

## Graphic Design

Graphic Design  
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## Graphic Design

The “look & feel” portion of an interface  
 What someone initially encounters

- Conveys an impression, mood

### Design Philosophies

My personal preferences:

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

### Graphic Design Principles

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

## Metaphor

Typing presentation and visual elements to some familiar relevant items

- e.g., Desktop metaphor
- If you're building an interface for a grocery application, maybe mimic a person walking through a store with a cart

Example

Overdone?

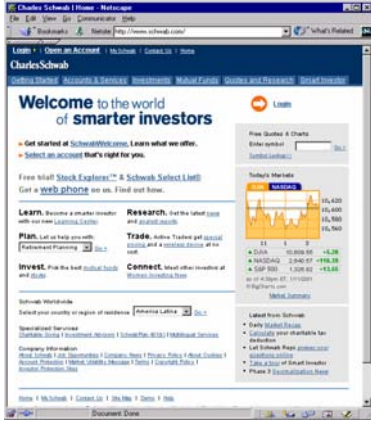


[www.worldwidestore.com/Mainlv1.htm](http://www.worldwidestore.com/Mainlv1.htm)

## Clarity

- Every element in an interface should have a reason for being there
  - Make that reason clear too!
- Less is more
- White space
  - Leads the eye
  - Provides symmetry and balance through its use
  - Strengthens impact of message
  - Allows eye to rest between elements of activity
  - Used to promote simplicity, elegance, class, refinement

## Example



www.schwab.com

Clear, clean appearance

Opinion?

## Consistency

- In layout, color, images, icons, typography, text, ...
- Within screen, across screens
- Stay within metaphor everywhere
- Platform may have a style guide
  - Follow it!

### Example

www.santafean.com



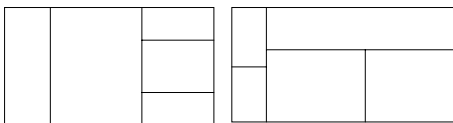
Home page

Content page 1

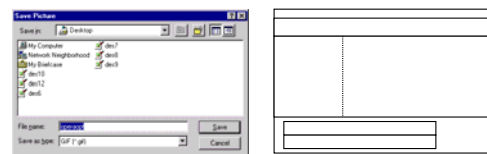
Content page 2

## Alignment

- Western world
  - Start from top left
- Allows eye to parse display more easily
- Grids
  - (Hidden) horizontal and vertical lines to help locate window components
  - Align related things
  - Group items logically
  - Minimize number of controls, reduce clutter
- Grids - use them



## Grid Example



### Alignment

- Left, center, or right

|                             |                             |                             |
|-----------------------------|-----------------------------|-----------------------------|
| Here is<br>some<br>new text | Here is<br>some<br>new text | Here is<br>some<br>new text |
|-----------------------------|-----------------------------|-----------------------------|

- Choose one, use it everywhere
- Novices often center things
  - No definition, calm, very formal

## Proximity

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

Time

Time:

|                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| Name <input type="text"/>  | Name <input type="text"/>  | Name <input type="text"/>  |
| Addr1 <input type="text"/> | Addr1 <input type="text"/> | Addr1 <input type="text"/> |
| Addr2 <input type="text"/> | Addr2 <input type="text"/> | Addr2 <input type="text"/> |
| City <input type="text"/>  | City <input type="text"/>  | City <input type="text"/>  |
| State <input type="text"/> | State <input type="text"/> | State <input type="text"/> |
| Phone <input type="text"/> | Phone <input type="text"/> | Phone <input type="text"/> |
| Fax <input type="text"/>   | Fax <input type="text"/>   | Fax <input type="text"/>   |

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## 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
- 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



www.delta.com

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## Economy of Visual Elements

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

## Coding Techniques

- **Blinking**
  - Good for grabbing attention, but use **very sparingly**
- **Reverse video, bold**
  - Good for making something stand out
  - Again, use sparingly

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## Typography

- Characters and symbols should be easily noticeable and distinguishable
  - Avoid heavy use of all upper case
  - Studies have found that mixed case promotes faster reading

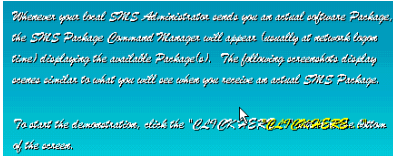
|                                                                                                         |                                                                                                         |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| HOW MUCH FUN IS IT<br>TO READ ALL THIS TEXT<br>WHEN IT'S ALL IN<br>CAPITALS AND YOU<br>NEVER GET A REST | How much fun is it<br>to read all this text<br>when it's all in<br>capitals and you<br>never get a rest |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|

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

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## Typography



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

## Fonts

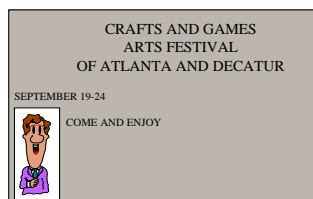
- Serif
  - Times, Bookman
- Sans serif
  - Tahoma, Arial
- Decorative
  - Comic Sans
- Script
  - Script
- Monospaced
  - Courier, Lucida

### Guidelines

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

## Font Control

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
- On monitors, typically RGB scheme
  - 0-255 value each red, green, blue
  - R: 170 G:43 B: 211
- Use it for a purpose, not to just add some color in

### Color Attributes

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

## Color

### Color Guidelines

- Display color images on black background
- Choose bright foreground color (white, bold green,...)
- Avoid brown and green as background colors
- Be sure fg colors contrast in both brightness and hue with bg colors
- Use color sparingly--Design in b/w then add color where appropriate
- Use color to draw attention, communicate organization, to indicate status, to establish relationships
- Avoid using color in non-task related ways

## Color

### Color Guidelines

Color is good for supporting search

- Do not use color without some other redundant cue
  - Color-blindness
  - Monochrome monitors
  - Redundant coding enhances performance
- Be consistent with color associations from jobs and cultures
- 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)

## Color

### Color Suites

- Designers often pick a palette of 4 or 5 colors



Professional



Monochromatic



Southwestern

### Color Associations

- |                                  |                                |
|----------------------------------|--------------------------------|
| • Red                            | • Yellow                       |
| – hot, warning, aggression, love | – happy, caution, joy          |
| • Pink                           | • Brown                        |
| – female, cute, cotton candy     | – warm, fall, dirt, earth      |
| • Orange                         | • Green                        |
| – autumn, warm, Halloween        | – lush, pastoral, envy         |
|                                  | • Purple                       |
|                                  | – royal, sophisticated, Barney |

## 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
- 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



What do each of these signify?

Almost always want to accompany your icons by a text label