Design Exploration Through Sketching & Experience Prototyping

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* Slides marked Buxton are courtesy of Bill Buxton, from his talk “Why I Love the iPod, iPhone, Wii and Google,” music uk, 18-19 Sept, 2008, Brighton

Hall of Fame or Shame?

Good
- At first glance, is fun and unique
- Well polished, aesthetically pleasing

Bad
- What does a tape deck have to do with podcasts? - confused metaphor is difficult to understand
- Focus on ‘retro’ means the user has to wait 5 seconds to watch animation of tape loading before anything plays

Interface Hall of Fame or Shame?

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- So simple that instructions fit in 1 image
- Fun!

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- Too much noise
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Dyson AirBlade hand dryer
example courtesy of Maya L.
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Dyson AirBlade hand dryer example courtesy of Maya I.

**Outline**
- Review tasks
- Review concept videos
- Sketching to explore user experiences

**Task.** The structured set of activities or high-level actions required to achieve a high level user goal.

**what** a user wants to do

**Task Example**

**Check missed calls and call back**
Manny is in the city at a club and would like to call his girlfriend, Sherry, to see when she will be arriving at the club. She called from a friends house while he was on the subway, so he couldn't answer the phone. He would like to check his missed calls and find the number so that he can call her back.

- High level goal – meet up with girlfriend
- Task – check missed calls & call back
  - task should say **what** but **not how**

**Selecting Tasks**
- Real tasks customers have faced / will face
  - collect any necessary materials
- Should provide reasonable coverage
  - compare check list of functions to tasks
- Mixture of simple & complex tasks
  - simple task (common or introductory)
  - moderate task
  - complex task (infrequent or for power customers)
What Should Tasks Look Like?

- Say what customer wants to do, but not how
  - allows comparing different design alternatives
- Be specific – stories based on facts!
  - say who customers are (use personas or profiles)
  - based on needfinding
  - design can really differ depending on who
  - name names (allows getting more info later)
  - characteristics of customers (job, expertise, etc.)
  - forces us to fill out description w/ relevant details
  - example: dentists forms
- Some should describe a complete goal
  - forces us to consider how features work together
  - example: phone-in bank functions

Task Flows Show How to Do the Task

- Task Flows are design specific, tasks aren’t
- Task Flows force us to
  - show how various features will work together
  - settle design arguments by seeing examples
    - only examples — sometimes need to look beyond
- Show users storyboards of task flows to get feedback

How What Task Flow Video Prototype

What Task Flow How

Concept Video

Making a Concept Video

Define
What is the message of the film? What is the value proposition you offer? Can you describe it in a few lines?

Make a basic plot
Discuss plot ideas until you get a few that really make sense, decide characters

Storyboard
Turn these into multiple storyboards of scenes to plan how you will film it

* note: not UI storyboards!

Storyboarding

Use sticky notes so scenes can be moved
Include lines to be spoken if necessary
Use appropriate angles

SCENE 4
Words On Screen: Investigate
Voiceover: The mitochondria are the powerhouse of the cell

SHOT 1
beautiful flower, child’s eyes are wide looking at it head is cocked to the side, inquisitive

SHOT 2
tablet pans into view, image on screen shows the cellular structure of the plant
Shoot your Film

Get as many shots (angles, close ups, distance...) as you can! You never know what might be useful later.

If you choose to use music

Now might be a good time to pick some songs. Music can be very powerful if chosen well. (see Vimeo for music you can use free)

Edit your Film

Use your storyboard! This part should be simple if you have storyboarded correctly.

Plan your story – Storyboard it.

Is the story believable?
Film multiple angles
Film longer than the shot needs (you can always cut down)

Use Close-Up shots

Capture emotion
Avoid conversation
(This is the hardest to get right and ends up distracting)
Use the right person for the role - ask friends

Wow Effect

Show your solution at its best, save the best for last

Subtlety

Show how the solution makes the user feel - subtly

Don't 'Sell' it

Don't tell people to use your solution, show them why

Questions on Tasks or Concept Videos
Design Process: Discovery

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

Design Process: Exploration

- Expand Design Space
  - brainstorming
  - sketching
  - storyboarding
  - prototyping

Iteration

At every stage!

- Design
- Prototype
  - Sketch
  - Paper
  - Video
  - Tool
  - Program
- Evaluate
  - Gut
  - Crit
  - Expert Eval
  - Lo-fi Test
  - User Study

To show this poll

1. Install the app from pollev.com/app
2. Start the presentation

Still not working? Get help at pollev.com/app/help or Open poll in your web browser

Sketching: A Quintessential Activity of Design
* Courtesy Bill Buxton
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.
Design as Choice

Elaboration (“Flare”)     Reduction (“Focus”)

Laseau (1980)

Courtesy Bill Buxton

Exploration of Alternatives

... 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

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

Administrivia

• Concept Videos due Thur/Fri
  – We will watch the top ones in class on Monday
  – Vote on awards

• Project Selection Criteria
  – novelty
  – significant UI component
  • e.g., P2P at smart Al or no UI
  – impact (e.g., frequency, density & pain)

• Workshops this week
  – Web Site w/ Stage & Dylan. Tue. 7pm, Hewlett 102
  – Sketch w/ Kerry & Amy. Wed. at 7pm 10/25, Gates 415

• Landay office hours (390 Gates)
  – Monday 3-4 PM
  – Thursday 10-11 AM

Team Break

1. Reflect on last week’s assignment (5-10 min)
   – what did you like about your team work?
   – what do you wish could be improved?

2. This weeks assignment (20 min)
   – what will it take to get finished?
   – what remains to be done? plan it!
   – can you address the critique from your TA in what you are doing for this week?
   – work on it now

Design

What does the customer want to buy?

Courtesy Bill Buxton
Experience Design

"The experience of even simple artifacts does not exist in a vacuum but, rather, in dynamic relationship with other people, places, and objects" – Buchenau & Suri 2000

Experience vs. Interface Design

CitrusMate Plus
Mighty OJ Manual Juicer
OrangeX Manual Juicer

Experience Design for a Phone App?

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

Minimal Detail

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

Design Thinking is Iterative

People think focusing is about saying “yes.” But… “Focusing is about saying no.” – Steve Jobs

Scott McCloud’s Understanding Comics

When we abstract an image through cartooning, we aren’t so much eliminating details as we are focusing on specific details.

By stripping down an image to its essential meaning, an artist can amplify that meaning in a way that realistic art can’t.

http://www.smashingmagazine.com/2013/06/sketching-for-better-mobile-experiences/

http://www.listmeapp.com/
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

- Project (due Thur/Fri in studio)
  - Concept Video
  - Short (90 seconds ideal)
  - Tell a story more than show an interface
  - Storyboard first!
  - Glad to look at rough cuts