

# software studio

**conceptual design: why?**

**Daniel Jackson**

# ratings

Adobe Photoshop Lightroom is a photography software program developed by Adobe Systems for Mac OS X and Microsoft Windows, designed ... »

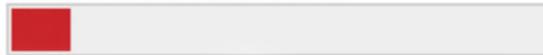
89% Love Lightroom



2,335 Positive Opinions out of 2,632

Adobe Photoshop Lightroom is a photography software program developed by Adobe Systems for Mac OS X and Microsoft Windows, designed ... »

11% Hate Lightroom



297 Negative Opinions out of 2,632

Adobe Photoshop is a graphics editing program developed and published by Adobe Systems Incorporated.

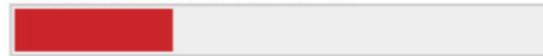
70% Love Photoshop



30,305 Positive Opinions out of 43,283

Adobe Photoshop is a graphics editing program developed and published by Adobe Systems Incorporated.

30% Hate Photoshop



12,978 Negative Opinions out of 43,283

Adobe Acrobat is a family of computer programs developed by Adobe Systems, designed to view, create, manipulate and manage files ... »

47% Love Acrobat



207 Positive Opinions out of 444

Adobe Acrobat is a family of computer programs developed by Adobe Systems, designed to view, create, manipulate and manage files ... »

53% Hate Acrobat



237 Negative Opinions out of 444

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# adobe acrobat pro

The image displays the Adobe Acrobat Pro interface. At the top, a toolbar contains icons for 'Create', file operations (save, print, email), settings, and navigation. Below the toolbar, a navigation pane shows page 2 of 3, zoomed at 300%. The main document area shows a page with the text: 'MIT Computer Science & Artificial Intelligence Lab', 'Daniel Jackson, 2012', and 'digital image'. A vertical sidebar on the left contains icons for document, bookmark, paperclip, and signature. A text editor window titled 'acrobat-sig-paste.txt' is open, showing the following text:

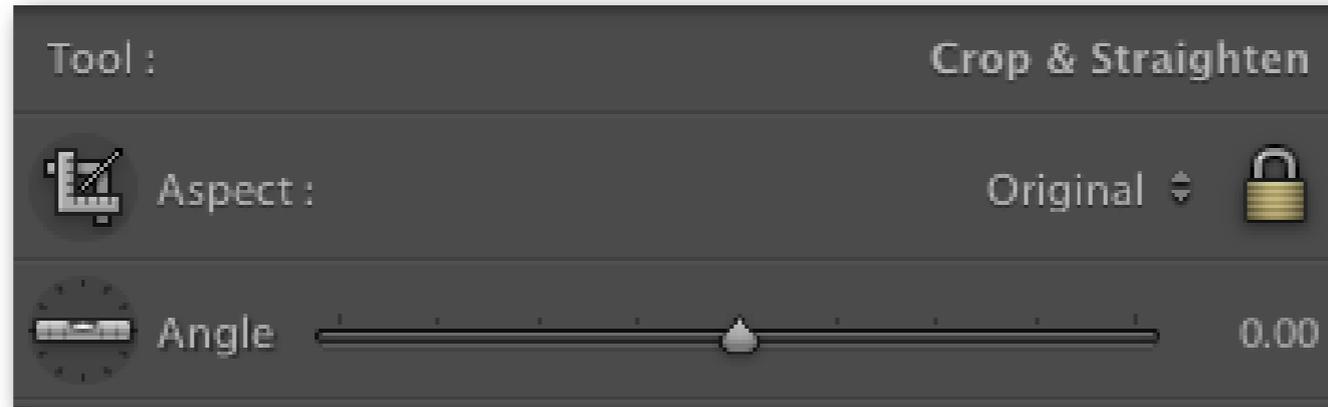
```
1 how to add a signature in acrobat
2 -- open document in acrobat
3 -- Tools->Advanced Editing->Touchup Object Tool
4 -- right click at desired point | Place Image...
5 then select jpg
6
7 how to add date
8 -- Tools->Typewriter
9
```

On the right, a sidebar titled 'Pages' lists various actions: Rotate, Delete, Extract, Replace, Crop, Split Document, Insert Pages (with sub-options: Insert from File, More Insert Options), Edit Page Design (with sub-options: Header & Footer, Background, Watermark, Bates Numbering), Content, Forms, Action Wizard, Recognize Text, Protection, and Sign & Certify.

# cropping in photoshop



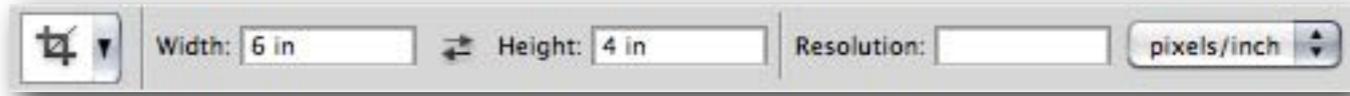
# adobe lightroom



# charm & style

Screenshot from MailChimp removed due to copyright restrictions.

# skin deep?



Screenshot of Microsoft Word's "Clippy" removed due to copyright restrictions.

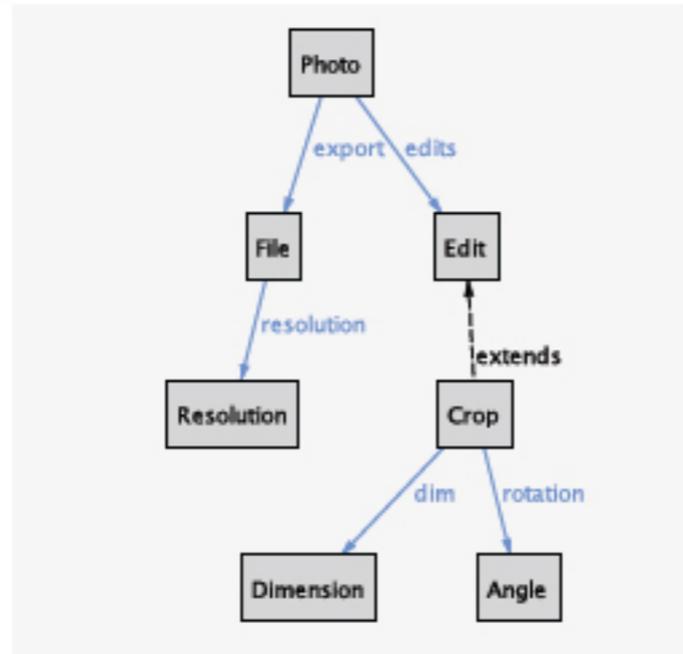
Clippy  
2003-2008  
*RIP*

Lightroom architecture diagram removed due to copyright restrictions.  
See [Troy Gaul's presentation](#) for reference image.

code

user's model

interface



conceptual model

putting it another way...

**“make your  
abstractions  
robust”**

**but which  
abstractions?**

weak concepts	strong concepts
hard to use	intuitive, predictable
a mess to maintain	decoupling & localization
unreliable & buggy	more dependable

# standard (good) practice

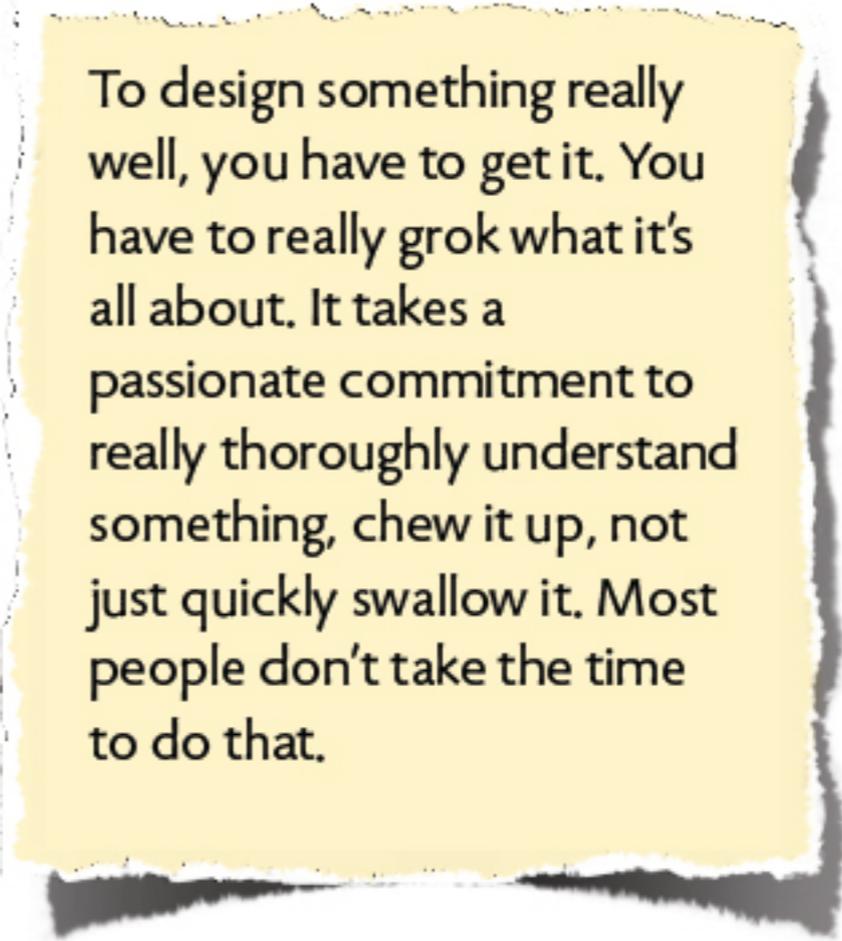
thinking & sketching  
simulating features

normal design practice  
copying good ideas

evaluating products  
user feedback

discarding failed designs  
“refactoring”

Photo of Steve Jobs, speaker of the quotation,  
removed due to copyright restrictions.



To design something really well, you have to get it. You have to really grok what it's all about. It takes a passionate commitment to really thoroughly understand something, chew it up, not just quickly swallow it. Most people don't take the time to do that.

**non-standard (better) practice**

**being explicit**

focusing: what are the concepts?

relating: how are they related to each other?

analyzing: what properties do they have?

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6.170 Software Studio  
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