CSC151.02 2013F, Class 39: On Two-Dimensional Design

Overview

- Preliminaries.
  - Admin.
  - Questions on HW8.
- Background: About the project.
- General elements of design.
- Relationships between elements.
- Broader design principles.
- Some examples.

Preliminaries

Admin

- For those of you who have not dealt with preregistration at Grinnell before, you can still enroll in a class that says it has no slots available.
  - We let classes overenroll and then we hack away at them. Isn’t that a great approach?
- This Friday we will be moving our class to ARH 302 (3rd floor lecture hall) to hear Hilary Mason ’00. Class starts at 12:45.
  - We won’t have a quiz this week.
- Grading:
  - Homework is reduced to 5% of your grade. The other 5% goes to the best of homework/quizzes/labs.
  - I will see how much I can grade through this coming weekend (which is the next reasonable chunk of free time I have).
    - Default grade on ungraded work is "check".
    - After you get the grades back, you can request that I grade any ungraded assignment.
    - Note that I need to grade both classes, and I do have to do class prep and things other than work.
- Today in class we will watch Sam engage in "Deck Wars" (no, not the TV show version; the Powerpoint version).
- Upcoming extra credit opportunities:
  - Town Hall, Wednesday, November 13, noon or 7:30 p.m.
  - Learning from Alumni, Thursday, 2:15: Atul Gupta, Trustee
  - CS Extra, Thursday, 4:30: Hilary Mason ’00
  - Informal chat with Hilary Mason, 8-9 pm
  - NO CS TABLE FRIDAY!
  - Career Connections with Hilary Mason ’00, CLS, Friday, 4:15-6:30 (I don’t know how Career
Connections work; I expect it’s really 4:15-5:00)
- Swim meet Saturday, noon; Beth swims at 3pm.
- Football, Saturday, noon (TJ and Jake are lots of fun to watch)
- Basketball, Friday and Sunday
- Digital Commons talk Monday, November 18, 7:00 p.m. or so
- CS Talk, Lunch, Wednesday, November 20 (info forthcoming)
- *Hamlet, some time soon.*
- "Data Sovereignty: The Challenge of Geolocating Data in the Cloud", November 25, 4:15 JRC 101
- Showing of "Gold Fever" by Andrew Shurburne ’01 or so, 7:00 p.m. Monday, November 25, ARH 302
- Tuesday, November 20, 4:15 p.m., JRC 209 a gaming event with the game [d0x3d!]

Questions on HW8

It’s hard.

How do we have a counter

```scheme
(define counter (vector 0))
(define increment-counter!
  (lambda ()
    (vector-set! counter 0 (+ 1 (vector-ref counter 0))))))
(define get-counter
  (lambda ()
    (vector-ref counter 0)))
(define reset-counter!
  (lambda ()
    (vector-set! counter 0 0)))
```

Chike says that output doesn’t always look like what you think it will, so check the car and the cdr. Scheme prints trees badly.

Background: About the project

- Tie together ideas from the semester
- And apply to apply them to the "image making" domain
- Write a procedure (image-series n width height)
  - Output: "Interesting image" of given width and height
  - Same n: Same image, just scaled differently
    - Some things are nearly impossible to scale, such as brushes
  - Different n: Different images (for natural n in the range 0 ... 999, inclusive)
- Well documented (internal)
Additional things

- NO RANDOMNESS
- Proposal next week with sketches
- Use multiple techniques
- It is up to you whether you use other images and whether that meets legal expectations. BUT
  CITE

What makes an image "interesting"?

- Keeps the viewer engaged (or some viewers engaged) - "Why did the artist do this?"
- Relationships
  - Between the components of your image
  - To other images in your series
  - To other works of art
  - To the world beyond
- Knowing design issues that you can take advantage of

General elements of design

- Color
- Line - size, color, thickness, straightness, etc.
- Shapes - Coherent units of your image, sometimes from lines, sometimes from color differences.
  - Geometric shapes
    - Regular
    - Irregular
  - Organic
  - Positive shape / negative shape
- Texture
  - Natural
  - Unnatural

Relationships between elements

Broader design principles

Some examples

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