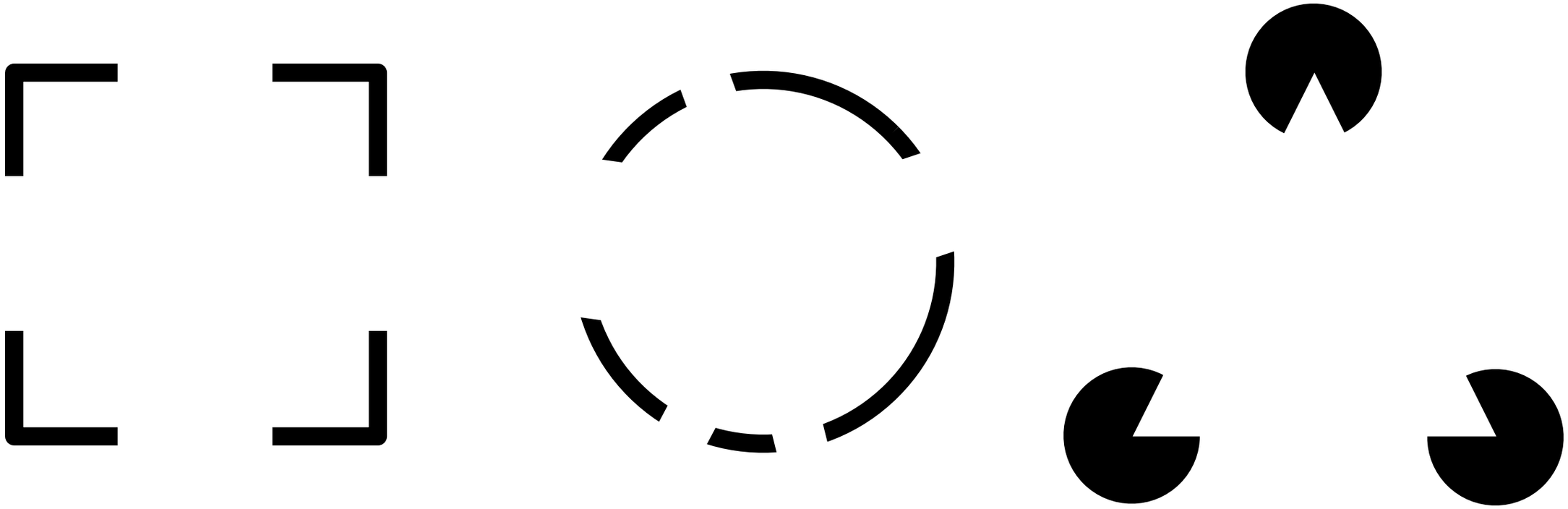


Image by R. C. James

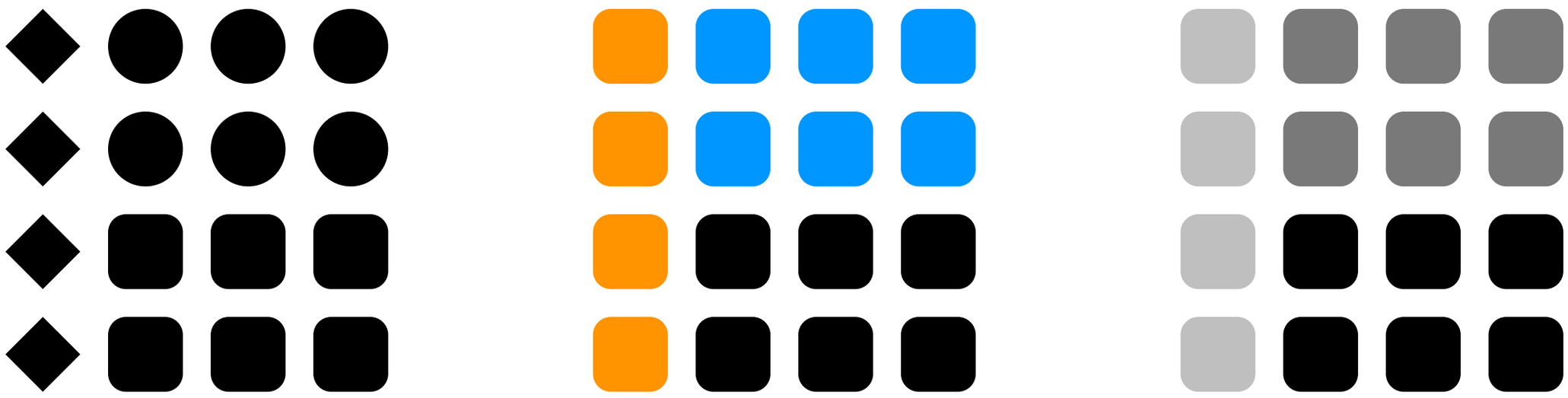


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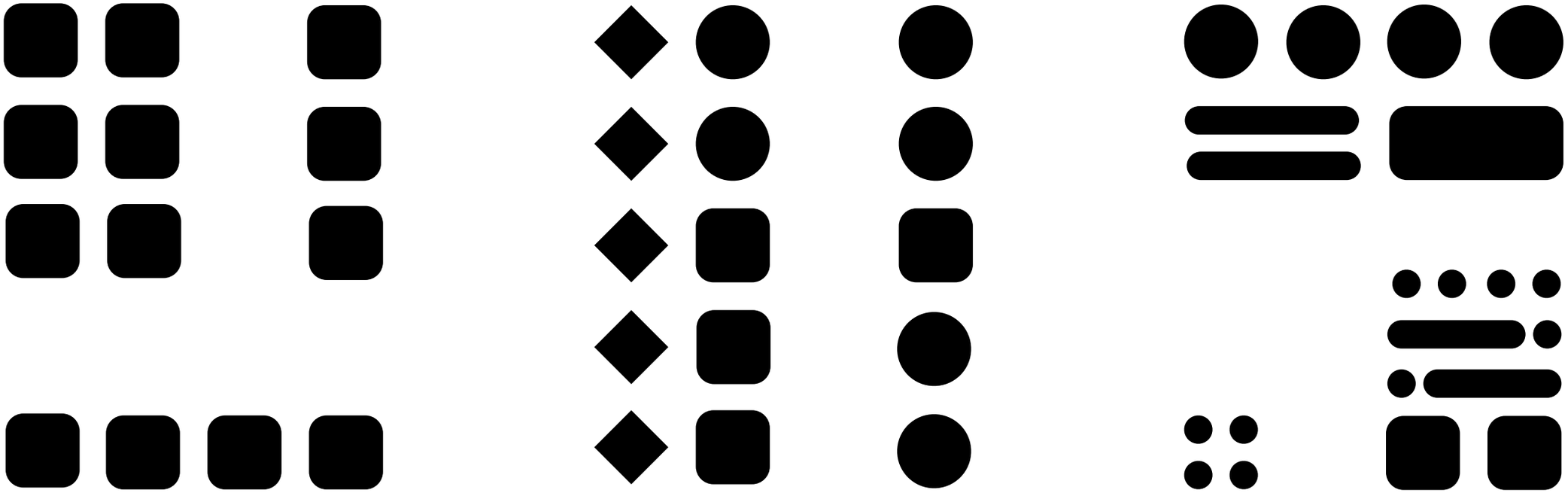
Closure



Similarity



Proximity




0
1
2
3
4
A/C


LFO
MODULATION BUSSES
OSCILLATORS
MIXER
FILTERS
ENVELOPES
OUTPUT
MASTER VOLUME
HEADPHONE VOLUME
HEADPHONES
CUTOFF
RESONANCE
ATTACK
DECAY
SUSTAIN
RELEASE
AMOUNT TO FILTER
RackMix 82
MASTER

Bulk Rename Utility

File Actions Options Help

MiroDownloads
PFiles
SSDBackup
System Volume Information
Virtual Machines
VirtualPC
DVD-RW-Laufwerk (E:)
Bilder (\\192.168.0.222) (Z:)
Acronis Secure Zone

Name	New Name	Sub...	Type	Siz
DSCN5495.JPG	Liechtenstein_Ferien_2009_184.JPG		JPEG...	0 ME
DSCN5496.JPG	Liechtenstein_Ferien_2009_185.JPG		JPEG...	0 ME
DSCN5497.JPG	Liechtenstein_Ferien_2009_186.JPG		JPEG...	0 ME
DSCN5498.JPG	Liechtenstein_Ferien_2009_187.JPG		JPEG...	0 ME
DSCN5499.JPG	Liechtenstein_Ferien_2009_188.JPG		JPEG...	0 ME
DSCN5500.JPG	Liechtenstein_Ferien_2009_189.JPG		JPEG...	0 ME
DSCN5501.JPG	Liechtenstein_Ferien_2009_190.JPG		JPEG...	0 ME
DSCN5502.JPG	Liechtenstein_Ferien_2009_191.JPG		JPEG...	0 ME

RegEx (1) R
Match
Replace
Include Ext.

Repl. (3) R
Replace
With
Match Case

Remove (5) R
First n 19 Last n 0
From 0 to 0
Chars Words
Crop Before
Digits High Trim
D/S Accents Chars
Sym. Lead Dots Non

Add (7) R
Prefix erien_2009_
Insert
at pos. 0
Suffix
Word Space

Auto Date (8) R
Mode None
Type Creation (Cur
Fmt DMY
Sep. Seg.
Custom
Cent. Off. 0

Numbering (10) R
Mode Suffix at 0
Start 100 Incr. 1
Pad 0 Sep.
Break 0 Folder
Type Base 10 (Decimal)
Roman Numerals None

File (2) R
Name Keep

Case (4) R
Same
Excep.

Move/Copy (6) R
None 1 None 1 Sep.

Append Folder Name (9) R
Name None Sep. Levels 1

Extension (11) R
Same

Selections (12) R
Filter *
Match Case
Folders Hidden
Files Subfolders
Name Len Min 0 Max 0
Path Len Min 0 Max 0

New Location (13) R
Path ...
Copy not Move

Reset
Revert
Rename

** **Working on multiple computers?** Synchronize your files across computers with **ViceVersa PRO**. Click Here To Find Out More ...

114 Objects (111 Selected) | Favourite

Aperture

Inspector Import New Name Keywords Email MobileMe Facebook Flickr Browser Split View Viewer Faces Places Loupe Full Screen

Library Metadata Adjustments

ISO 80 f/4 1/400 12,7mm

Presets Adjustments

▶ RAW Fine Tuning

▶ White Balance

▼ Exposure Auto

Exposure: 0.0
Recovery: 0.14
Black Point: 3.0
Brightness: 0.0

▼ Enhance

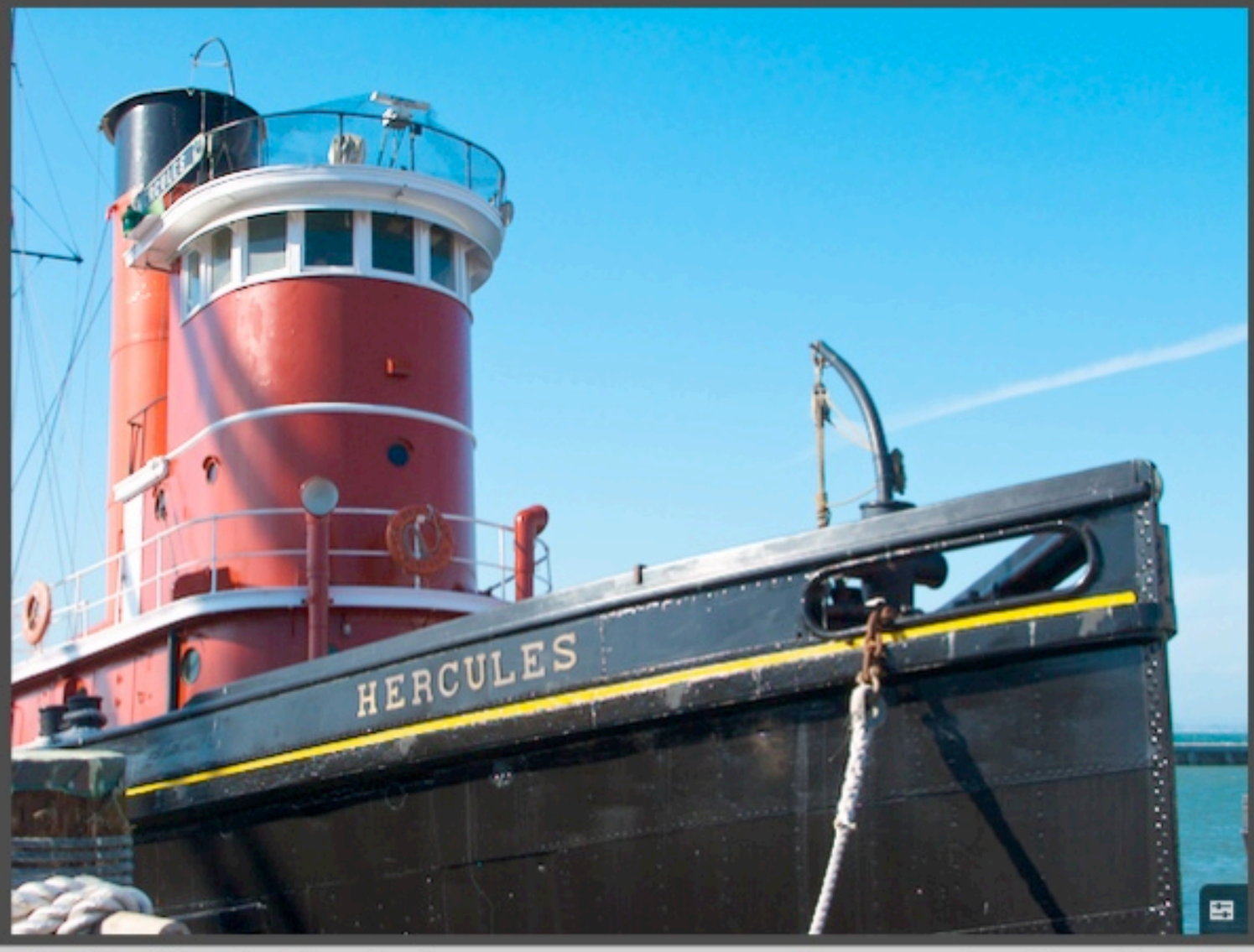
Contrast: 0.0
Definition: 0.11
Saturation: 1.0
Vibrancy: 0.25

▶ Tint

▶ Highlights & Shadows

▶ Levels Auto Auto

▶ Color



Processing...

Date

1 selected – 409 items displayed

Unrated or Better


Version N...


Version N...

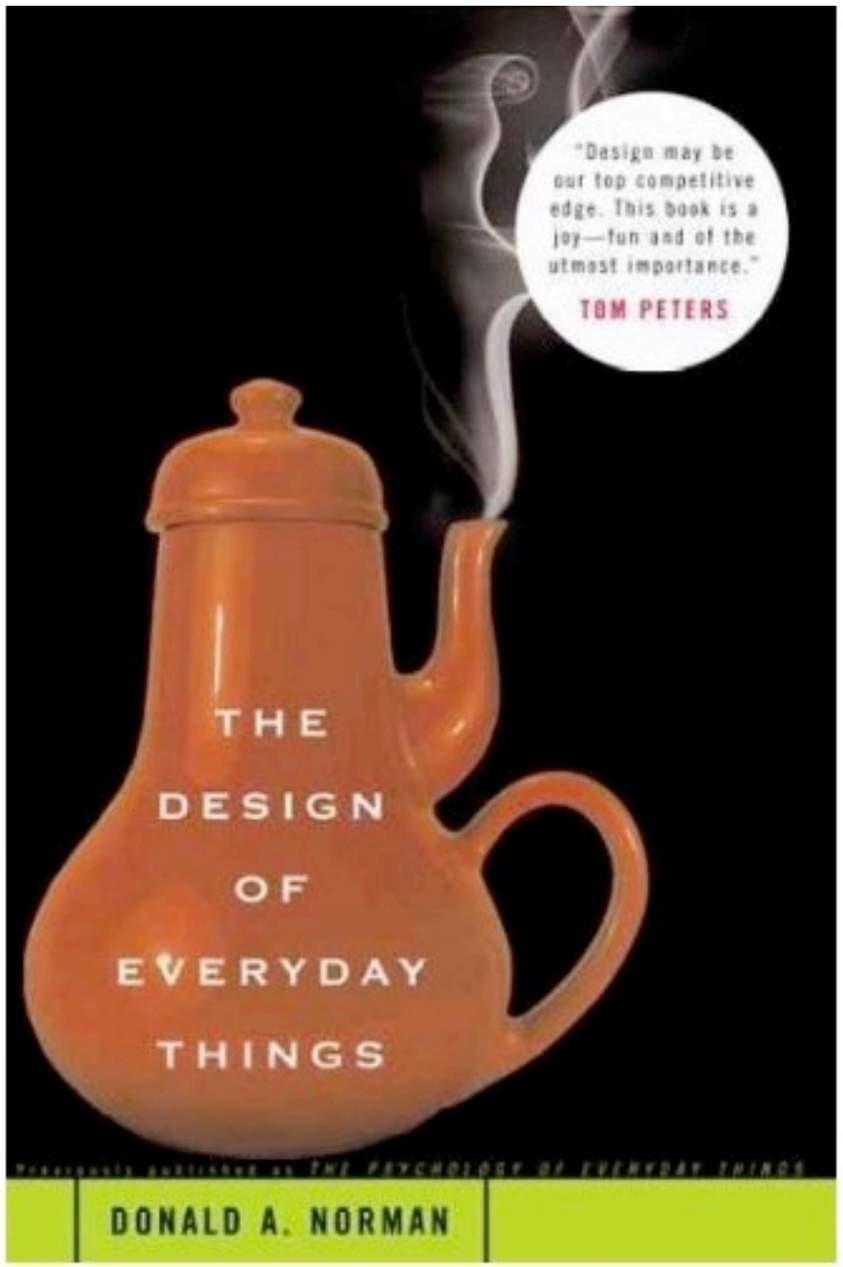

Version N...


Versio...


Versio...


Version N...

What you should do!



Donald Norman

The Design of Everyday Things

Bruce “Tog” Tognazzini’s

First Principles of Interaction Design

http://www.asktog.com/basics/firstPrinciples.html

Jakob Nielsen’s

Ten Usability Heuristics

http://www.useit.com/papers/heuristic/heuristic_list.html

Ben Shneiderman’s

Eight Golden Rules of Interface Design

http://faculty.washington.edu/jtenenbg/courses/360/f04/sessions/schneidermanGoldenRules.html

Ben Shneiderman's

Eight Golden Rules of Interface Design

1. Strive for **consistency**
2. Enable frequent users to use **shortcuts**
3. Offer informative **feedback**
4. Design dialog to yield **closure**
5. Offer simple **error handling**
6. Permit easy **reversal of actions**
7. Support **internal locus of control**
8. Reduce short-term **memory load**

The First-Impression Goal

$$\frac{n_{\text{Aha!}}}{n_{\text{Huh?}}} \overset{!}{\geq} 2$$

Any programmer who writes UI code must grok UID basics.

Discuss!

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http://uiobservatory.com