Administrivia

- Midterms will be handed out in lab today and tomorrow.
- Hi-Fi prototype assignment is being handed out today, due in two weeks.

Design is...

- About function:
  * Good designs support user tasks

- About form:
  * Good designs should be a pleasure to use

Design is...

- About communication, not just about the medium
- It's not abstract expressionism:

History

- Russian Constructivism between the wars

Bauhaus (1919-33)

- 3 Principles that shaped modern design:
  * Form follows function
**Bauhaus**

3 Principles that shaped modern design:
- Economy of form (limited shape vocabulary)
- Integrity of materials

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**UI Design Principles**

- Simplicity
- Scale, Contrast, Proportion
- Organization and Visual Structure
- Grid-based Design

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**Simplicity**

Simple designs are usually the most effective

"Form ever follows function"
- Louis Sullivan

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**Simplicity - Unity**

One path to simplicity is through unifying themes:
- Forms, colors, components with like qualities
Simplicity - Refinement

Simplicity - Fitness

- Match the design to the capabilities of the technology and the user

- Why not use Roman fonts?
- Sans-serif fonts fit the medium
- Be careful of slant

Simplicity - Common mistakes

- Clutter and noise

Simplicity - Common mistakes

- Interference between competing elements

Simplicity - Common mistakes

- Using explicit structure as a crutch

Simplicity - Common mistakes

- Belaboring the obvious
Simplicity - Common mistakes
- Overly literal translation

Simplicity - Common mistakes
- Excessive Detail

Simplicity - Common mistakes
- Gratuitous dimensionality

Break
- Midterms will be handed out in lab today/tomorrow
- Next assignment (Hi-Fi prototype) goes out today.

Module and Program
- A systematic approach to the design of many artifacts:
  * web pages on a site
  * documentation pages
  * devices in a family
- Programs describe how to build designs from modules.

Grid-based Design

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142: Three hearts on the back design dedicated to the paper pattern by exercise on paper square. This is a border line or design on paper square. But the line of repeating patterns on paper square.
Grid-based Design

Principles - Focus
- Focus: the design should highlight one or a small number of modular elements

Principles - Consistency
- Consistent application: The program should maximize consistency in size, position, texture...

Common mistakes
- Arbitrary component positions
- Arbitrary component dimensions
- Random window sizes and layouts
- Unrelated icon sizes and imagery
- Inconsistent control presentations
- Inconsistent visual language
Reinforcing structure through repetition: Repeat design elements across the program

Stylesheets can help

Establish modular units

Techniques - Canonical grid

The canonical grid

An six-column basic grid with column separators and label templates

Can be implemented with HTML tables

Canonical Grid

Determine any size restrictions

Define horizontal and vertical modules

Develop a rough sketch of sizes, positions, orientations

Use the canonical grid to adjust sizes and positions of control elements

For dynamic layouts, figure out the minimum workable size.
Canonical Grid

Places to go

- MetaDesign: www.metadesign.com
- IDEO: www.ideo.com
- Frog Design: www.frogdesign.com
- Swim studio www.swimstudio.com
- Cooper Interaction Design www.cooper.com
- Aaron Marcus and Associates www.amanda.com
- Icarian www.icarian.com