CSC151.02 2014S, Class 15: Homogeneous Lists: Making and Manipulating Groups of Drawings

Overview

- Preliminaries.
  - Admin.
  - Upcoming work.
  - A few notes from yesterday’s class.
  - New homework assignment.
  - Questions.
- Questions on the reading.
- Lab.

Preliminaries

Admin

- I won’t be able to hold a review session this week. Sorry.
- Extra credit:
  - Falling Club, 4:15-6:15 at the rock wall.
  - Thursday extra, Thursday @ 4:30 p.m., Sci. 3821, Red/Black trees.
  - Opera Iowa: The Elixir of Love, Thursday, 7:30, Roberts
  - CS Table Friday @ noon: Law, Order, and Computers

Upcoming work

- Start homework 4
- Friday’s reading: The GNU Image Manipulation Program and Scripting the Gimp Tools
- Lab writeup: Exercise 5
  - Subject: CSC 151.02 Writeup 11: Lists of Drawings (YOUR NAME)
  - Due Friday.

A few notes from Tuesday’s lab

irgb-redder and related procedures are not always invertible. Consider what happens at the extreme values.
> (define red1 (rgb-new 244 0 0))
> (define red2 (rgb-new 255 0 0))
> (define red3 (rgb-new 250 0 0))
> (define black (rgb-new 0 0 0))
> (define very-dark-grey (rgb-new 8 8 8))
> (define very-dark-purple (rgb-new 8 0 8))

What do you think about the following procedure?

(o irgb-complement irgb-redder irgb-complement)

How would you implement \texttt{irgb-redder}? (There’s how it’s implemented, and what we might do given what we’ve learned in using it.)

- Current implementation

  (define irgb-redder (lambda (irgb) (irgb (+ (irgb-red irgb) 32) (irgb-green irgb) (irgb-blue irgb))))

  (define irgb-redder (lambda (irgb) (irgb (+ (irgb-red irgb) 24) (- (irgb-green irgb) 16) (- (irgb-blue irgb) 16))))

\textbf{About homework 4}

- New partners!
- Four problems, all emphasizing transformations.

\textbf{Questions on the Readings}

- Nope.

Lab

Samuel A. Rebelsky, rebelsky@grinnell.edu

Copyright (c) 2007-2014 Janet Davis, Samuel A. Rebelsky, and Jerod Weinman. (Selected materials are copyright by John David Stone or Henry Walker and are used with permission.)

This work is licensed under a Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit [http://creativecommons.org/licenses/by-nc/3.0/] or send a letter to Creative Commons, 543 Howard Street, 5th Floor, San Francisco, California, 94105, USA.