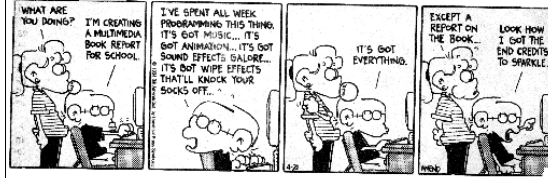


## Graphic Design

The “look & feel”

## Who Needs Substance?



## Graphic Design

- The “look & feel” portion of an interface
- What someone initially encounters
  - Conveys an impression, mood

## Design Philosophies

- Personal preferences:
  - Economy of visual elements
  - Less is more
  - Clean, well organized

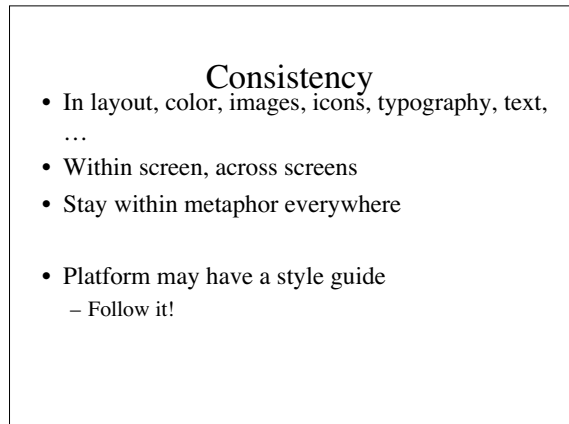
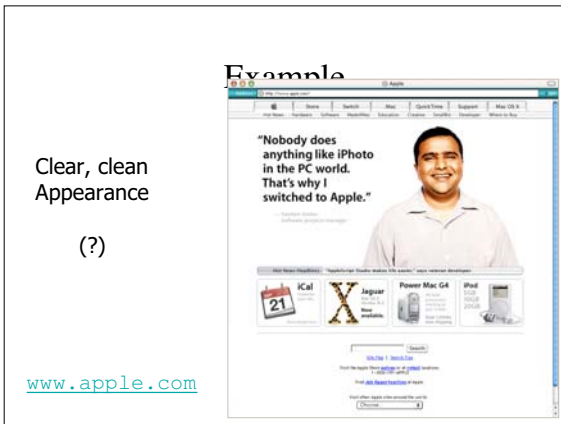
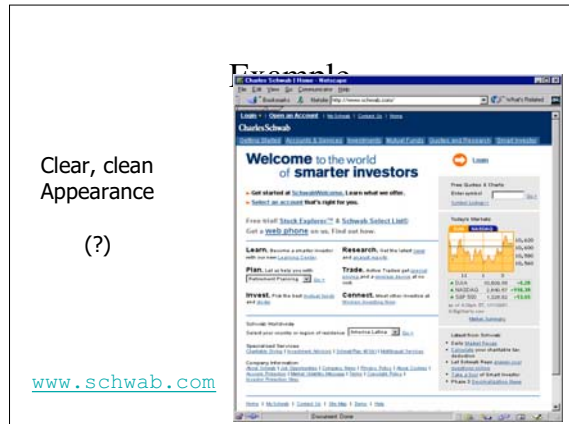
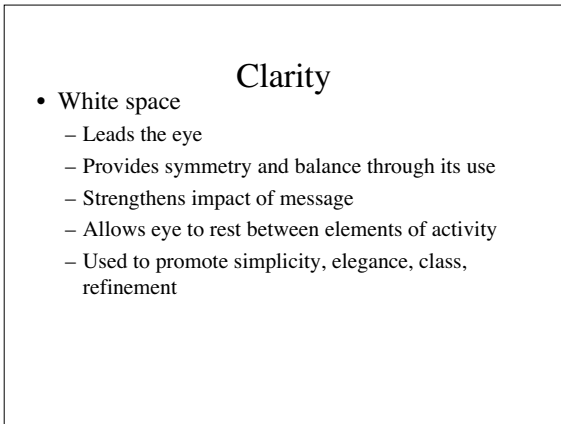
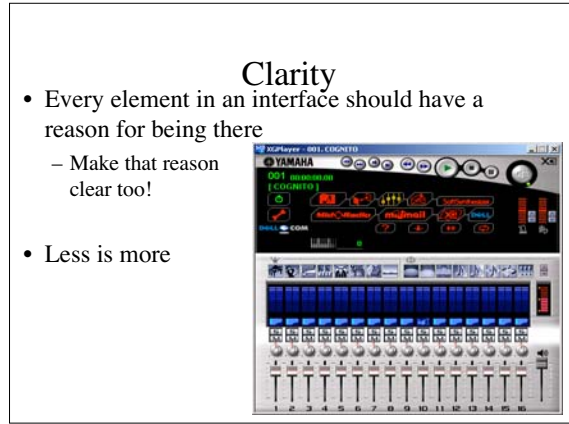
Sequencing    Layout    Imagery    Color  
Organization    Typography

## Graphic Design Principles

- Metaphor
- Clarity
- Consistency
- Alignment
- Proximity
- Contrast

## Metaphor

- Tying presentation and visual elements to some familiar relevant items
  - e.g., Desktop metaphor
  - e.g., Elevator metaphor
- If you’re building an interface for a grocery application, maybe mimic a person walking through a store with a cart





### Alignment

- Western world
  - Start from top left
- Allows eye to parse display more easily
- “Read-flow” principle

### Alignment

- Grids
  - (Hidden) horizontal and vertical lines to help locate window components
  - Align related things
  - Group items logically
- Minimize number of controls, reduce clutter

### Alignment

- Grids - use them

### Grid Example

### Alignment

- Left, center, or right?
 

Here is some new text	Here is some new text	Here is some new text
-----------------------------	-----------------------------	-----------------------------
- Choose one, use it everywhere
- Novices often center everything
  - No definition, calm, very formal

### Proximity

- Items close together appear to have a relationship
- Distance implies no relationship

Time  Time

- Colon ties label and field together

Time:

### Example

<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">         Name: <input type="text"/>          Addr1: <input type="text"/>          Addr2: <input type="text"/>          City: <input type="text"/>          State: <input type="text"/>          Phone: <input type="text"/>          Fax: <input type="text"/> </div>	<div style="border: 2px solid green; padding: 5px; display: inline-block;">         Name: <input type="text"/>          Addr1: <input type="text"/>          Addr2: <input type="text"/>          City: <input type="text"/>          State: <input type="text"/>          Phone: <input type="text"/>          Fax: <input type="text"/> </div>	Name <input type="text"/> Addr1 <input type="text"/> Addr2 <input type="text"/> City <input type="text"/> State <input type="text"/> Phone <input type="text"/> Fax <input type="text"/>
Right-align Field labels	Enhance grouping With boxes	Not zesty

### Contrast

- **Pulls you in**
- Guides your eyes around the interface
- Supports skimming
- Take advantage of contrast to add focus or to energize an interface
- Can be used to distinguish active control

### Contrast

- Can be used to set off most important item
  - Allow it to dominate
- Ask yourself what is the most important item in the interface, highlight it
- Use geometry to help sequencing

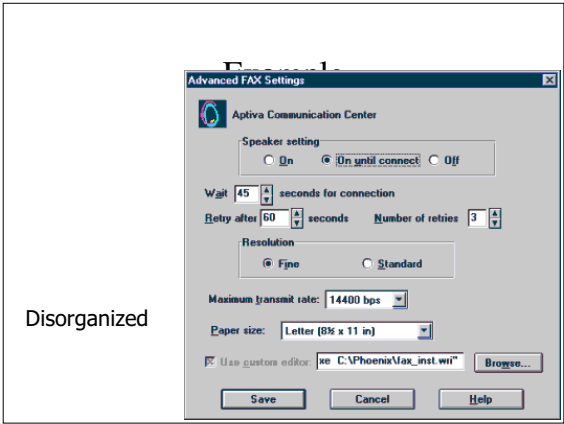
### Example

Important element

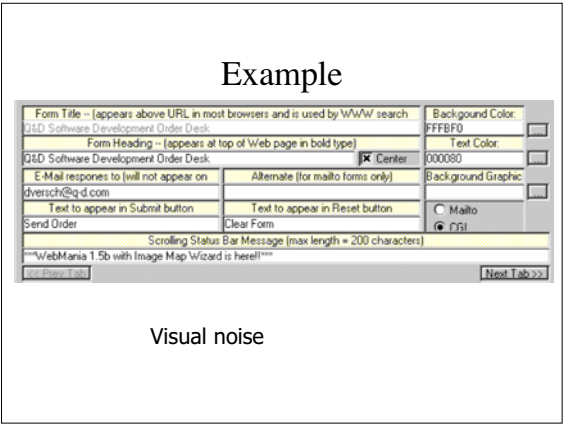
[www.delta.com](http://www.delta.com)

### UI Exercise

- Look at interface and see where your eye is initially drawn (what dominates?)
- Is that the most important thing in the interface?
- Sometimes this can (mistakenly) even be white space!

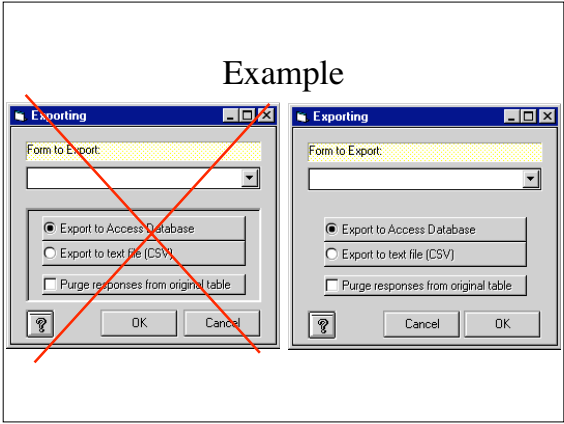


Disorganized



Example

Visual noise



Example

### Economy of Visual Elements

- Less is more
- Minimize borders and heavy outlining, section boundaries (use whitespace)
- Reduce clutter
- Minimize the number of controls

### Typography

- Characters and symbols should be easily noticeable and distinguishable
  - Avoid heavy use of all upper case
  - Mixed case promotes faster reading

---

HOW MUCH FUN IS IT TO READ ALL THIS TEXT WHEN IT'S ALL IN CAPITALS AND YOU NEVER GET A REST

How much fun is it to read all this text when it's all in capitals and you never get a rest

### Typography

- Readability
  - How easy it is to read a lot of text
- Legibility
  - How easy it is to recognize a short burst
- Typeface = font (not really, but close enough)

## Wow

Whenever your local SMS Administrator sends you an actual software Package, the SMS Package Command Manager will appear (usually at network login time) displaying the available Package(s). The following screenshots display scenes similar to what you will see when you receive an actual SMS Package.

To start the demonstration, click the "OK" button at the bottom of the screen.

Yuk

## Typography

- Serif font - readability
- Sans serif font - legibility
  - (both are variable spaced)
- Monospace font

## Fonts

- Serif
  - Times, Bookman
- Sans serif
  - Tahoma, Arial
- Onscreen fonts
  - Georgia
  - Geneva
  - Verdana
- Decorative
  - Comic Sans
- Script
  - Script
- Monospaced
  - Courier, Lucida

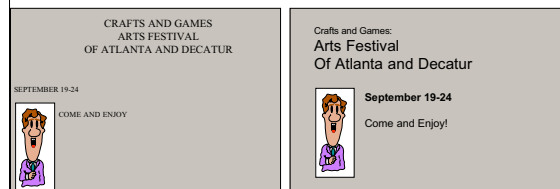
## Typography

- Guidelines
  - Use serif for long, extended text; sans serif for “headlines”
  - Use 1-2 fonts/typefaces (3 max)
  - Use 1-3 point sizes max
  - Never use bold, italics, capitals for large sections of text
  - Be careful of text to background color issues

## More Wow



## Example Which do you prefer?



Applies lots of these principles


## Color

- We see the world via a *reflective* color model
  - Light strikes a surface and is reflected to our eyes--Properties of surface dictate color
  - Printers
- Colors on display follow the *emitted* model

## Color Attributes

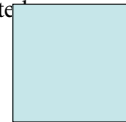
- Hue
  - native color, pigment
- Saturation
  - relative purity, brightness, or intensity of a color
- Value
  - lightness or darkness of a color

## Color

- On monitors, typically RGB scheme
  - reen, blue
- R: 170 G:43 B: 211

## Color Guidelines

- Design in b/w then add color where appropriate
  - Print your design out in b/w to test it
- Use color to draw attention, communicate organization, to indicate status, to establish relationships
- Avoid using color in non-task related ways



## Color Guidelines

- Display color images on black background
- Choose bright foreground color (white, bold green,...)
- Avoid brown and green as background colors
- Be sure foreground colors contrast in both brightness and hue with bg colors

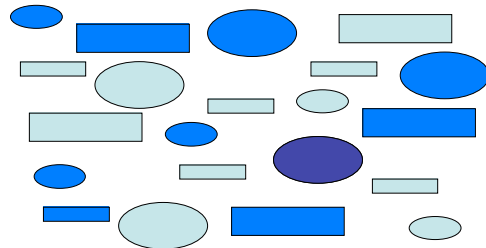
## Color Guidelines

- Color is good for supporting visual search
- Do not use color without some other redundant cue
  - Color-blindness
  - Monochrome monitors (and printouts)
  - Redundant coding enhances performance
- Be consistent with color associations from jobs and cultures

### Color Guidelines

- Limit coding to 8 distinct colors (4 better)
- Avoid using saturated blues for text or small, thin lines
- Use color on b/w or gray, or b/w on color
- To express difference, use high contrast colors (and vice versa)

### How many...



### Find the...

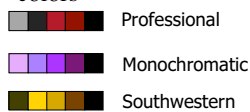


### Color Associations

- Red
  - hot, warning, aggression, love
- Yellow
  - happy, caution, joy
- Brown
  - warm, fall, dirt, earth
- Green
  - lush, pastoral, envy
- Orange
  - autumn, warm, Halloween
- Purple
  - royal, sophisticated, Barney

### Color Suites

- Designers often pick a palette of 4 or 5 colors



### Icon Design

- Design task
- Represent object or action in a familiar and recognizable manner
- Limit number of different icons
- Make icon stand out from background

## Icon Design

- Ensure that singly selected icon is clearly visible when surrounded by unselected ones
- Make each icon distinctive
- Make icons harmonious members of icon family
- Avoid excessive detail

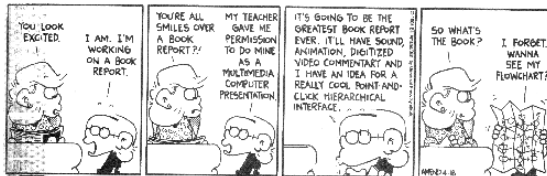
## Icon Design



What do each of these signify?

Almost always want to accompany your icons by a text label

## It's All About Design...



## Good & Bad Designs

- [www.baddesigns.com](http://www.baddesigns.com)
- [www.iarchitect.com](http://www.iarchitect.com)