Design Exploration

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"Slides revised thanks to courtesy of Bill Buxton; from his talk "Why I Love the iPod, iPhone, Wii and Google"" move uk, 10-18 Sept. 2008; slightr1

Outline

• Sketching to explore
• Sketching user experiences
• Prototyping
• Working on your “How Might We” Statements
• Brainstorming Solutions

Design Process: Discovery

Assess Needs
• understand client’s expectations
• determine scope of project
• characteristics of customers & tasks
• evaluate existing practices & products

Design Exploration

Expand Design Space
• brainstorming
• sketching
• storyboarding
• prototyping

Production

Design Process: Exploration

Discovery

Design Exploration
design refinement
Production

Iteration

At every stage!

Design

Prototype
• Sketch
• Paper
• Video
• Tool
• Program

Evaluate
• Gut
• Ctrl
• Expert Eval
• Lo-fi Test
• User Study

Sketching: A Quintessential Activity of Design

* Courtesy Bill Buxton
Engelbart’s Unfinished Legacy: Designing Solutions to Global Grand Challenges

Kicker Studio, www.kickerstudio.com

From Sketch to Prototype

<table>
<thead>
<tr>
<th>SKETCH</th>
<th>Prototype</th>
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<tbody>
<tr>
<td>EVOCATIVE</td>
<td>DIDACTIC</td>
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<td>SUGGEST</td>
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<td>EXPLORER</td>
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<td>TENTATIVE</td>
<td>SPECIFIC</td>
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<td>NONCOMMITTAL</td>
<td>DEPICTION</td>
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The Anatomy of Sketching

- Quick / Timely
- Inexpensive / Disposable
- Plentiful
- Clear vocabulary. You know that it is a sketch (lines extend through endpoints, …)
- No higher resolution than required to communicate the intended purpose/concept
- Resolution doesn’t suggest a degree of refinement of concept that exceeds actual state
- Ambiguous
If you want to get the most out of a sketch, you need to leave big enough holes. There has to be enough room for the imagination.

Courtesy Bill Buxton

Sketching in Interaction Design

- Analogous to traditional sketching
- Shares all of the same key attributes
- More feel than look
- Must accommodate time & dynamics
- Phrasing

Courtesy Bill Buxton

Design as Choice

Elaboration Reduction

Laseau (1980)

Implementation

Design

Elaboration

Reduction

... a designer that pitched three ideas would probably be fired. I'd say 5 is an entry point for an early formal review (distilled from 100's). ... if you are pushing one you will be found out, and also fired. ... it is about open mindedness, humility, discovery, and learning. If you aren’t authentically dedicated to that approach you are just doing it wrong!

Alistair Hamilton
VP Design
Symbol Technologies

Courtesy Bill Buxton

People on a design team must be as happy to be wrong as right. If their ideas hold up under strong (but fair) criticism, then great, they can proceed with confidence. If their ideas are rejected with good rationale, then they have learned something.

There are no dumb questions. There are no ideas too crazy to consider. Get it on the table, even if you are playing around. It may lead to something.

Bill Buxton
Sketching User Experiences
pg. 147-149

Courtesy Bill Buxton
Experience Design

- Draw my phone
- Draw my phone’s interface
- Draw the experience of using my phone
- Which is the true object of design?

Experience Design

Minimal Detail

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

Scott McCloud’s Understanding Comics

People think focusing is about saying “yes.” But... “Focusing is about saying no.” — Steve Jobs
“You can use an eraser on the drafting table or a sledgehammer on the construction site.”

- Frank Lloyd Wright, architect

interacts like
create experiences

prototype: how?
Engelbart’s Unfinished Legacy: Designing Solutions to Global Grand Challenges

How might we?
"Gambit" the transition of control?
Parallel Prototyping Goal

• Prototype to test an assumption

Summary

• Sketching allows exploration of many concepts in the very early stages of design
• As investment goes up, need to use more and more formal criteria for evaluation

Next Time

• Lecture
  – Lo-fi Prototyping
  – In-class Ideation Exercise