CSC151.02 2013F, Class 10: Programing the GIMP Tools

Overview

- Preliminaries
  - Admin.
  - About HW2
  - Questions on HW3
  - Clicker Questions.
- A new model of images making.
- Coding algorithms for drawing.
- Other useful techniques.
- Lab.

Admin

- I was in Pella, so brought you Dutch letters (enough for 1/2 each). Sorry to those of you who are gluten or almond intolerant. (I don’t know about ingredients, but my peanut-allergic son and my tree-nut-allergic self are okay with them.)
- Study break, tonight at 8pm.
- Grading stuff
  - I finally finished grading HW1. Sorry for the delay.
  - Our grader has graded HW2 and I’ll be returning it and commenting on it.
  - I’ll be returning Friday’s quizzes. Some of you may want to chat with me.
  - I’ll distribute the exam tomorrow.
- Many things went wrong today - broken code, broken lab, etc. Sorry. It also means that I’m even more discombobulated than normal.
- Not quite lab writeup (due Wednesday):
  - Document using the six P’s the rectangle procedure from the first lab on drawings.
  - Email to rebelsky@grinnell.edu, subject "CSC 151.02 Lab Writeup: Documentation"
- Reading for Tuesday: Design and Color
- EC Opportunities:
  - Convocation this Wednesday at noon in JRC 101 (see Sam’s rant on the importance of convo in the outline for more details)
  - CS Extras Thursday @ 4:30: Kim Spasaro on Linguistics Programming
  - CS Table Friday (Pair programming)
  - Humans vs. Zombies
  - Other?
- I also encourage you to attend any of the other Title IX talks/events.
Comments on HW2

- I’ll be returning them at the end of class.
- It would be nice to see you try more non-working or strange values
  - What happens if you use a negative number? A complex number?
  - What happens if you try a different number of parameters.
- Things like "least common multiple" and "greatest common divisor"
- Many of you left out examples / "tests"

Questions on HW3

- Who is my audience?
  - Your peers in this class, one week earlier
- When our code generates images, should we include the images?
  - Generally, no. We can regenerate them.
  - For the yellow rectangle

(rectangle "yellow" ....) (drawing rectangle 43512315 0 0 20 20)

Clicker Questions

- NO CLICKER QUESTIONS TODAY

A new model of images making

- ON computers, we often draw with an application
- New model: Tell the application what to do "Select this brush" "Drag from here to here" "Fill the selected region" ...

Coding algorithms for drawing

- What we can do by hand, we can do "by code"
  - It’s more precise. We can be more perfect than we can by hand.
  - It’s easier to replicate (we can copy/paste instructions instead of images)
    - We can rerun the instructions
  - We can decompose how the image is created
  - We can change the code and generate a related image (without affecting the original).
    - Easy to fix errors!
  - We can do long, repetitious tasks more easily
  - In some deranged circles you get geek cred for writing programs to make images
Other useful techniques

Lab

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