CSE 40416
System Interface Design

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Lecture 39 - December 7, 2009

Today’s Lecture
- Graphic Design
  - Simplicity
  - Contrast
- Almost Done
  - 2 Lectures to Go
  - Last Blog Post
  - Wed: Case Studies

Reminders
- Blog Post (Week)
- Final Project

CIFS – Course Feedback
- Yet another reminder
  - Don’t let your grades be held up
  - As of last Friday PM (4/20) responses

Eye / Motion Tracking - Microsoft

Hall of Shame

Evaluation

12/13/2009
Evaluation

☐ Apply what you’ve learned so far
☐ What seems good?
☐ What seem off?

Revisit Principles

☐ Simplicity
☐ Contrast
☐ White Space
☐ Balance
☐ Alignment

*Designing Visual Interfaces by Kevin Mullet and Darrell Sano*
*Edward Tufte’s The Visual Display of Quantitative Information*

Simplicity

☐ Perfection is achieved not when there is nothing more to add, but when there is nothing left to take away. (Antoine de St-Exupery)
☐ Simplicity does not mean the absence of any décor. It only means that the décor should belong intimately to the design proper, and that anything foreign to it should be taken away. (Paul Jacques Grillo)
☐ Keep it simple, stupid. (KISS)
☐ Less is more.
☐ When in doubt, leave it out.

How to Achieve Simplicity

☐ Reduction
  ■ Google, Tivo
  ■ Ex. Handicapped Symbol
    □ US DOT
☐ Regularity
  ■ Repeat same pattern
☐ Combine elements
  ■ Double / triple duty
  ■ Ex. scroll bar

Contrast / Visuals

Selectivity: How well can you pull out variations that encode a variable?

Exercise

Left half?  Red letters?  K’s?
**Associativity**

- Associative perception: can variable be ignored when looking at other variables?
  - Associative: position, hue, value, texture, shape, orientation
  - **Not associative: size, value**
    - Small size and low value interfere with ability to perceive hue, value, texture, and shape

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**Size vs. Hue**

- Left half? — Red letters? — K's?

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**Say the Colors**

- Green
- Orange
- Red
- Black
- Pink
- Blue — Stroop effect

**Cognitive vs. perception**

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**Contrast Techniques**

- Choose appropriate visual variables
- Use as much length as possible
- Sharpen distinctions for easier perception
  - Multiplicative scaling, not additive
  - Redundant coding where needed
  - Cartoonish exaggeration where needed
- Use the *squint* test

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**Evaluate**

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**White Space - Gestalt**

- Whole from parts

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White Space vs. Noise

Ex -> Tufte

Evaluate - GIMP

Evaluate - Picasa

Questions?

- Weekly Blog
- Final Project
- Electronic Portfolio