

CS445 / ECE451 / CS645 / SE463
Software Requirements Specification & Analysis

User Interfaces



User Interfaces as Requirements

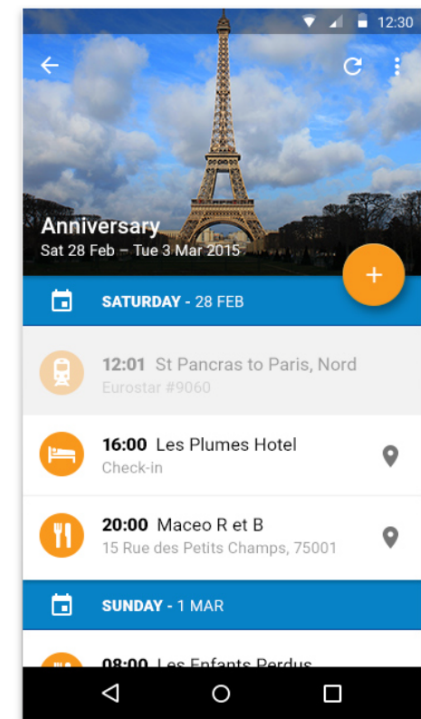
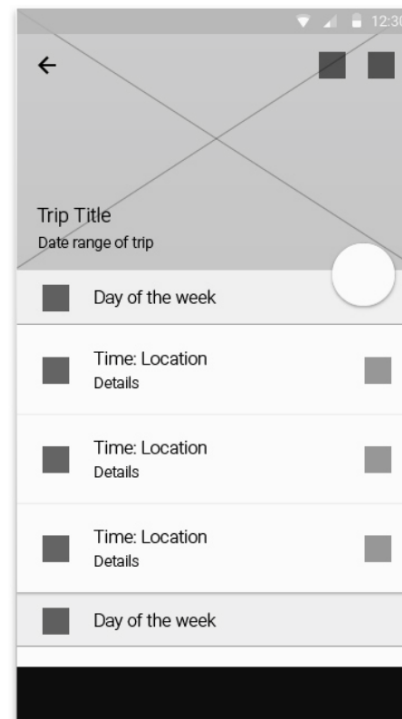
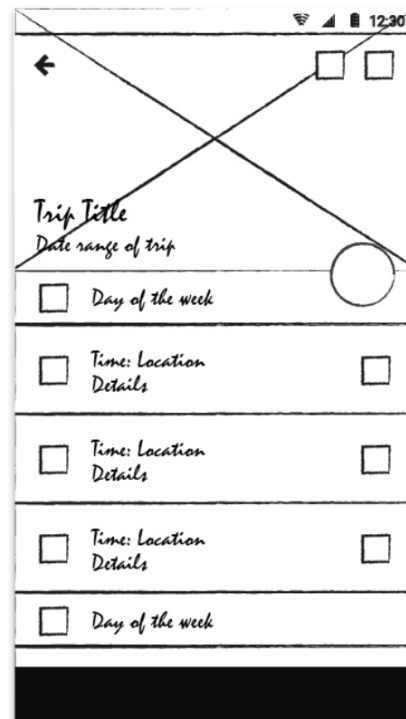
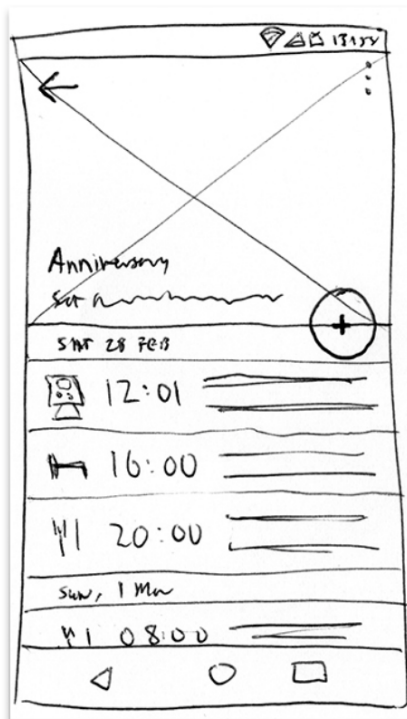


© 19 September, 2019, Scott Adams, Inc., Distributed by Andrew McMeel

Apple's Design Process

- **Paired Design Meetings** Designers have two meetings each week.
 - *Crazy brainstorming*, where they let their imaginations run wild, with no constraints
 - *Production meeting*, work out how a crazy idea from the first meeting might work
- **Pixel Perfect Mockups**
- **10 to 3 to 1** Apple designers start with 10 mockups for any product or feature, which they whittle to 3, refine those into one design
- **Designers have complete freedom**

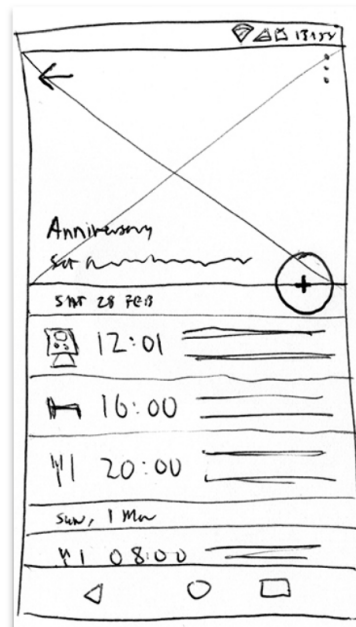
Iterative UI Design Process



<http://murdochcarpenter.com/portfolio/wireframes/>

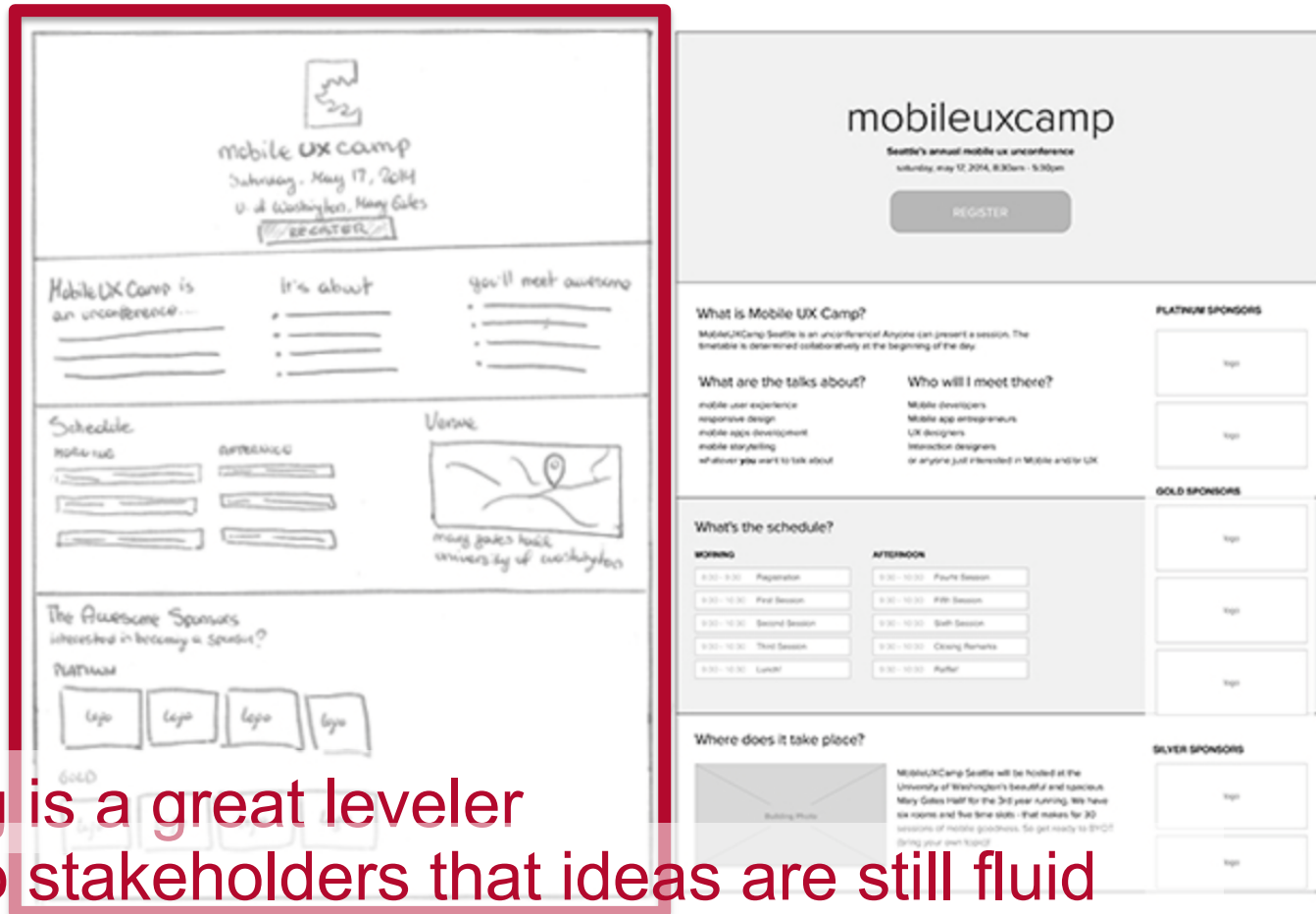
Sketches

Sketches of the UI focus on content: the scope of what to include on a screen, and how to lay it out.

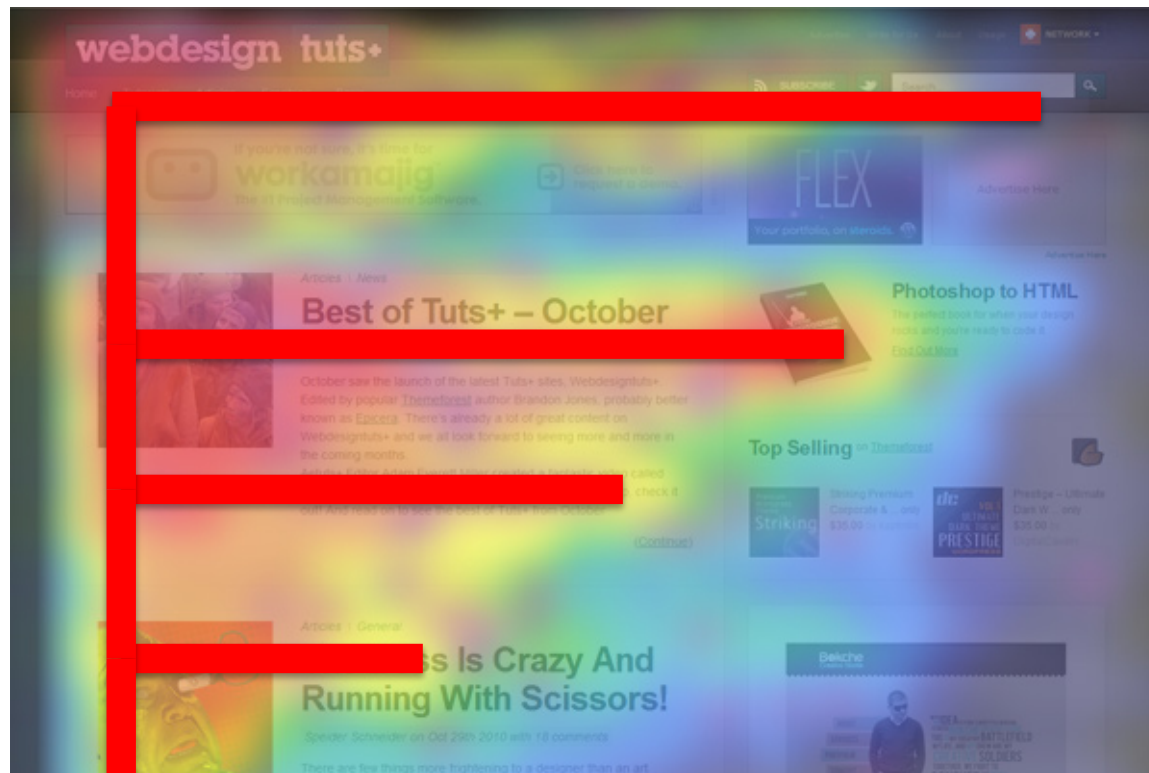


<http://murdochcarpenter.com/portfolio/wireframes/>

Sketching vs. Wireframing



Example: F-Layout Design



<http://webdesign.tutsplus.com/articles/understanding-the-f-layout-in-web-design--webdesign-687>

The heatmap shows where users tend to focus their gaze, reading left to right, and top to bottom (but less to the right the lower they gaze)

JavaScript Unit Testing For Beginners

Jake Rocheleau • Coding • July 1, 2016

Developers should love the security of unit tests. Nobody loves writing unit tests, but the peace of mind they bring can easily be worth the extra work. Unit tests check blocks of code to ensure that they all run as expected. This is very common for traditional software development and now very common in web development too. But how exactly does JavaScript fit into the unit...

[Read More](#)

How to Create a Perfect Color Scheme [Infographic]

Diana Valeanu • Design • June 29, 2016

Nothing can make a project stand out or identify your brand or business like color. Just think: What would the "Golden Arches" of McDonald's be without the signature red and gold? When it comes to creating the perfect color scheme, there are plenty of things to consider. Established branding is important and should be honored if colors already exist. But if not, the...

[Read More](#)

20 Great Examples of Website Gamification

Nataly Birch • Websites Examples • June 27, 2016

Modern web technologies open up new horizons for the creatives. If you still mourn the death of Flash, then you are likely to miss unique and ample opportunities provided by WebGL, HTML5 and other advanced libraries and languages. The time has come to leave past in the past and embrace cutting-edge solutions that bring to life outstanding projects full of dynamics and...

[Read More](#)

Our Products [Show more](#)



WEBSITE FRAMEWORK
Slides
\$249



WORDPRESS PLUGIN
Qards
\$99



DESIGN FRAMEWORK
Startup Framework
\$249



DESIGN FRAMEWORK
Flat UI Pro
\$39

Designmodo Market [Show more](#)



UI KIT
Barni E-shop
\$48



UI KIT
Noon UI Kit
\$29



MOCKUPS
UI Presentation Kit
\$29



MOCKUPS
Fancy Items
\$38



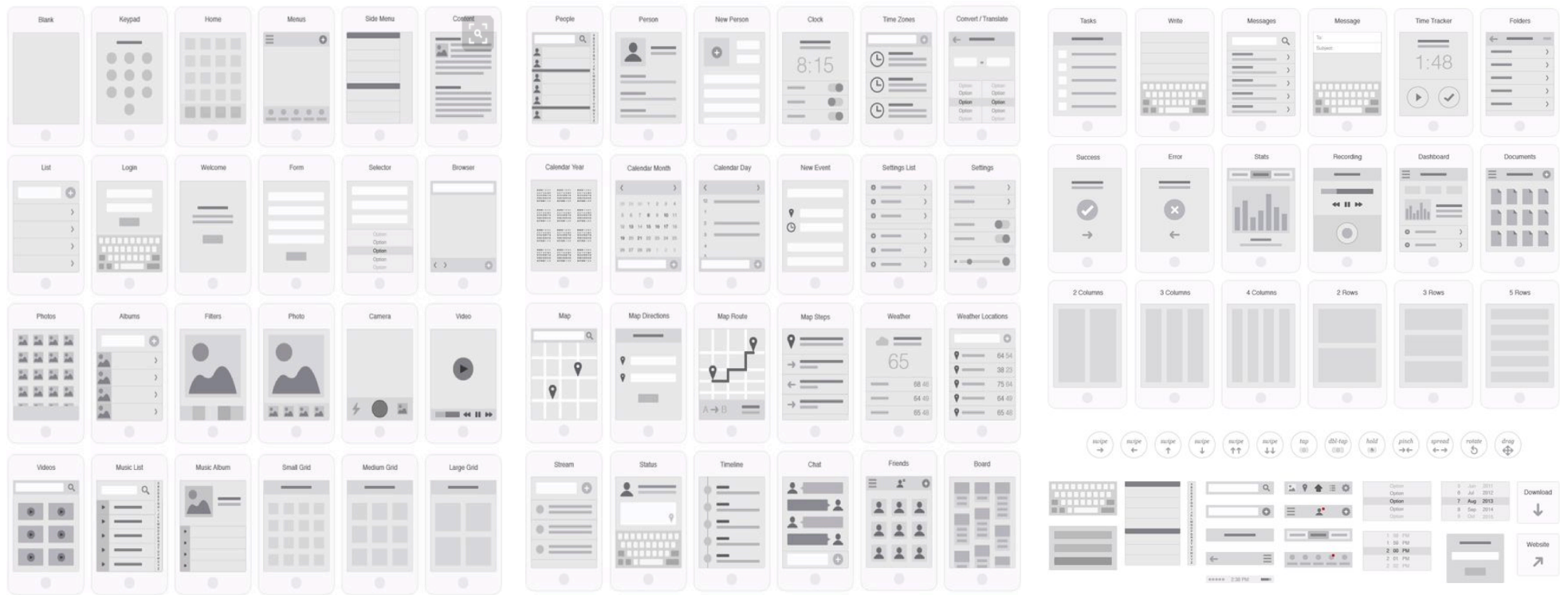
UI KIT
Barni-for-Media UI Kit
\$38

Newsletter

Get our products/news earlier than others, let's get in touch.

Enter your email address

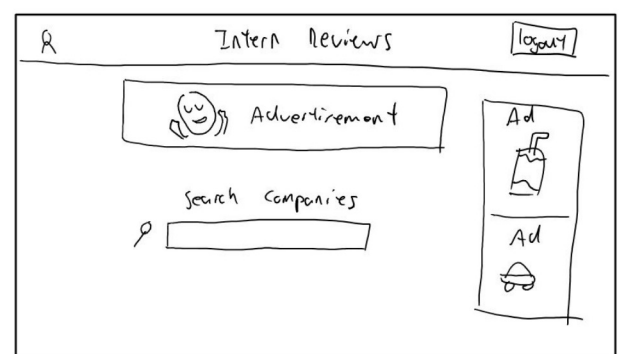
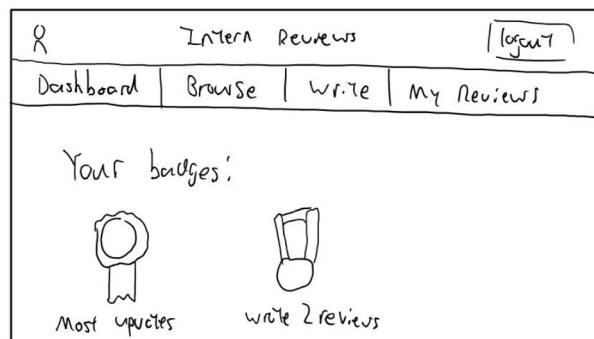
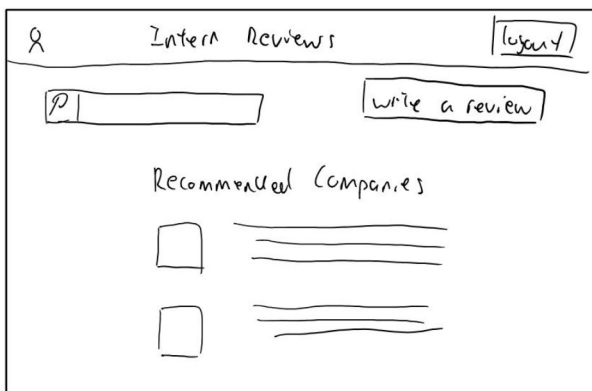
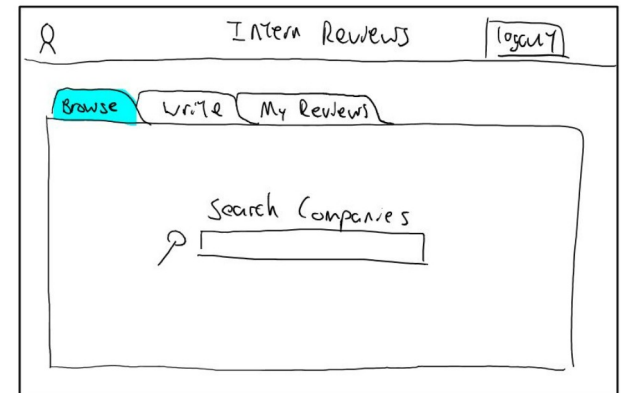
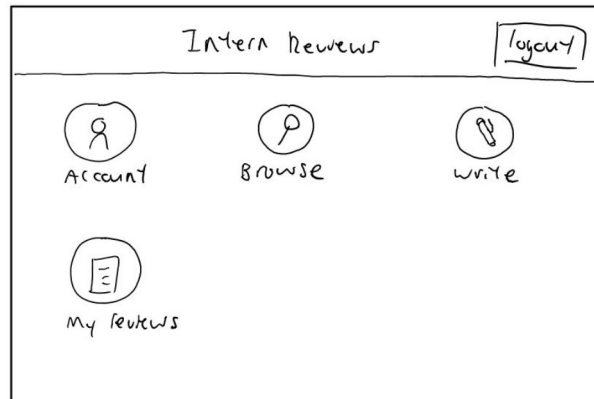
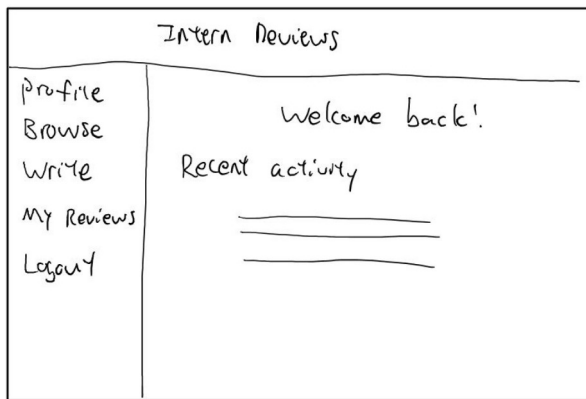
UI Templates



UX kits from ux.com

Crazy 8s (sketching)

Sketches of possible landing pages for InternReviews

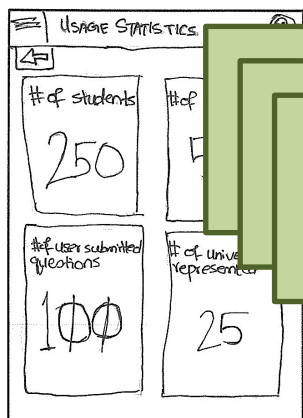


Crazy 8s (critique, iteration)

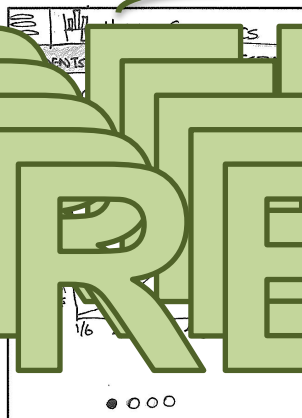
Sketch alternatives for Cardio screen reporting usage statistics

+ Tabs nicely organize data

REPEAT



- Too little content



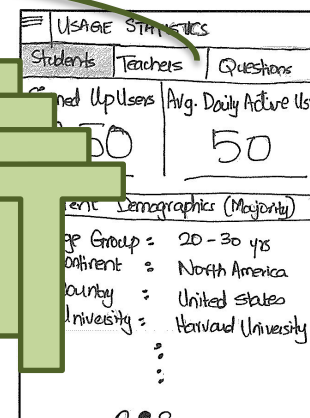
+ Better visualization
- Too much information



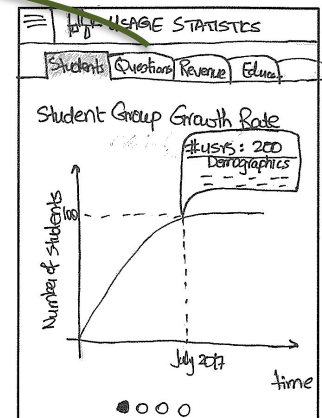
- Too textual
- Uses space poorly



- Too textual



+ Best layout of text



+ Graphs provide best visualization

User Flow Cardio

Login



Welcome

Procedure Splash Page

Procedure Description

Assessment

Disease Statistical Analysis

Submit Question

Review Approval Requests

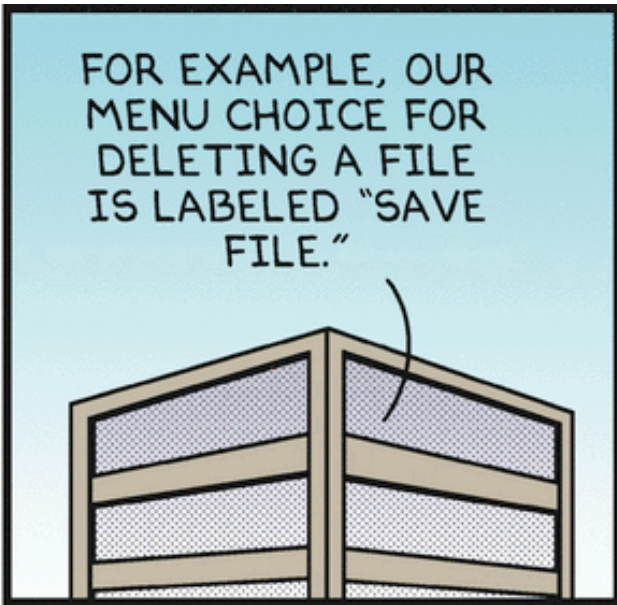
Usage Stats

User Profile





DILBERT.COM @SCOTTADAMSSAYS



5-2-18 ©2018 Scott Adams, Inc./Dist. by Andrew McMeel



© 2 May, 2018, Scott Adams, Inc., Distributed by Andrew McMeel

References

Karl E Wieggers and Joy Beatty. *Software Requirements*, 3ed. Microsoft Press, 2013.

Chapter 15: “Risk reduction through prototyping”

Chapter 10: “Documenting the requirements”



**UNIVERSITY OF
WATERLOO**

All rights, including copyright, in the content of these slides and video are owned by the course author. The slides and videos are owned by the University of Waterloo. For further information, please contact the course author Joanne Atlee, jmatlee@uwaterloo.ca.