CSC151.02 2013F, Class 11: A Design Perspective

The chief aim of color should be to serve expression as well as possible. Henri Matisse

Overview

• Preliminaries
  o Admin.
  o Some discussion of pair programming.
  o Clicker Questions - GIMP Tools.
• A bit about design.
• A bit about color theory.
• Exploring some images and design spaces.
  o Clicker questions, revisited
  o Some interesting images
  o Maybe fun with color spaces

Admin

• Dr. Davis and I discussed the exam and decided that we’d prefer to distribute it after HW3 comes in. So you’ll get it tomorrow.
• My email application has been acting up. If you want a meeting with me and haven’t scheduled one, please see me after class and we’ll pick a time.
• Reading for Wednesday: Raster Graphics and RGB Colors
• SACNAS Ice Cream Social Thursday, September 19th at 8:00PM in the Biology Commons
• EC Opportunities:
  o Convocation this Wednesday
  o CS Extras Thursday @ 4:30: Kim Spasaro on Linguistics Programming
  o CS Table Friday (Pair programming)
  o Other?
• I also encourage you to attend any of the other Title IX talks/events.

Pair Programming

• Idea: Instead of one person, you have two
• Two roles: Driver and navigator. (A bit more complex with three people often two navigators.)
  o Driver - write code
  o Navigator - guide
  o Need to rotate roles.
• Why do we do it? What are the benefits?
  o "Two minds are better than one"
    • Helps avoid wrong directions
• Ideas build upon each other!
• If your navigator has access to the reference material, the driver is more efficient - doesn’t need to switch windows, etc.

○ Having to explain what you do helps you
  ● understand it better
  ● make fewer careless mistakes

○ Some of you folks are already too reluctant to ask for help
  ● Encourages you to ask and be unsure

○ "Fresh Eyes" - It’s hard to see problems in what you’ve done

○ Over the long term, you’ll have to work with other people on projects, so get used to it

• Evidence from both industry and classroom suggest success
• How should you behave as part of a pair?
  ○ Know your role - Navigators should guide, not just steal the keyboard
  ○ Communicate
  ○ Be patient
  ○ Switch roles
  ○ Don’t be afraid to ask for help
  ○ Don’t be too assertive
  ○ Don’t be too passive - you won’t learn if you just watch
  ○ Positive criticism
  ○ Explain

Clicker Questions

• Gender issues and pairing
• Gimp Tools

A bit about design

• Goal "Oooh pretty"
• But perhaps we should also understand millennia of experience on design
• Many principles
  ○ Symmetry
  ○ Balance
  ○ Depth
  ○ Color

• Goals in image making
  ○ Guide the viewer’s eye through the image
  ○ Keep the viewer’s interest (Kluber says that simple representational art will not keep the viewer’s interest)
A bit about color theory

- Three ways to think about colors
  - Making it with light - Red, Green, and Blue More light - Brighter
  - Making it with paint (subtractive) - Red, Yellow, and Blue More paint - Darker
  - Alternate approach to paint
    - Hue - Basic color
    - Saturation - How much of the pigment you mix into the paint
    - Value - Brightness
- How do you as a designer use colors?
  - Complementary - Tends to make colors "pop" or vibrate
  - Analagous - Three neighboring colors on the color wheel
  - Monochromatic - Variants of one color
- Other uses
  - Feeling: Warm/cold
  - Depth

Exploring some images and design spaces

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