SKETCHING

CPSC 544 FUNDAMENTALS IN DESIGNING INTERACTIVE COMPUTATION TECHNOLOGY FOR PEOPLE (HUMAN COMPUTER INTERACTION)

WEEK 7 – CLASS 13A

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Includes slides from Leila Aflatoony, Karon MacLean and Jessica Dawson
TODAY

• Sketching [20 min]
  • Including brief discussion of the readings
• Human abilities [50 min]
• Project questions [10 min]
ADMIN

- Ideate due next Tues – how is it going?
- Example final conceptual from last year’s project to be posted - CHECK
LEARNING GOALS

to have exposure to additional techniques (beyond the reading) used for sketching
see some concrete examples
understand the value of collaborative sketch
SKETCHING WITH OFFICE SUPPLIES

reconstruction of the pencil sketch of the online shopping system using office supplies.
ANNOTATIONS

Annotations are names, labels and explanatory notes whose spatial location identifies the part(s) of the sketch they refer to. They are graphical marks that are incorporated into the drawing itself.
NOTES

Notes are any text incorporated in the sketch where its spatial location relative to parts of the drawing is not important.
SLIDEWARE FOR DRAWING
exploiting commonly available digital presentation tools for sketch drawing
DIGITAL VS PAPER-BASED SKETCHING

What to do
Touch a different color or scan another item.

What you selected
JPG Stroller
- Green
- Blue
- Red

Item
Style
Cost
---
JPG Stroller
Green
98.00

All done?
Order Print Discard
TEMPLATES

Pre-draw the constant, non-changeable parts of your sketch as a template that you can use and reuse.
PHOTO TRACES
Create collections of sketch outlines that form the basis of composed sketches.

1. Decide on the hand posture(s) you want. Take your photos of the hand postures you would like to sketch.
2. Import the first photo of a hand posture into your digital drawing editor.
3. Set the opacity of this photo to 50%.
4. Draw a stroke path along the outline of the hand. It is not necessary to be too accurate with this.
5. Remove the original photo from the background. What remains on the drawing page is the outline of the hand posture that you can fine tune (e.g., to scale, to rotate, to re-adjust stroke thickness) and save for later use.
USING THE PHOTO TRACES

Sketch out a particular gesture that a horizontal display – a digital table – will understand.

Add arrows that indicate how the orientation of parts of the hand relative to one another are tracked to recognize postures on an interactive tabletop.
EXAMPLE

Using a Single Sketch Element for Two Different Sketches
EXAMPLE

Add features to the sketch that are not in the original photo (e.g., the images in the flipbook, or the details of notes on the poster wall).
HYBRID SKETCHES

• Take a photo, or series of photos, of a place where the interaction takes place.
• Create or reuse a photo trace sketch of the person and/or system.
• Create an opaque background for our outline sketch.
• Sketching the interface.
HYBRID SKETCHES
EXPLORE AND SKETCH OUT DIFFERENT DESIGN IDEAS

Augmented-Reality Thermostat Visualization:
The sketches illustrate three alternative visualizations that a micro-projector of a mobile phone could display when pointing the phone next to the thermostat.
Collaborative sketching is as much about group interaction around the sketch (e.g., brainstorming and commenting on each other’s ideas) as it is about producing a sketch. Indeed, the sketch itself as produced may have been less valuable than the conversations around it.
REFERENCE

Many of the images in this lecture come from:
DISCUSSION OF READINGS

Then on to Part II of class (human abilities)….