Sketching and Storyboarding

CS160: User Interfaces

John Canny
Review

Brainstorming principles

Brainstorming exercise
Project Assignment (due 9/16)

Group Brainstorm
- Goal: Brainstorm and refine project ideas with small group
- Will have time in class (next time)
  And plan to meet outside of class

Next class (location TBD)
- Bring printouts of your Individual Project Proposal
- Bring large sheets of paper
- Plenty of pens and pencils
Sketching

Why sketch?
Sketching

To represent or describe something

To communicate an idea

To seduce (i.e. marketing)
Or...

To serve as temporary memory for your ideas

To flesh out some details

To expose your (subconscious) assumptions
Sketches

Start and sustain conversations about design
- the messier the better

Provide shared representation for ideas as they evolve

Provide an archive of your design exploration
But...

I can’t draw!

That’s OK, most great engineers (and some great artists) can’t either.
Sketching

Just do it!

In sketching, bad is often good.

But practice anyway – sketching and seeing.
Sketching

A first sketch, which communicates?
Sketching

Second sketch. What does this communicate?
Sketching

Third representation. What is the message here?
Sketching

Fourth representation. What is the designer trying to do?
Sketching

For early feedback (Sagan).

Design Pictionary: While sketching, add words evoked by your sketch, or that you’d like to evoke.

Show the sketches to someone else. See how many words match yours.

playful
overblown

useful

quirky
dull

ambiguous
avuncular
Try it

Bebot
Some have claimed that sketching is essential for design:

See e.g. Goel “Sketches of Thought” MIT Press, 1995

Suwa and Tversky “External representation contributes to the dynamic construction of ideas” Diagrams 2002
Characteristics of Sketches

Quick
Timely
Inexpensive
Disposable
Clear vocabulary
Characteristics of Sketches

Distinct gesture

Minimal detail

Appropriate degree of refinement

Suggest and explore rather than confirm

Ambiguity
Types of Sketches

Sketch
Memory Drawing
Presentation Drawing
Technical Drawing
Description Drawing

What were the most familiar to you?
Visual Storytelling
Shortcut: tracing/overlays
Use simple shapes: “Napkin Sketches 101” Moyer.
Visual Storytelling

Use text boxes and arrows to augment the characters
Visual Storytelling

Use labels and arrows to describe or explain.

1. View/Edit
   Click clip icon to view info on clip

D enters from left

Q: Zoom Femme lights cig

C/O Femme: "I knew he wanted me"

Students add voiceover to clip—cannot exceed 12 sec

Drag clips onto film strip and arrange to create sequence

Red dot indicates current clip

Jump shot

Reaction
Storyboarding:

Representing time in space
Q: Why are transitions like Canada?

A: Because they are overshadowed by the states.
A counter-example?
Another counter-example: k-sketch
Film Storyboards

See http://www.theforce.net/theater/shortfilms/troops/
Storyboarding for Interfaces

Technique

– Series of frames depicting key steps in reaching a goal
– Can use a pin board for easy rearrangement/editing

Describe the interaction in context

– Often useful to show user in at least 1st frame (establishing shot)
– Relationship between the user and its environment
– Relationship between the user and the system
Sketch: Single Display

Film Editing Interface
### Attendance List

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<th>Last Name</th>
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<th>SID #</th>
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- Lee, Benjamin: 12345678
- Santos, Allen: 23456789
- Schwartz, Jonah: 34567890
- Vennette, Joshua: 45678901

- Go to Attendance View
- Back to main menu
- 38 Present, 2 Absent
- Take Attendance
- Done
- Look Up: Sc...
Sketch: Single Display

Theater: Shattuck Cinemas
Phone: (510) 665-13412  Dist: 1.5 m
Address: 2122 Shattuck Ave
Berkeley, 94709
Cost: $8.50 normal, $6.00 senior, $4.50 matinee

Art of War  ★★★
(10:00)-(1:00)- 4:00 - 7:00 - 10:00
Bittersweet Motel  ★★★★★
(11:00)-(1:30)- 4:00 - 6:30 - 9:00
Godzilla  ★★
(10:30)-(2:00)- 5:30 - 9:00
The Cell  ★★★★
(11:00)-(1:00)- 3:00 - 5:00 - 7:00 - 9:00
Sketch: Single Display
Storyboards

From SIMS 202
Scenario 1: "I want to listen to alternative music"
Test Storyboards with Users

Can be “played” in front of users (or other designers)

Check understanding of process users go through
   – Observe user reaction
   – Debrief users

Good reference point during the design process
Exercise
Storyboarding Exercise
Storyboarding Exercise

Withdrawing money at an ATM machine in 6-8 frames

Think about users' goals while using an ATM
  – Think about ways to address these goals
  – Talk/Brainstorm with people seated near you

Individually create a storyboard depicting best idea
  – Quality of drawings not important
  – Must convey the interface and interactions