CSC151.02 2013F, Class 22: Conditionals

Overview

- Admin.
- The parts of an algorithm, revisited.
- Choosing between two options with if.
- Making multiple choices with cond.
- Lab.

Admin

- I hope the second half of last week went well. The conference was interesting and I brought you (minor) swag.
- Keep partners from last week for today.
- Yes, you’ll have a writeup for every lab. I’m behind enough that I probably won’t respond until break.
- I am booked solid from 8 to 8 with SHACS review. Sorry. I’ll get site updated tonight.
- Active minds wants to remind you that ...
- Writeup: Conditionals Lab, 3c, 4d
- Upcoming EC opportunities
  - Tuesday, 7 pm, Road to Rio
  - Thursday extra, Science 3821 at 4:30: Grad school in CS
  - Friday CS Table: Reports from Hopper
  - Friday film: Codebreaker, 7pm, Harris
  - Wit, the play, opens Thursday.
  - Any Queer Culture Week Activity
    - E.g., Wednesday at 7:30, Consent, Negotiation, and BDSM, somewhere in ARH
  - ...
- Other upcoming stuff
  - Study break 8 pm tonight
  - Review session 1:15 pm Thursday
  - Mentor session 7:30 pm Thursday
  - Mentor session 7:00 pm Sunday
  - ...

The parts of an algorithm, revisited

A long long time ago, we asked ourselves what goes into an algorithm
We name things (e.g., "dominant hand") - Variables
  ○ And they vary (define name value) (let ([name value]) ...)

Sequence operations *(compose
  ○ nesting - inside-out
  ○ We can just write them in order, as in when we’re writing gimp operations

Make choices - Conditionals
  ○ TODAY

Repetition - e.g., repeat unscrewing motion
  ○ Need termination
  ○ repeat, map, for-each!

Need to know what the basic operations are - What is the "common knowledge"
  ○ (require gigls/unsafe)
  ○ mathematical: multiply, etc.
  ○ drawing-hshift, drawing-vshift
  ○ gimp tools
  ○ and more

Subroutines / Functions - Group together instructions (lambda (x) some code that relates to x)

We also discussed some conceptual issues

○ How precise do we have to be
○ Special situations

Choosing between two options with if

Making multiple choices with cond

Lab

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