

CSE 440: Introduction to HCI

User Interface Design, Prototyping, and Evaluation!

Lecture 09: Sketching

Instructor: Amy Zhang, 10/28/2021

Today's Topics

- UI Hall of Fame and Shame
- Mid-quarter Anonymous survey
- Sketching
- Rapid Prototyping
- Figma workshop led by Andrew!
- Group work time on 2e

UI Hall of Fame and Shame

UI Fail or...Dark Pattern?

The Nerdwriter

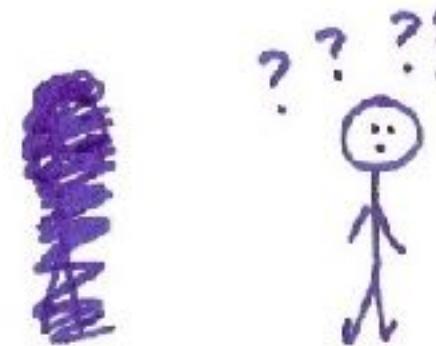
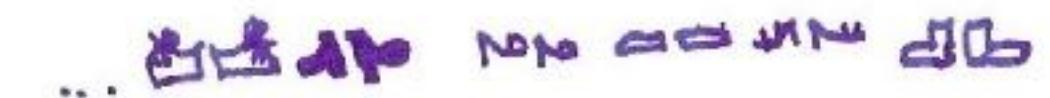
Anonymous Survey

- We're officially halfway through the quarter! :O
- <https://tinyurl.com/j2y4nwh9>
- We're going to spend ~3 min to fill out the survey above
- It's anonymous (unless you choose tell us your name in free response)
- All suggestions and feedback welcome. Help us improve the course!
- You can also tell us how your group is doing (specify group name so that we can follow up with the group if need be)

Sketching

2a Sketching

STORE FOR THE STYLE-CHALLENGED



As it should be ...

outfit #1



outfit #2

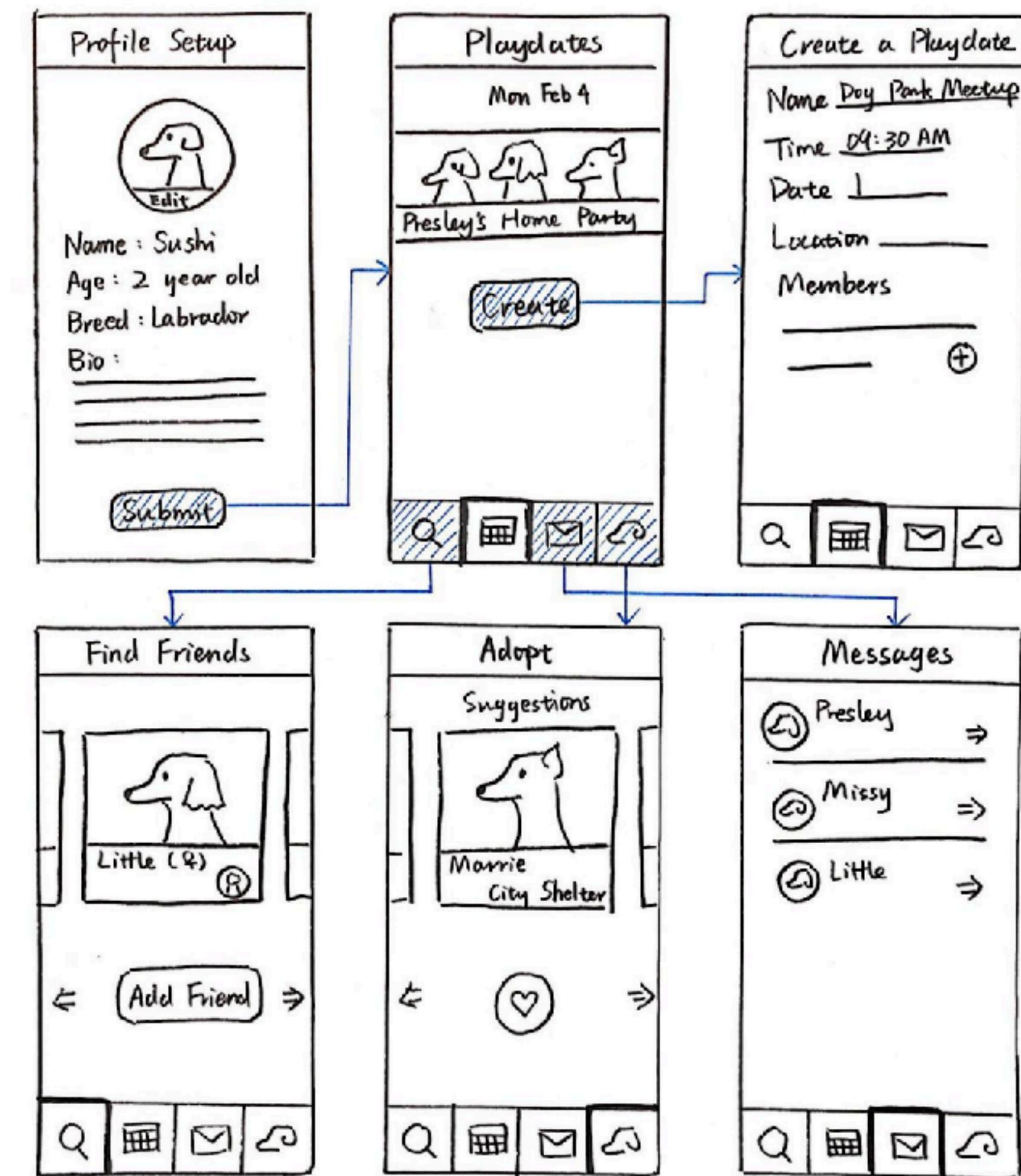
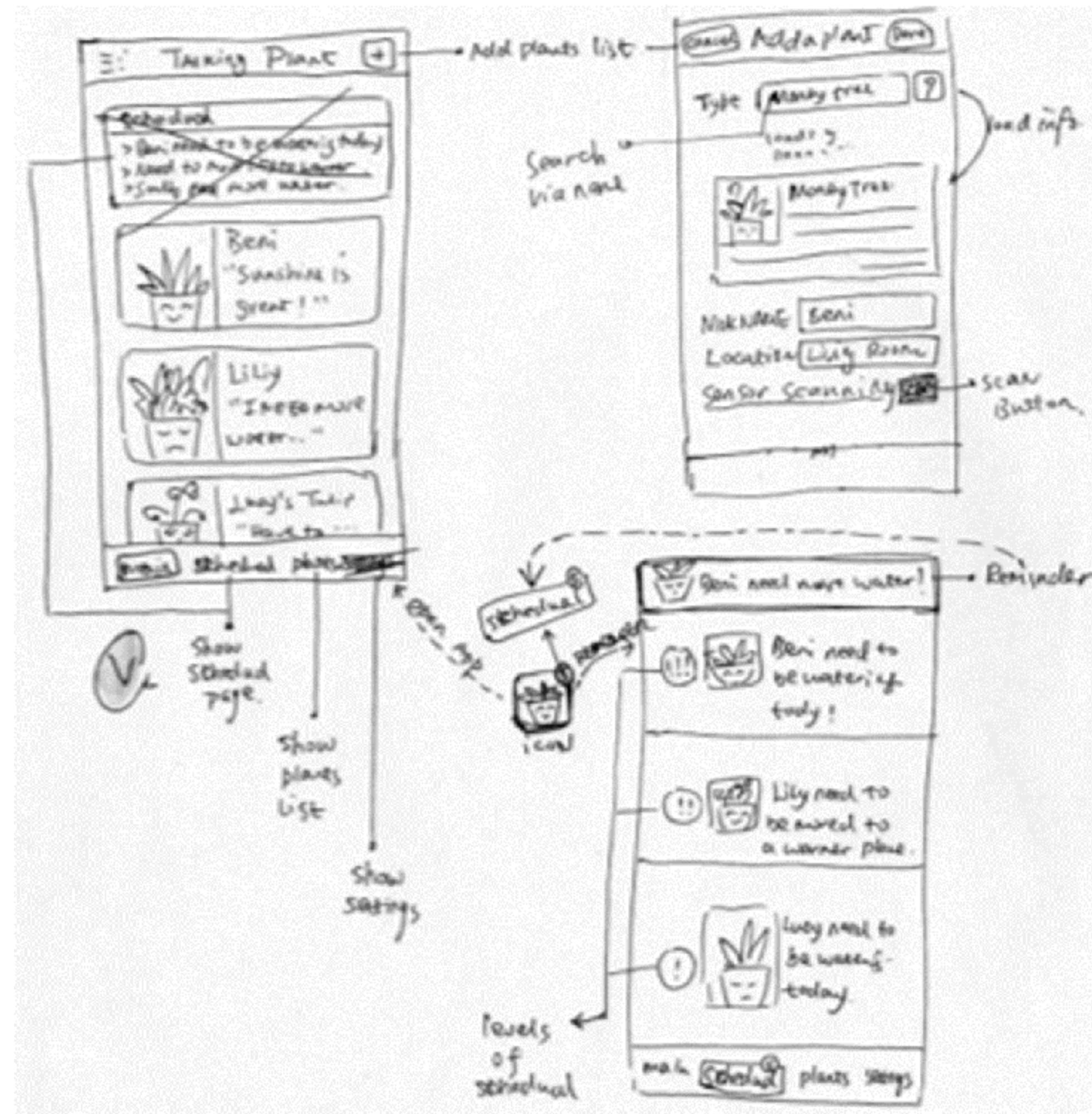


outfit #3



(pre-selected to match so you don't
have to choose.)

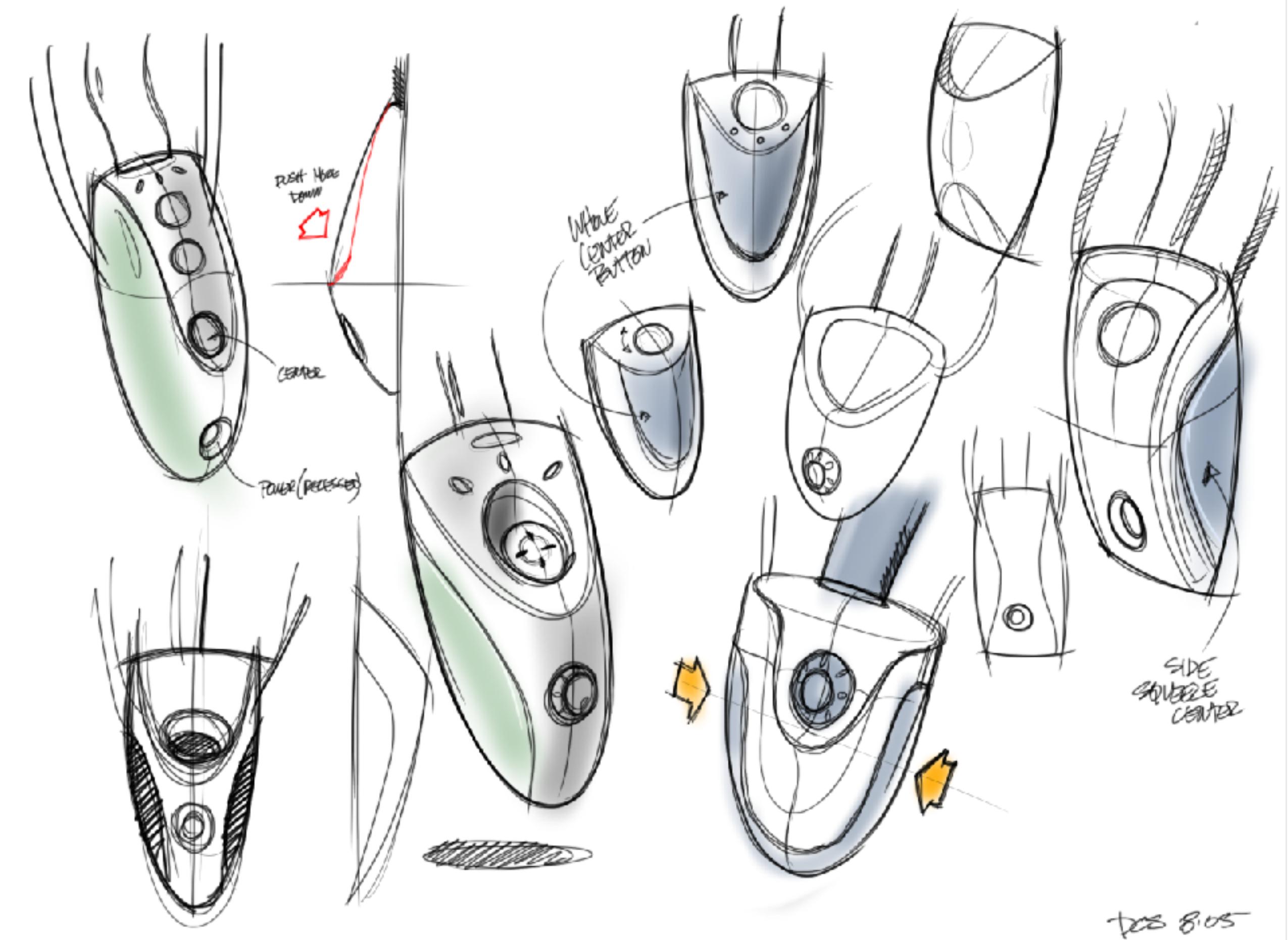
2e Sketching



Why Sketch?

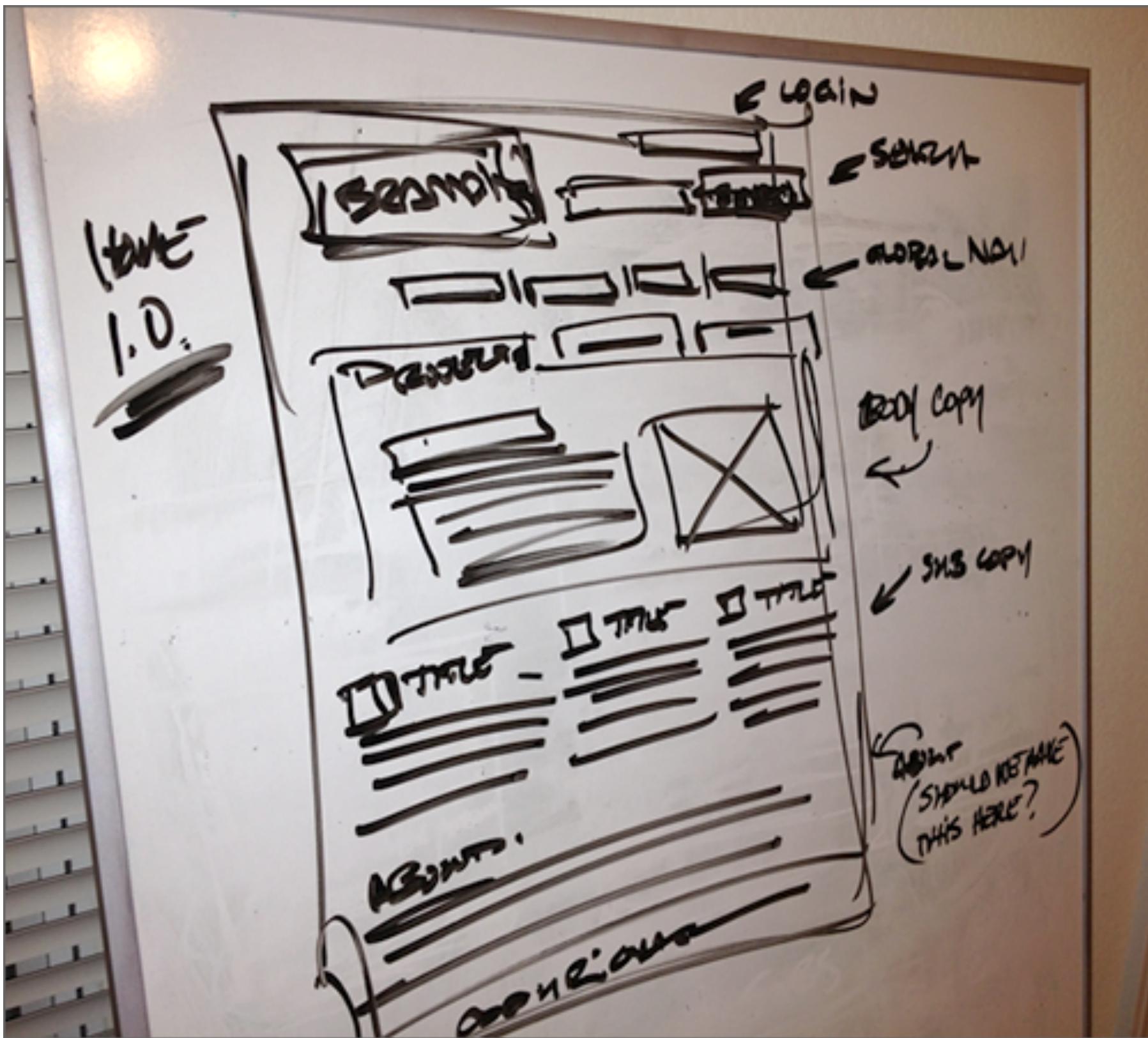
- Sketching is the fastest instance of design iteration (an entire design-implement-evaluate cycle in as little as a few minutes!)
- We are still in the tightest part of the spiral in the **spiral model**
- Because it's so cheap, we can also **parallel prototype** (which you've learned is good to do)
- All these things help us **boost creativity!**
- As our ideas get more in-depth (moving towards higher fidelity prototypes), we narrow and switch to **serial prototyping**

Sketching is...
A process that enables you to
think through ideas and
convey design ideas to others
very early in the design phase



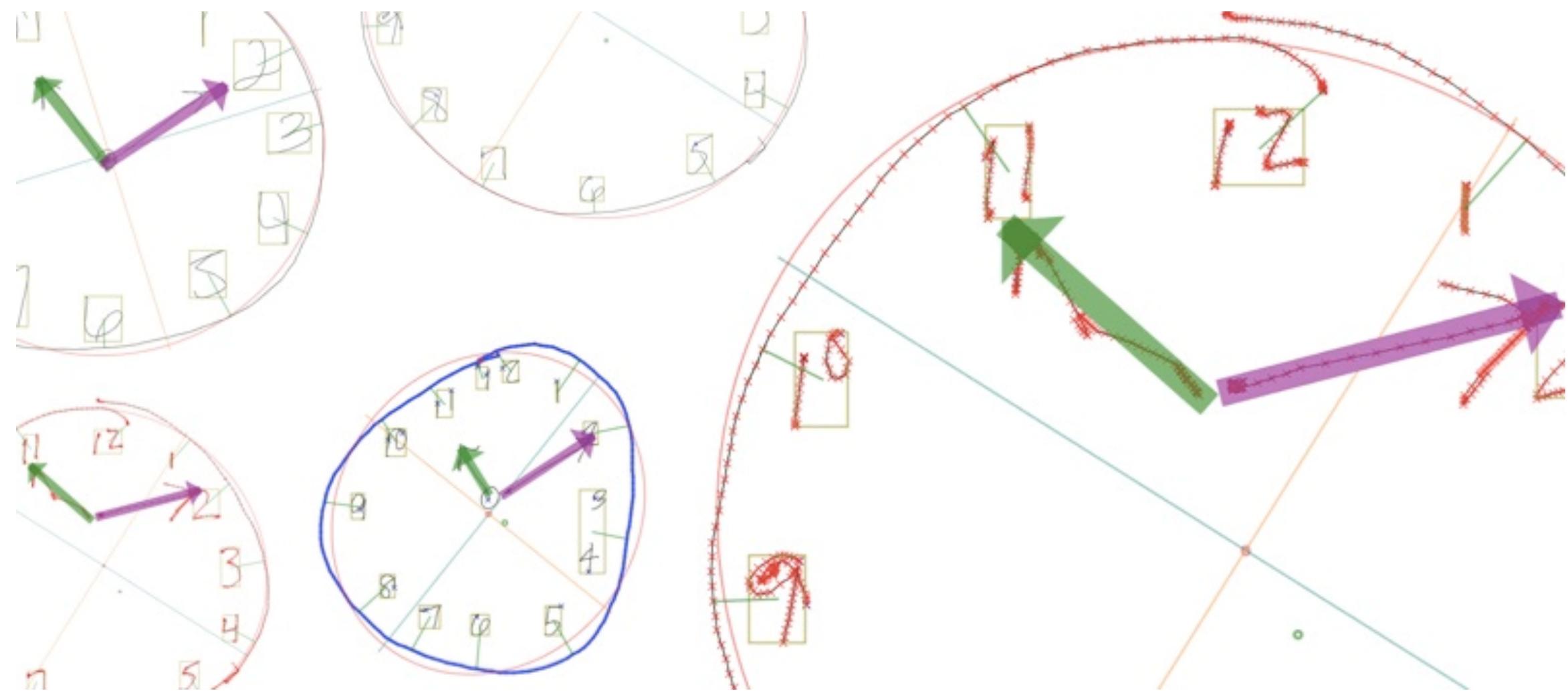
12 Important Properties of Sketches

Quick



A sketch is quick to make,
or at least gives that impression

Timely



A sketch can be provided
when needed

Inexpensive



Cost must not inhibit the ability to explore a concept, especially early in design

Disposable



If you cannot afford to throw it away,
then it is not a sketch

But they are not "worthless"

Plentiful

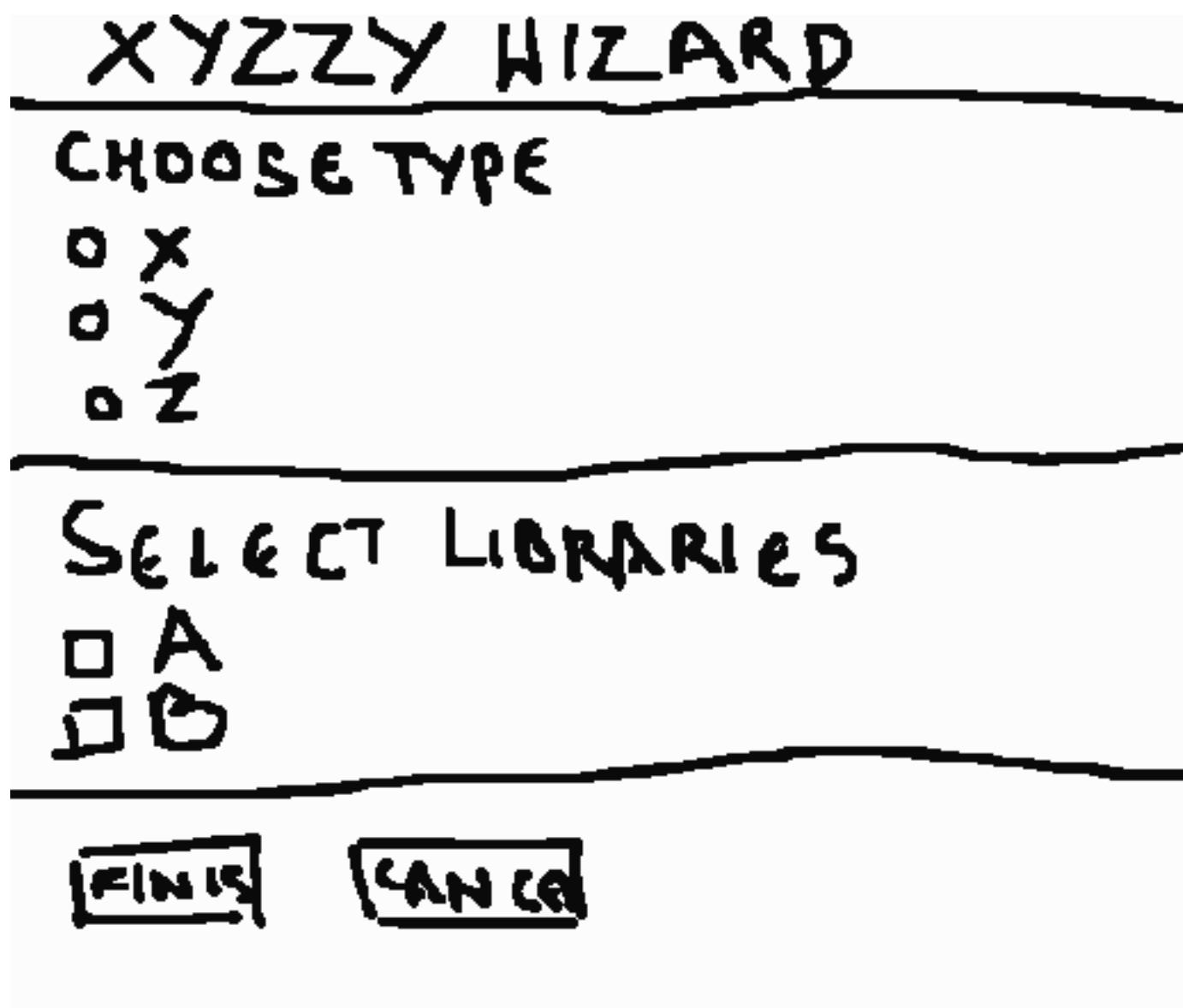


Sketches do not exist in isolation

Sketches are made to be compared

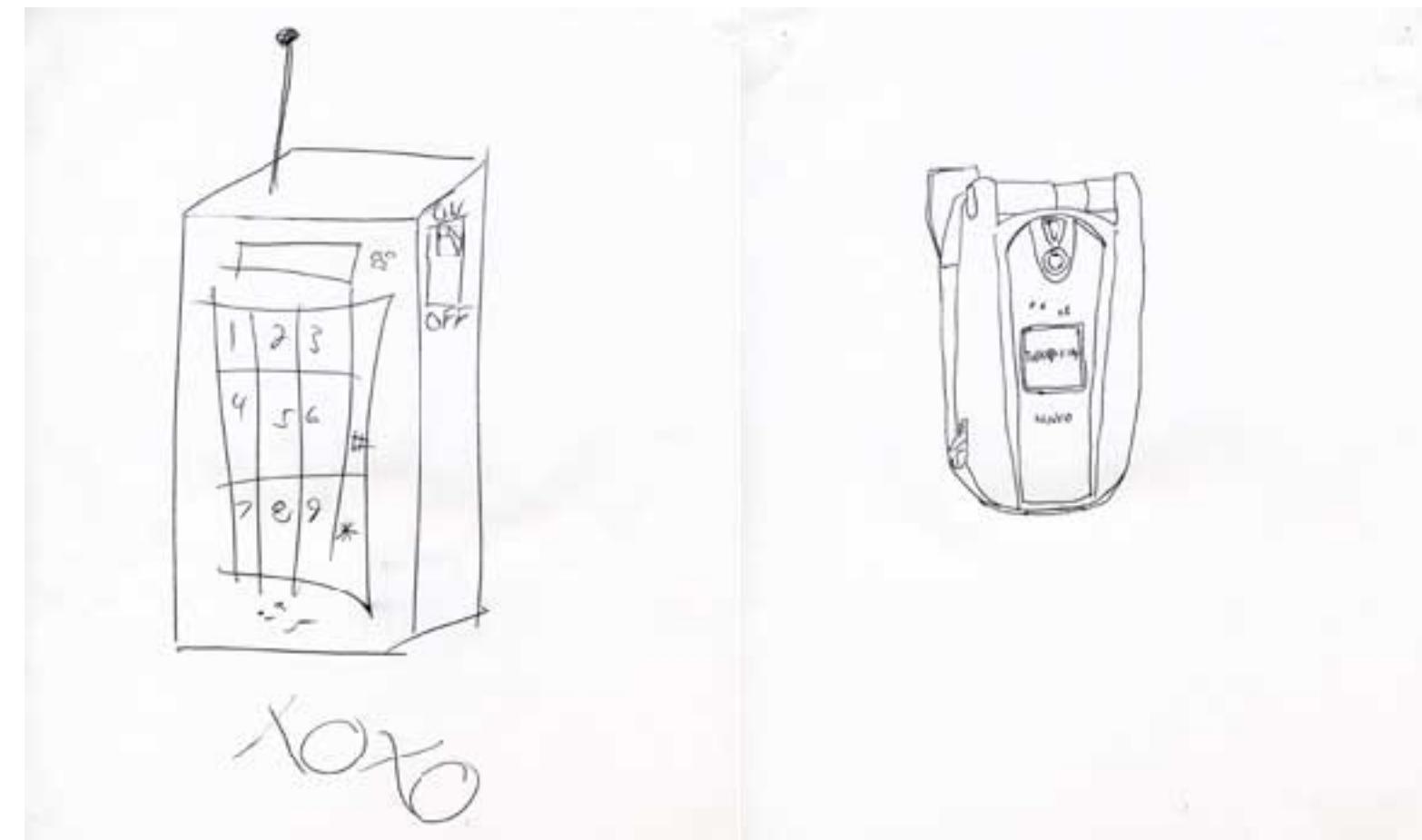
Meaning and relevance
is in the context of a
collection or series

Clear Vocabulary

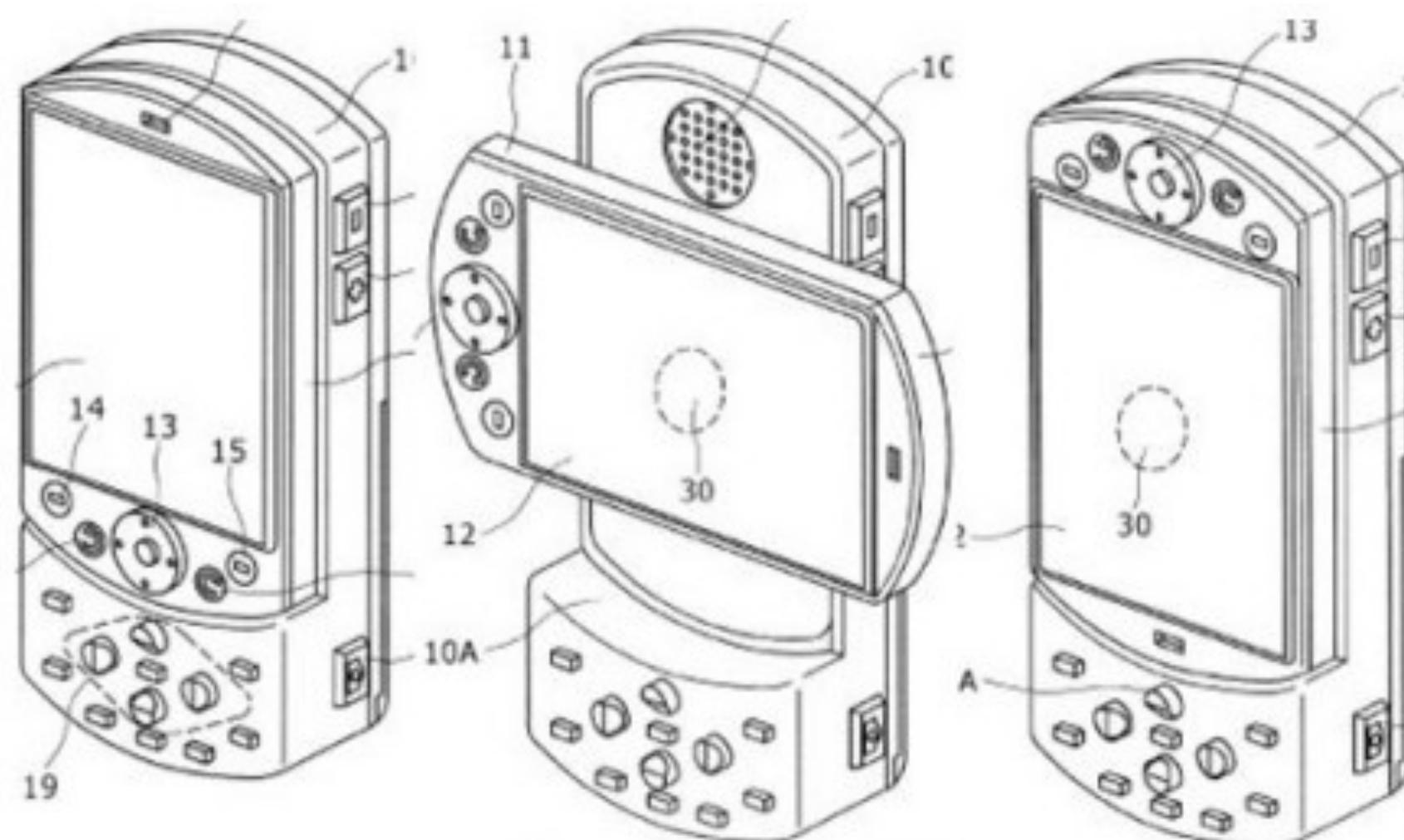


The way it is rendered makes it distinctive that it is a sketch (e.g., style, form)

Distinct Gesture



Fluidity of sketches gives them
a sense of openness and freedom



Opposite of engineering drawing,
which is tight and precise

Minimal Detail

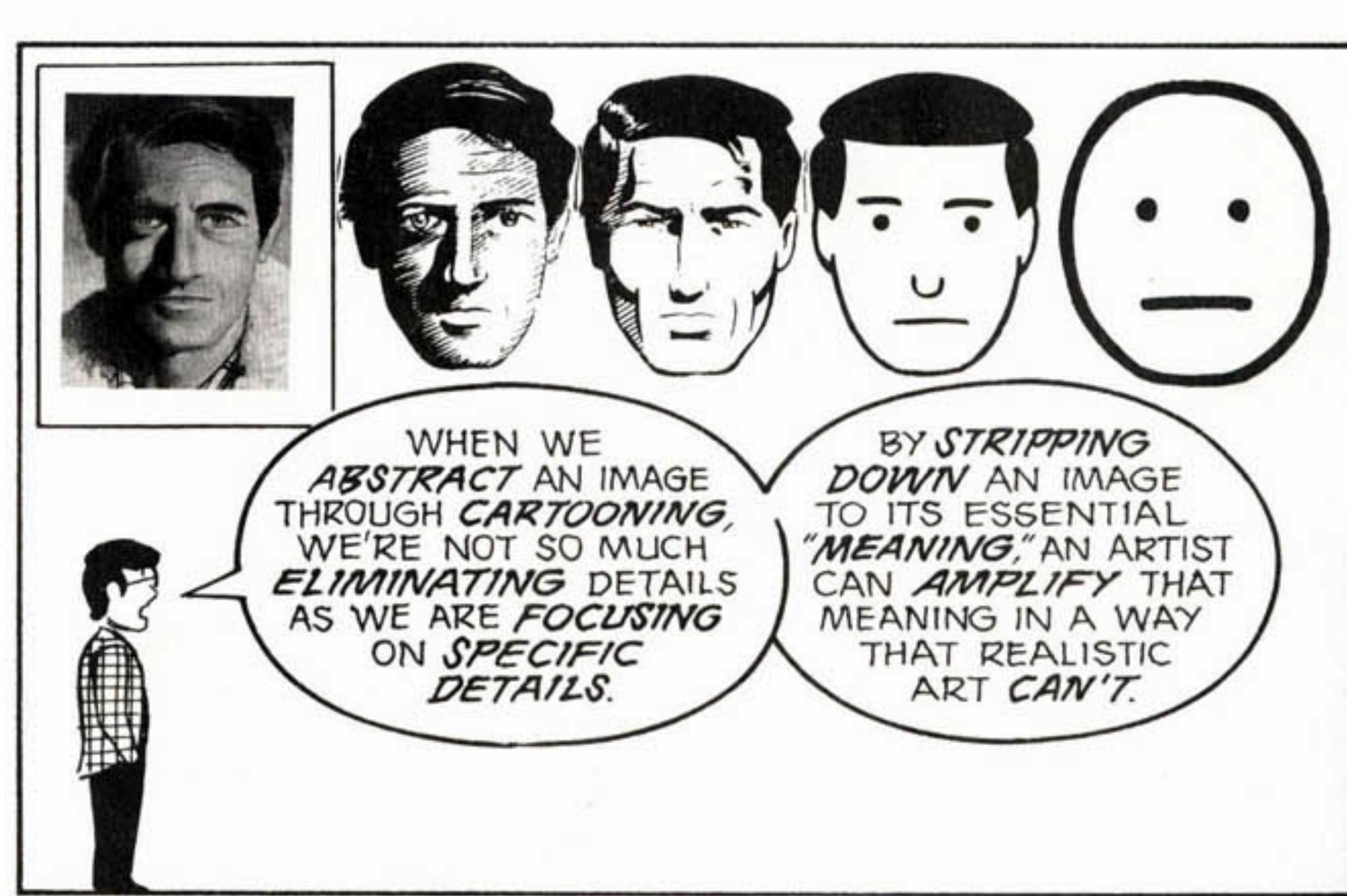


Include only what is required to render the intended purpose or concept

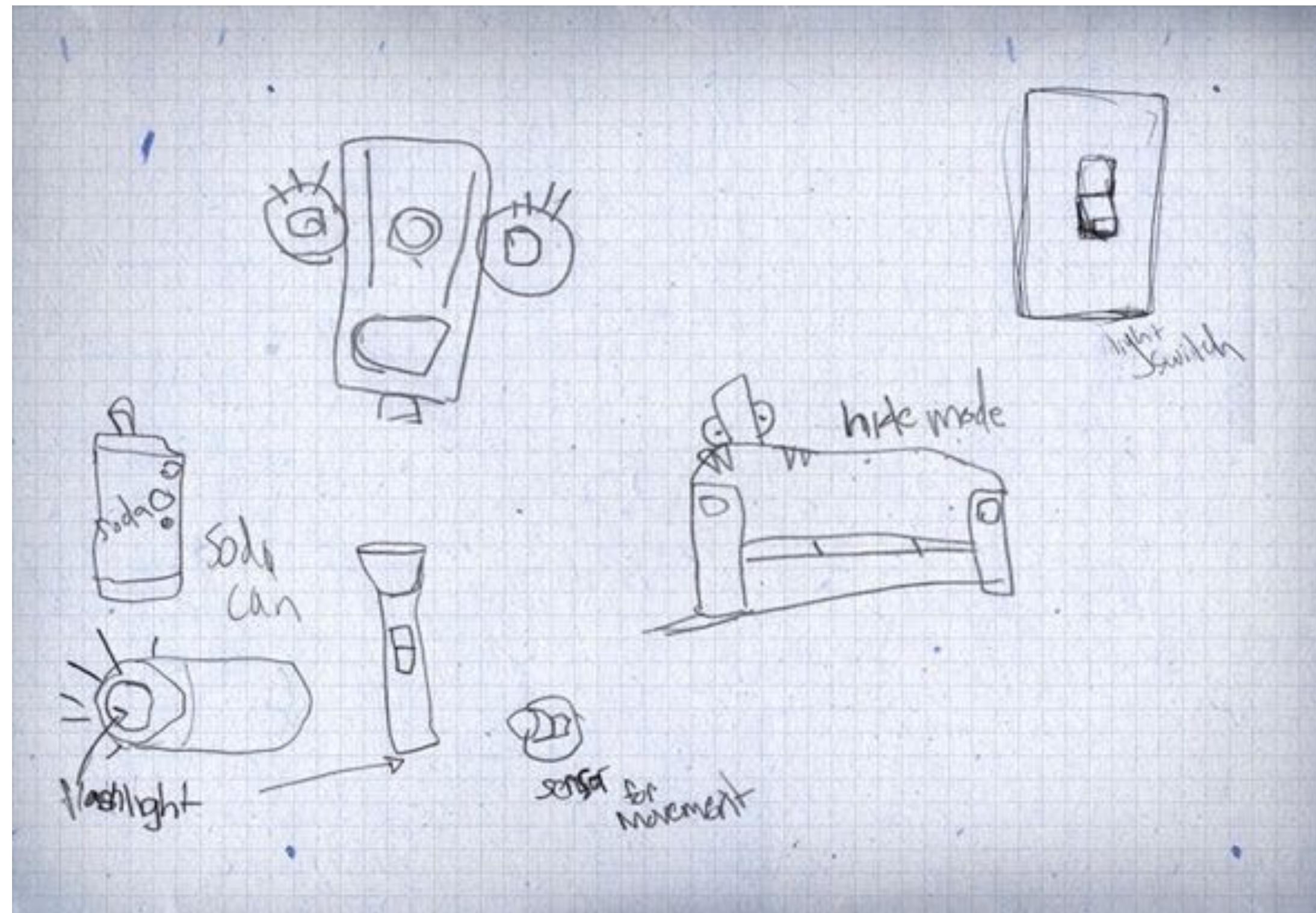
Create JSP for this page

Name:	<input type="text"/>
Number:	<input type="text"/>
Category:	<input checked="" type="checkbox"/> Clothing
Price Range:	<input type="text"/> 0.00 to <input type="text"/> 9.999,99
<input type="button" value="Search..."/> <input type="button" value="Home"/>	

Minimal Detail



Appropriate Degree of Refinement



Make the sketch as refined as the idea

If you have a solid idea,
make the sketch look
more defined

If you have a hazy idea,
make the sketch look
rougher and less defined

Suggest and Explore Rather than Confirm



Sketches should act as a catalyst of the desired and appropriate behaviors, conversations, and interactions with others (such as the people giving you feedback on your sketch).

Ambiguity



Intentionally ambiguous

Value comes from being
able to be interpreted
in different ways, even by
the person who created them

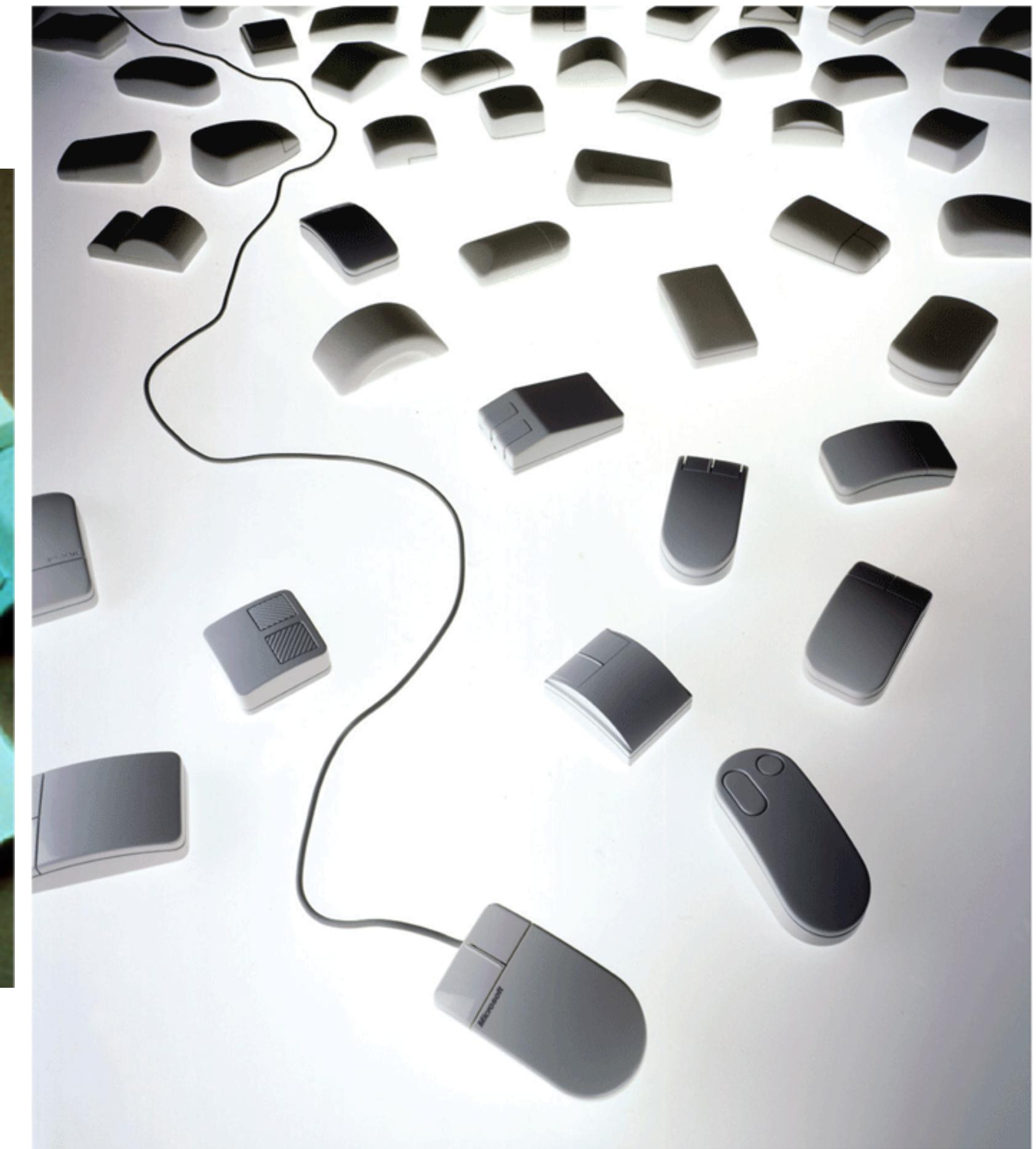
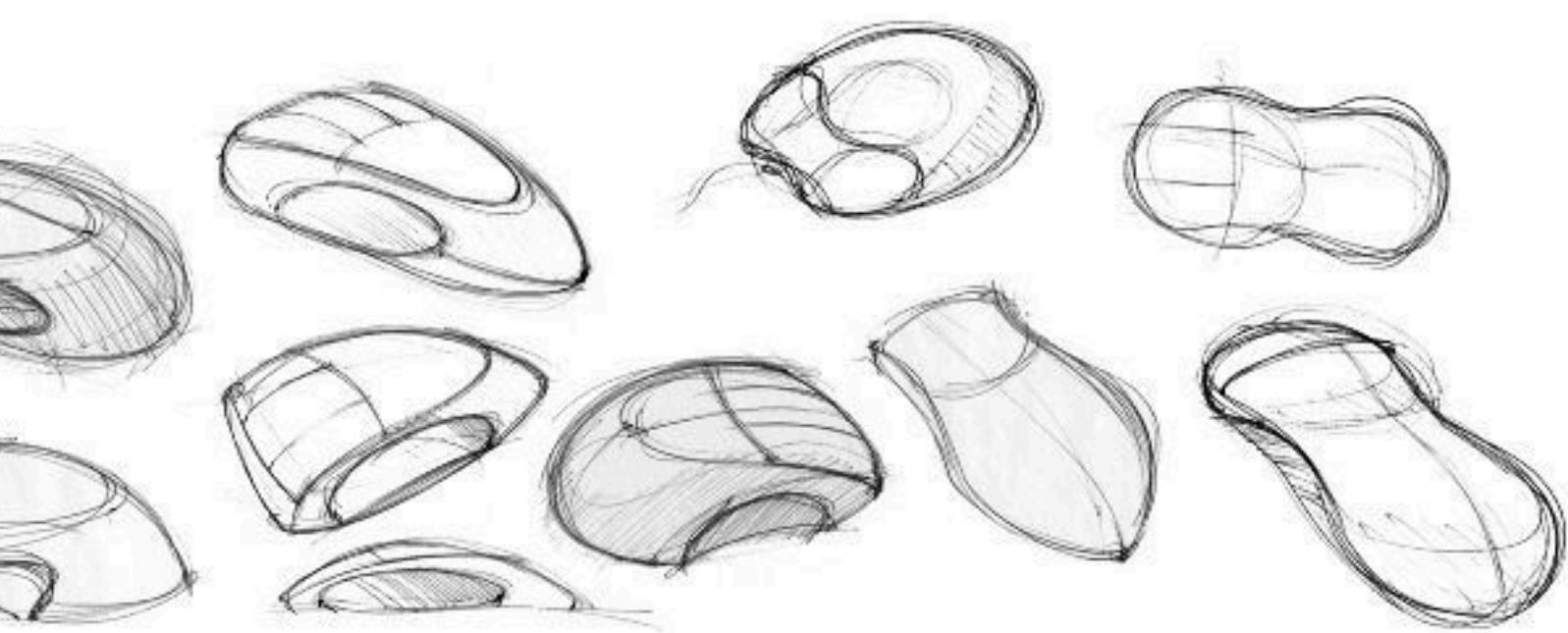
Sketches have holes

Rapid Prototyping

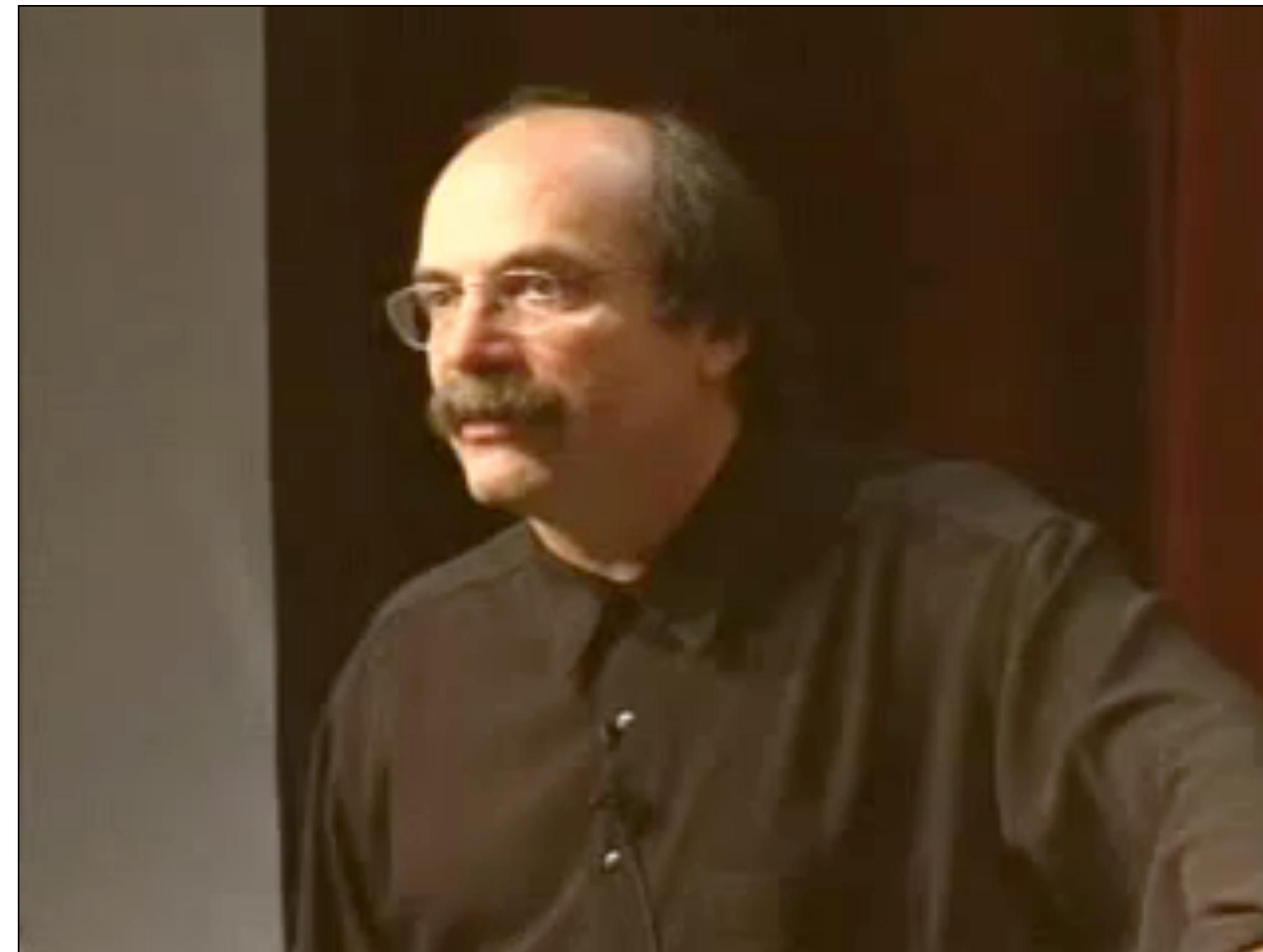
Moving from Sketches (2a, 2e) to Prototypes (3a)

Sketch	Prototype
Invite	Attend
Suggest	Describe
Explore	Refine
Question	Answer
Propose	Test
Provoke	Resolve
Tentative, non committal	Specific Depiction

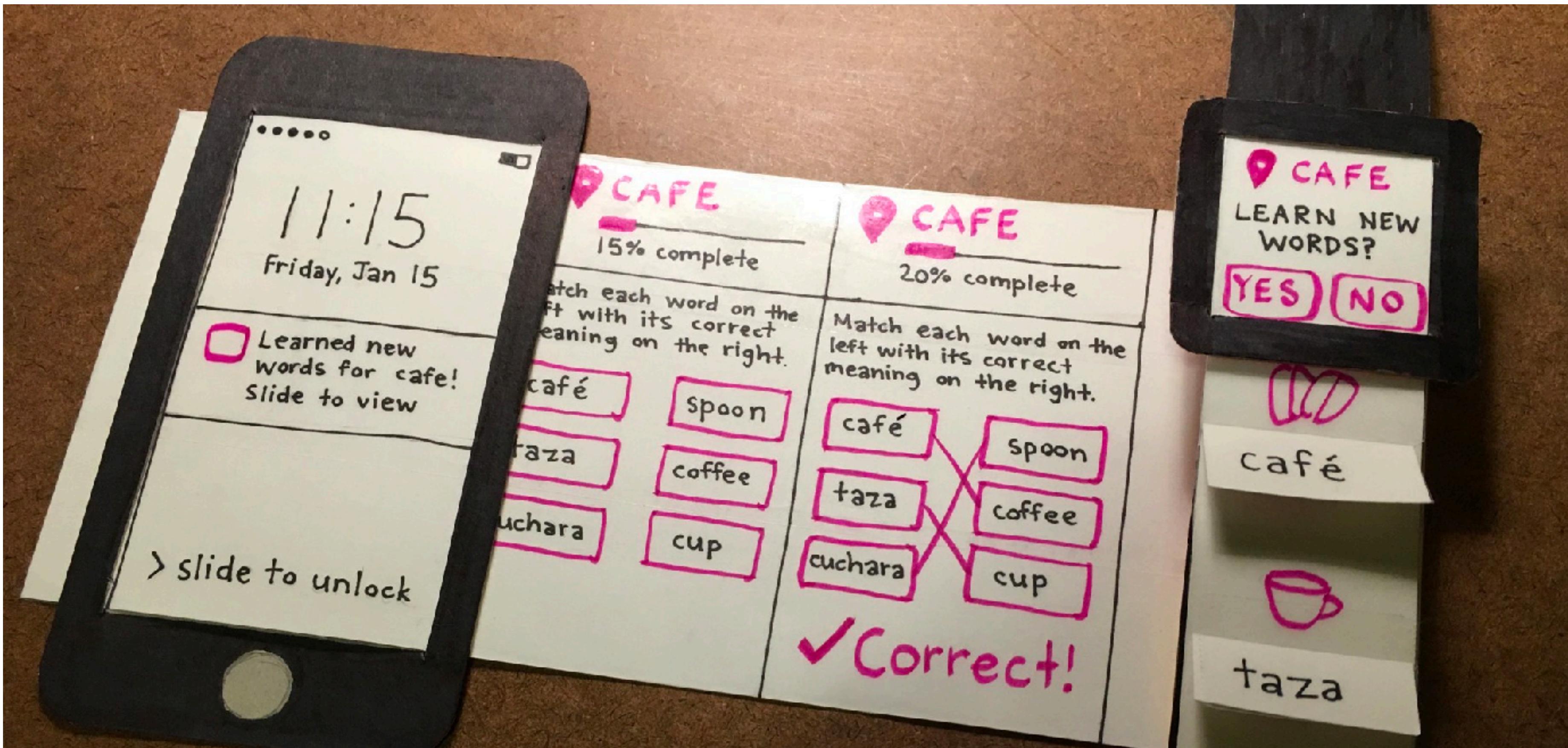
Example: Rapid prototyping the mouse



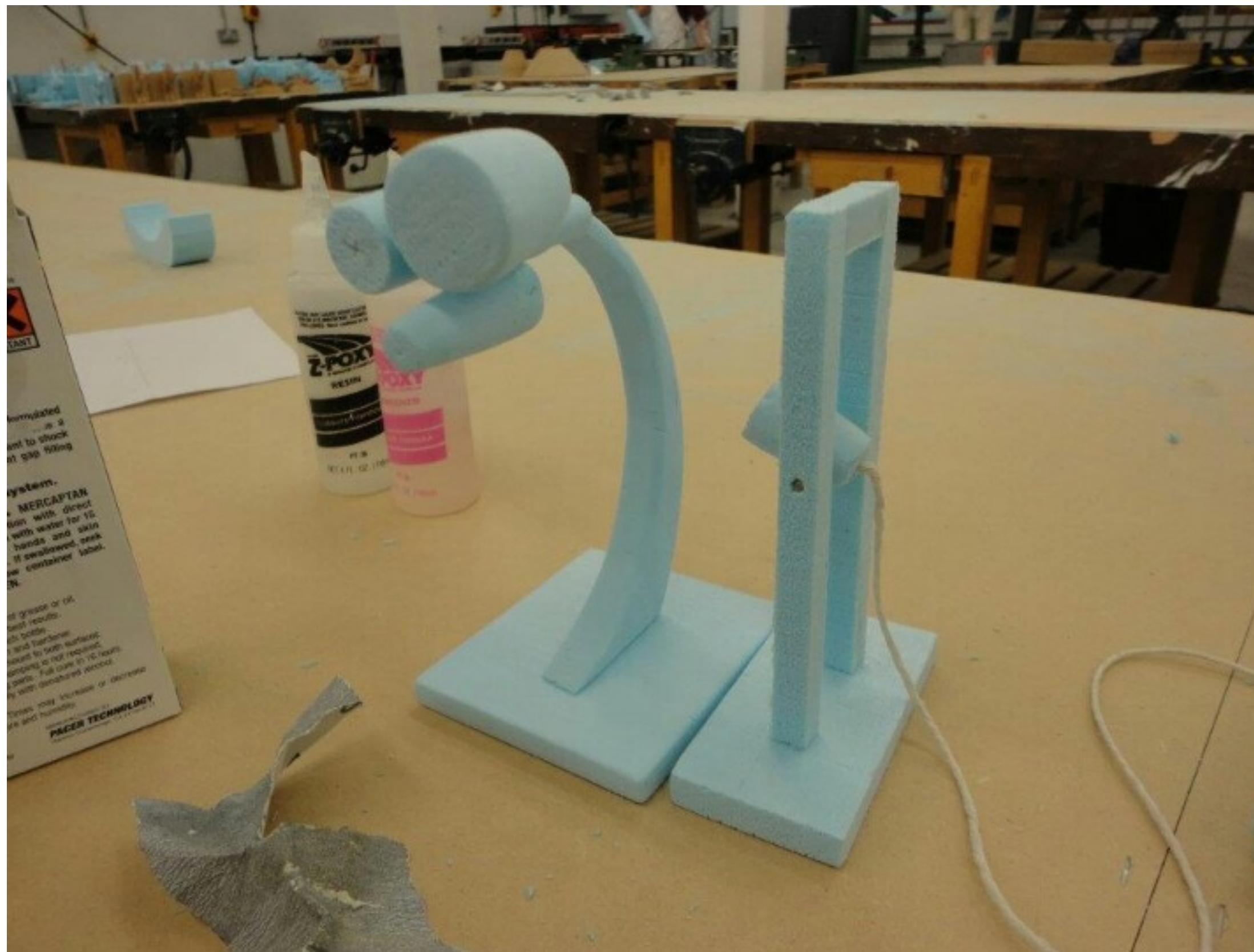
Example: Rapid prototyping the mouse



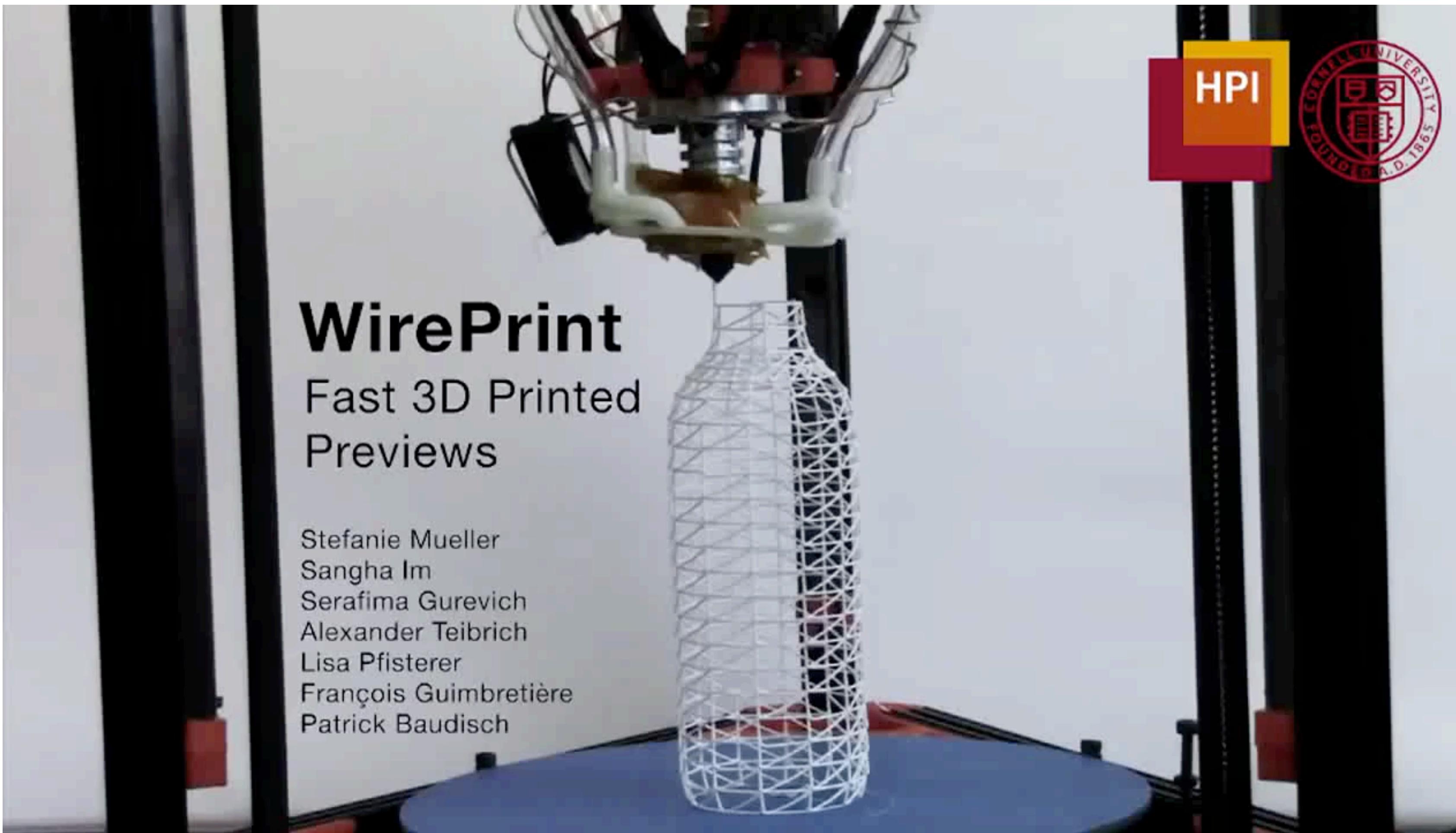
Paper Prototyping (3a)



Rapid Physical Prototyping



Rapid Physical Prototyping



WirePrint

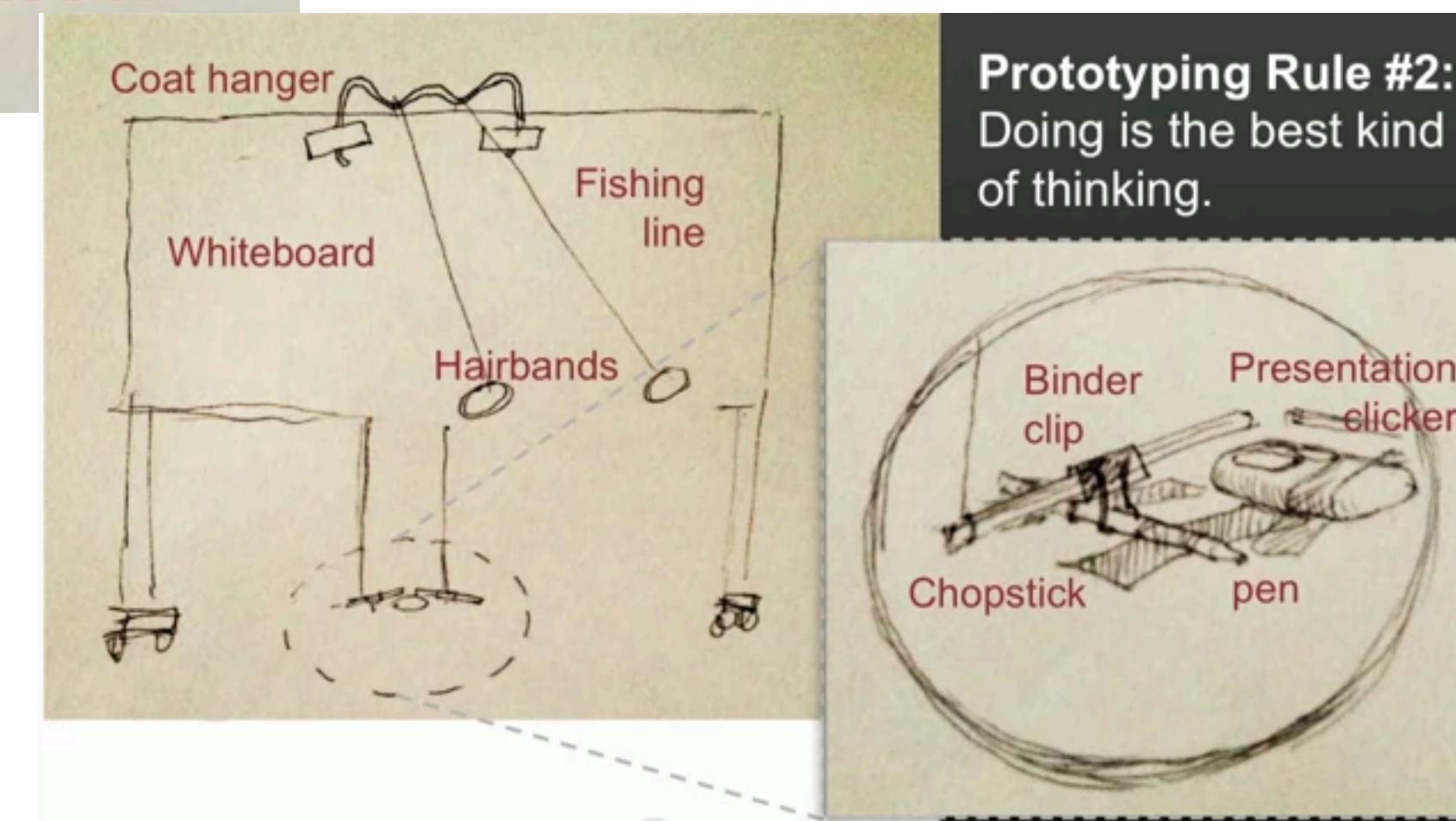
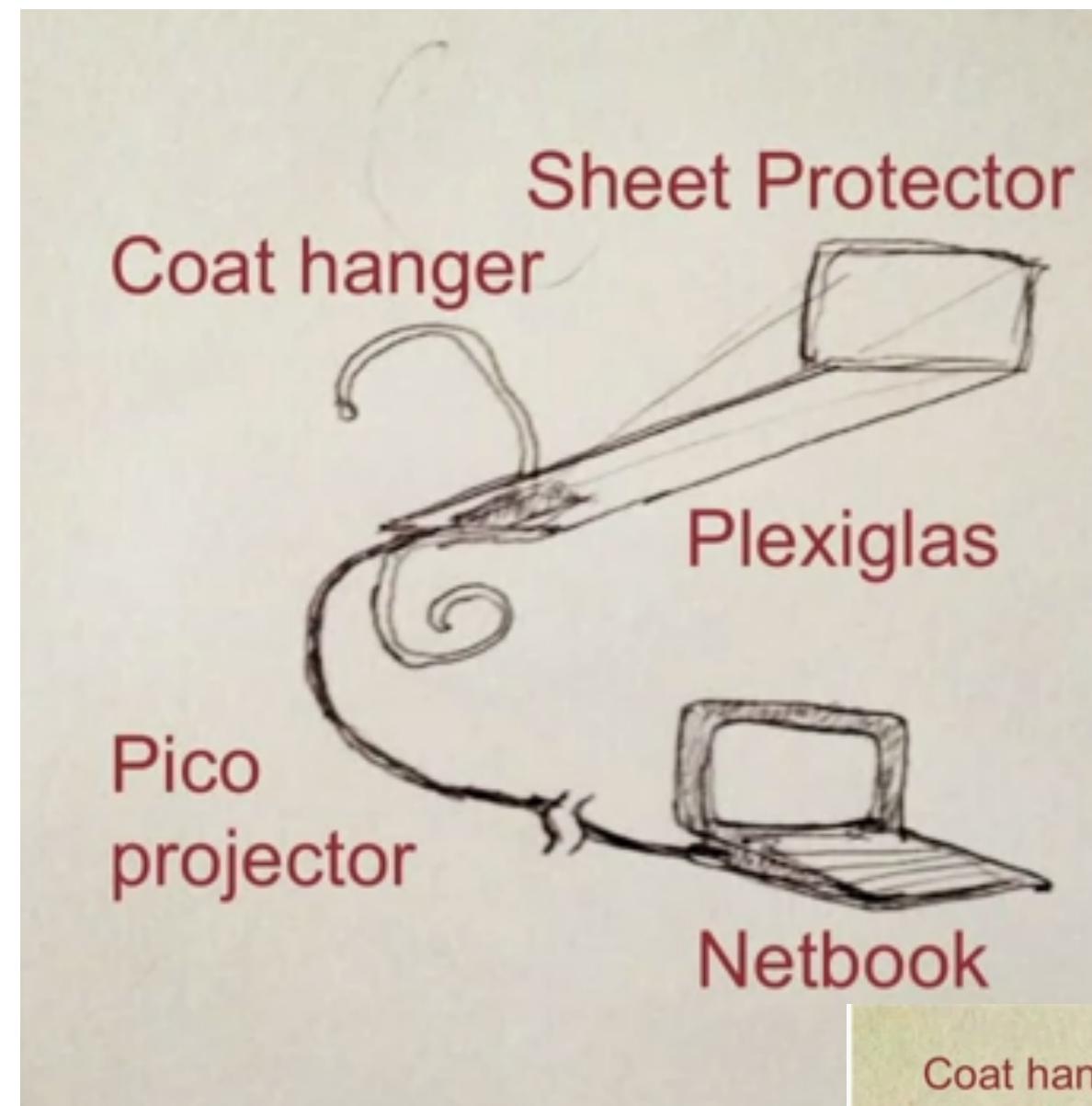
Fast 3D Printed
Previews

Stefanie Mueller
Sangha Im
Serafima Gurevich
Alexander Teibrich
Lisa Pfisterer
François Guimbretière
Patrick Baudisch

Example: Rapid Prototyping Google Glass



Example: Rapid Prototyping Google Glass



Tutorial on Figma led by Andrew!

This will come in handy in Assignment 3!

Submit what you made in Figma at the following link:

<https://tinyurl.com/2rjjpx6t>

Remaining time in class is for 2e (you will also have time tomorrow to work on it).