

# PUI – Prototyping Lab

Fall 2013

Human Computer Interaction Institute

Carnegie Mellon University

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RAPID PROTOTYPING



# HW3

- Assigned today!
- On the course website
  - <http://www.andrew.cmu.edu/user/ihowley/pui/index.htm#materials>
- Design a photocopier
  - Iteration 1 **Due in 7 days** (Paper Prototyping, etc)
  - The rest due November 4 (Flex Program & Report, etc)



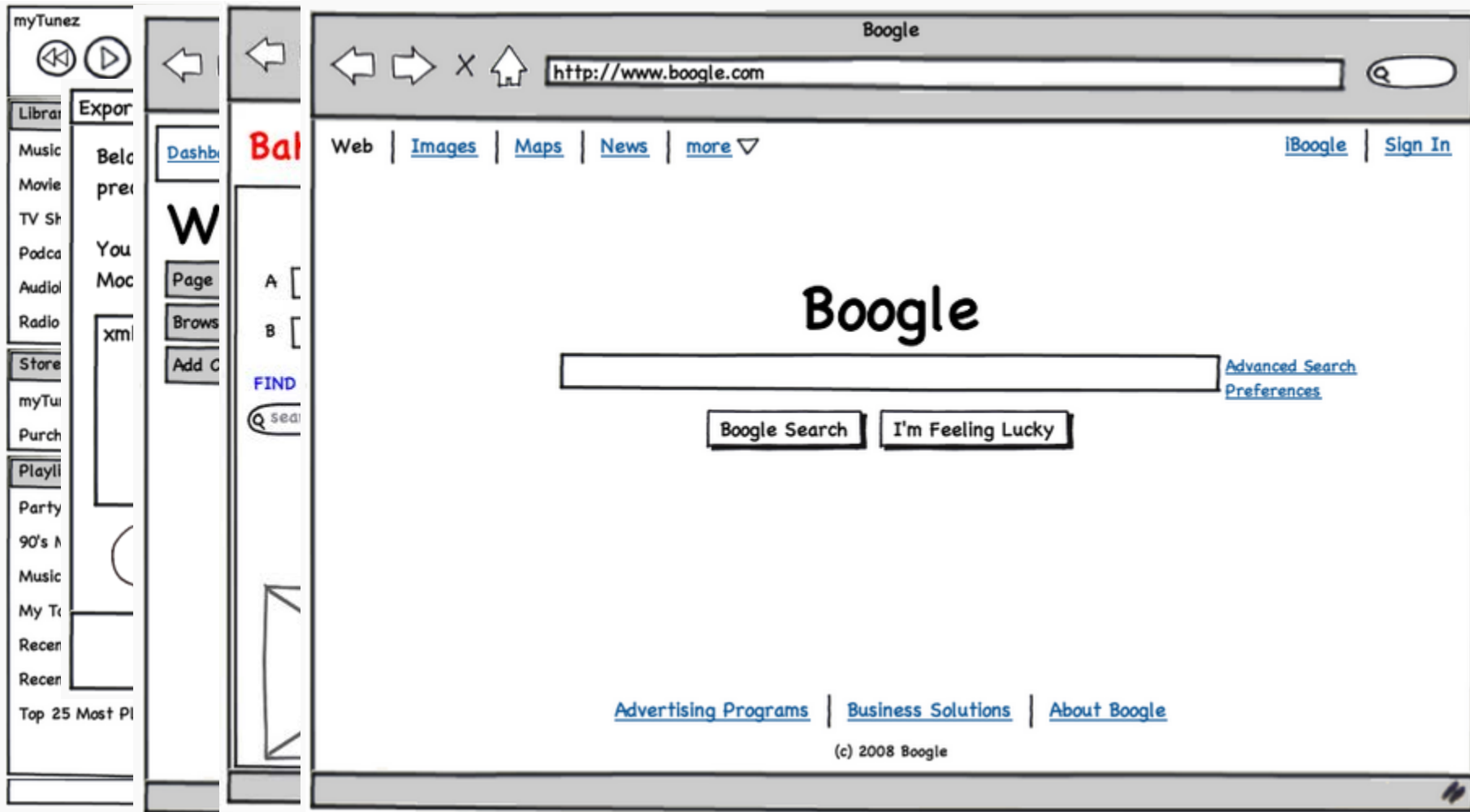
# Balsamiq!

- <http://balsamiq.com>
- Desktop (7 day trial) & Web versions
  - Low-fi Sketch Wireframes
  - Click-through Prototypes
  - UI Components & Icons



# Balsamiq!

EXAMPLES



# Balsamiq!

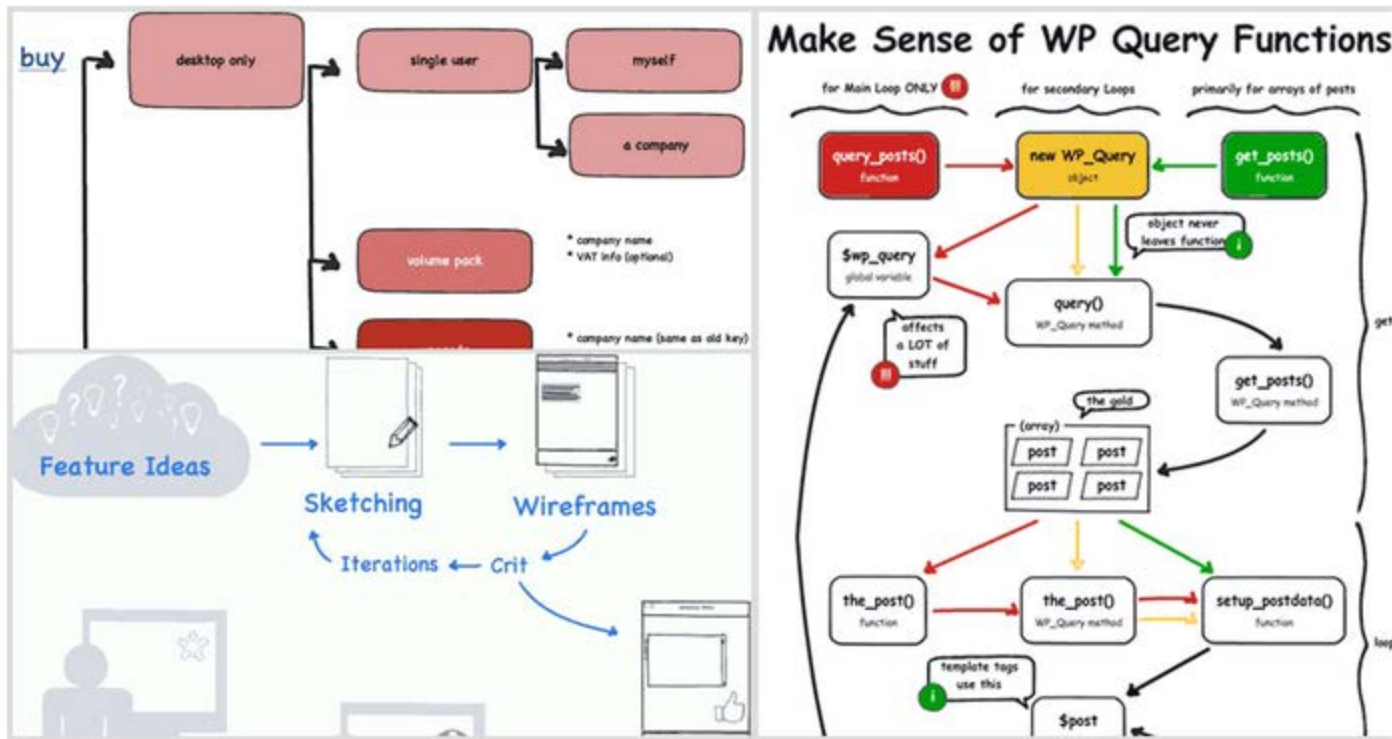
- Linking Mock-ups Together
  - <http://support.balsamiq.com/customer/portal/articles/111742-linking-mockups-together>
- Specifying Interaction in Balsamiq (beyond linking)
  - <http://support.balsamiq.com/customer/portal/articles/107999>
  - <http://www.youtube.com/watch?v=PeV4gF0b-Xk>



# Balsamiq!

INTERACTIONS

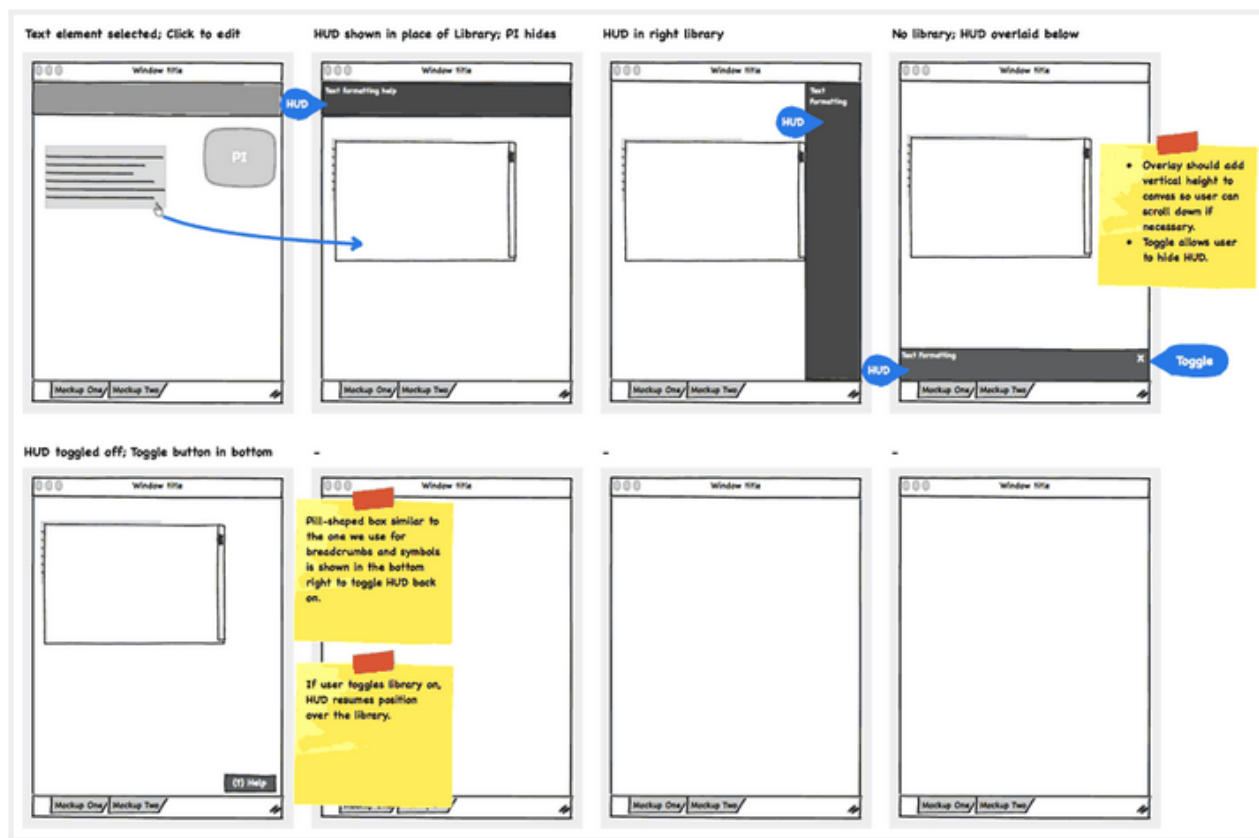
- Flowcharts



# Balsamiq!

INTERACTIONS

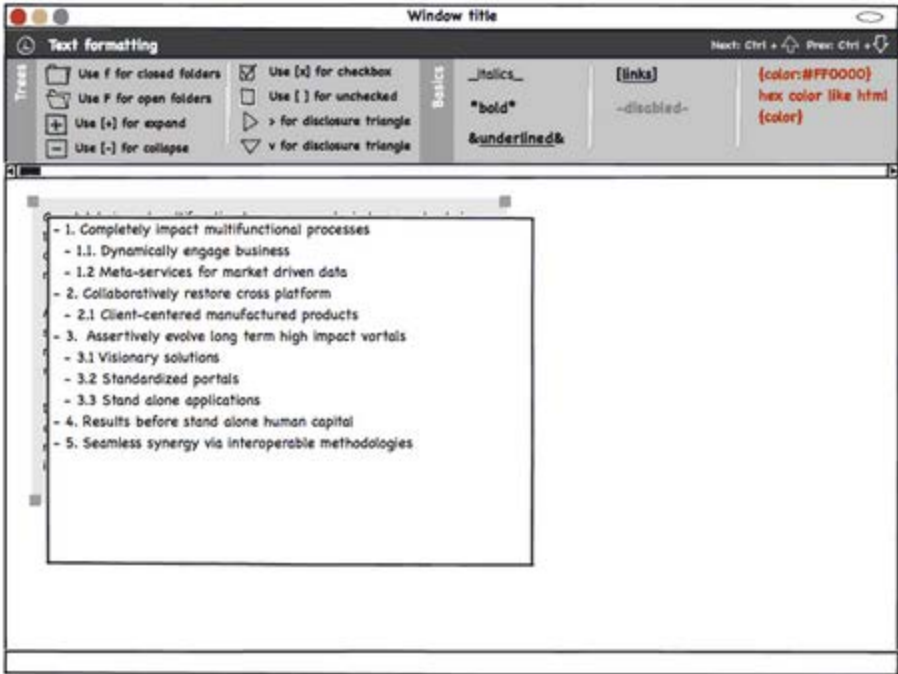
- Sketchboards



# Balsamiq!

INTERACTIONS

- Wireframes with annotations



The screenshot shows a window titled "Text Formatting Rules Expanded over Library". The window has a title bar with "Window title" and standard window controls. Below the title bar is a toolbar with "Next: Ctrl + ⬆️" and "Prev: Ctrl + ⬆️". The main content area is divided into two sections. The top section, labeled "Text formatting", contains a list of rules and their corresponding HTML/CSS markup. The bottom section, labeled "Basics", contains a list of items with various formatting applied to them. The items are:

- 1. Completely Impact multifunctional processes
  - 1.1. Dynamically engage business
  - 1.2. Meta-services for market driven data
- 2. Collaboratively restore cross platform
  - 2.1 Client-centered manufactured products
- 3. Assertively evolve long term high impact portals
  - 3.1 Visionary solutions
  - 3.2 Standardized portals
  - 3.3 Stand alone applications
- 4. Results before stand alone human capital
- 5. Seamless synergy via interoperable methodologies

Annotations 1, 2, and 3 are placed around the window. Annotation 1 points to the HUD header. Annotation 2 points to the pagination controls. Annotation 3 points to the formatting tips section.

**NOTES**

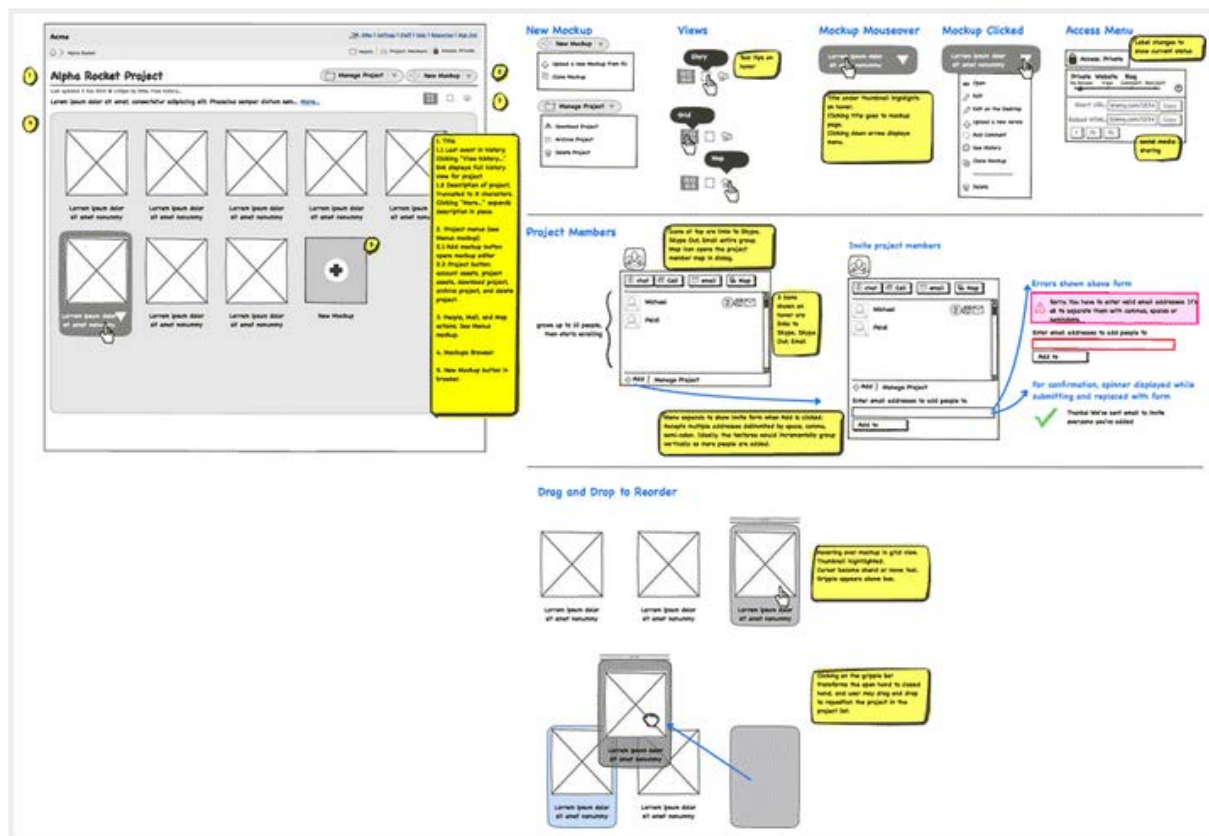
- 1. HUD header**  
Indicates that this HUD displays text formatting tips.
- 2. Pagination**  
Users can paginate through the HUD using Ctrl+arrow keys.
- 3. Formatting Tips**  
Categorized tips for the current component are shown.  
**3.1 Order of Tips**  
Make the control-specific tips show up first, and the basic ones last.  
**3.2 Context**  
Formatting options should be relevant to control in use.  
**3.3 Tips as Actions**  
A useful feature would be that clicking one of the formatting tips inserts the text formatting markup into the insertion point of the textarea.  
If text is selected in the textarea, and the text formatting tip is markup with opening and closing tags, enclose the selected text with the markup.



# Balsamiq!

INTERACTIONS

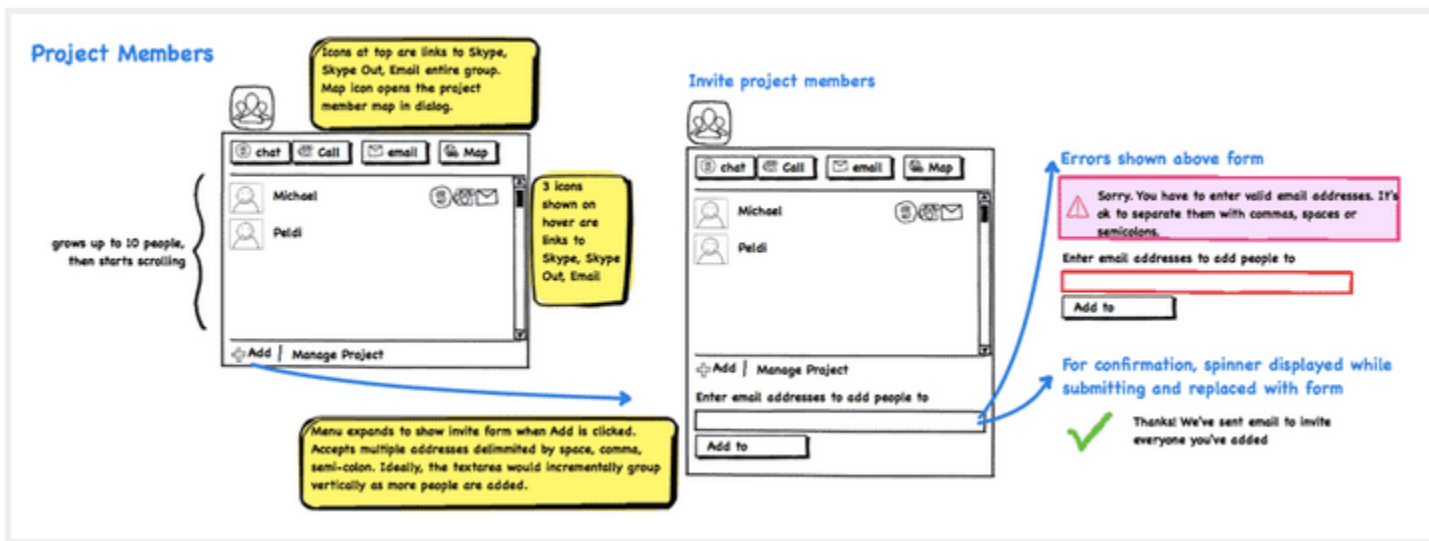
- Wireframes with illustrated flow



# Balsamiq!

INTERACTIONS

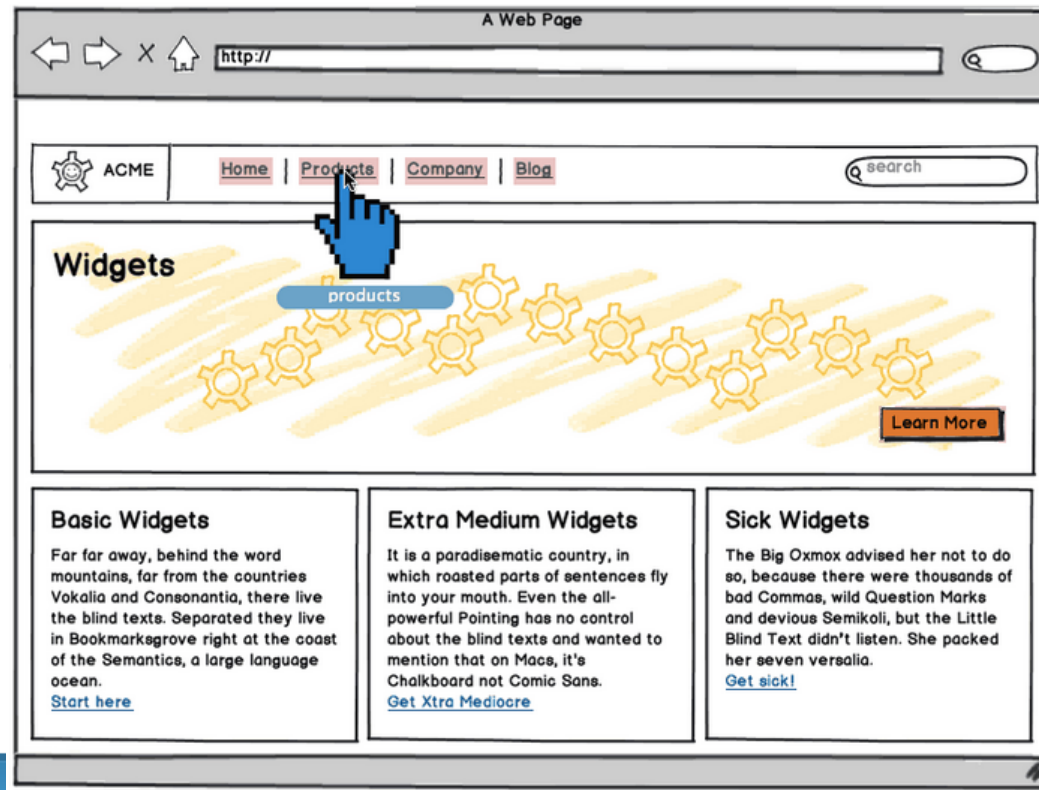
- Storyboards



# Balsamiq!

INTERACTIONS

- Click Through Prototypes with Links
  - [http://www.youtube.com/watch?v=\\_8lyyvE\\_CYrg](http://www.youtube.com/watch?v=_8lyyvE_CYrg)



# Balsamiq!

EXERCISE



# Questions?



# POP (Prototypes on Paper)

QUINTIN'S TIP!

- <https://popapp.in/>
- Smartphone App for designing on the go (& taking with you)
- Appears to be free
  1. Design on Paper
  2. Take Pictures
  3. Link Pages
  4. Play & Test



# POP (Prototypes on Paper)

EXAMPLES

<http://www.youtube.com/watch?v=2OgLmxHzDeU>



# Physical Prototyping

- Laser Cutter Tutorial (*in process*)





# Questions?

