Lecture 11: Visual Design Principles

March 8
Welcome to Yvette's!!
Established 1980
Sensational!! ~*

Yvette's Bridal Gowns
Yvette's is here for YOU!!! ~***~*
let's Celebrate! it's Prom 2010!!! ~*~*

Apple Pie, please click here ~*
Invitations!! Call to Artists!! ~*
please click here!! ~*
Yvette's habla poquito espanol!! ~*

Yvette's has Gorgeous Gowns full figure!!
Yvette's sells Kitty Chen Couture, click here ~*Sensational!! ~*
Designer Fabrique ~*

Nous aimons la France.
Tuxedo rentals starting @ $65.00 ~*

Yvette's Paintings for sale!!, please click here!! ~*

Yvette's phone number: (850)-871-3000
Monday thru Saturday 10:00 a.m. ~ 6:00 p.m.

- Pink Links to our DESIGNERS -*
Follow the Pink Links to Yvette's!! ~*

Yvette's sells tuxedos!!

MISS SUNSHINE PAGEANT PAGEANTS
SPRING 2010 DESIGNER FASHIONS, click here ~*Sensational!! ~*

CMSC 434 Introduction to Human Computer Interaction 2
Goals of visual design

• Help users find their way
  – Learnability
  – Memory
  – Few errors
  – Efficient

• Provide a distinct look and feel
  – Satisfaction
Topics

• Color
• Contrast
• Grouping
• Simplicity
Color
Color Guidelines

• Avoid saturated colors
  – Use pastel colors

• Be consistent with expectations
  – Red means bad, green means go

• Use few colors
  – Too many colors look complex, cluttered, distracting

• Avoid colors causing chromatic
Chromatic aberration

• Different wavelengths focus differently
• E.g., red & blue can’t be focused simultaneously

Is this sentence easy to read?
Is this sentence easy to read?
Contrast
Techniques for Contrast

• Manipulate appropriate visual variables
• Visual variables:
  – Brightness
  – Hue
  – Texture
  – Shape
  – Position
  – Orientation
  – Size
Why contrast?

- Users need to select an item of a particular value (selectivity).
- Users need to compare items with different values (comparability).
- When there are multiple dimensions, users need the flexibility to ignore one dimension (disassociativity).
Techniques for Contrast

• Manipulate appropriate visual variables

• Visual variables:
  – **Brightness**
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Techniques for Contrast

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Techniques for Contrast

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• Visual variables:
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Techniques for Contrast

• Manipulate the value of visual variables
• Visual variables:
  – Brightness
  – Hue
  – Texture
  – Shape
  – Position
  – Orientation
  – Size
Techniques for Contrast

• Manipulate appropriate visual variables

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• Hue
• Texture
• Shape
• Position
• Orientation
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• Shape
• Position
• Orientation
• Size
• Maximizes range

• Minimize levels

• Why?
Simplicity

"Simplicity is the ultimate sophistication."

*Leonardo Da Vinci.*
Techniques for simplicity

• Reduce
  – Hide or remove inessential component

• Regularize
  – Limit inessential variations

• Double-duty
  – Make a component to play multiple roles

• Organize
  – Arrange controls in logical groups
Reduce
Regularize
Double-duty
Organize
How does Google simplify search?
Grouping
Gestalt principles

• Proximity
• Similarity
• Continuity
• Closure
• Figure and background
• Symmetry
• Common fate

Fancy way of saying “grouping”
Proximity
Similarity
Continuity
Closure

Figure and background
Symmetry
Common fate
Proximity  
Similarity  
Continuity  
Closure  

Figure and background
Symmetry
Common fate
Proximity
Similarity
Continuity
Closure

Figure and background
Symmetry
Common fate
Proximity
Similarity
Continuity
Closure
Figure and background
Symmetry
Common fate
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Closure  

Figure and background  
Symmetry  
Common fate
Proximity  Figure and background
Similarity  Symmetry
Continuity  Common fate
Closure
Proximity  
Similarity  
Continuity  
Closure  

Figure and background  
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