

Preview of Coming Attractions, Project Work Time

Rose-Hulman Institute of Technology
Computer Science and Software Engineering

Exam 2, Thursday at 7 PM

- Same format as exam 1
- Paper part and computer part, but weighted towards computer part (70%/30%?)
- Covers all of our Python work, including SET project
 - Includes assigned readings from Zelle chapters 1-11.
 - 11.1-3 is a nice short review of lists

Resources for Paper Part

- No textbook this time
- Sheet of notes:
 - Single 8.5 by 11 page (both sides)
 - Whatever you want on it
 - Prepare this carefully!

Resources for Computer Part

- Any printed or handwritten material you choose (notes, books, printouts, ...)
- Your computer, with power adapter and network cable
 - Computer and anything actually on it
 - Network, but only to access your own SVN repository and any material directly reachable from the CSSE 120 ANGEL and web sites for this term
 - No google-like searches
 - No people other than the instructor for clarification

Exam Topics: Paper part

- Tracing code by hand, for example loops of all types, functions that mutate parameters, functions that call other functions.
- Using subscripts in sequences. Compare and contrast lists and strings
- What mutation is. Why it is valuable. Why it is dangerous. How mutating an object is different from assigning a value to the object.
- What procedural decomposition is. Why it is important. Why parameters are powerful. How to do it.
- What an object is. What a class is. The difference between a class and an instance of a class. What a constructor, method and instance variable are. The notation for each of those. self.
- What a sentinel is and why it is useful
- Concepts from your project

Exam Topics: Computer part

- Counting or summing (or otherwise accumulating).
- Using zellegraphics objects.
- Looping through a sequence.
- More sophisticated looping patterns (like through two sequences in parallel, nested loops, patterns beyond 0, 1, 2, ... n-1)
- Indefinite loops and looping patterns using them.
- Using parameters in a meaningful way.
- Writing a function that calls another function you write, where the calls are in a loop with the parameter(s) varying through the loop.
- Returning a value.
- Building up and returning a list.
- Using classes new to you.
- Mutating a list.
- Concepts from your project.

Optional exam review Question & Answer session Friday 2nd hour
Place O259

Questions About Exam?

C You Soon!

- Beginning next session, class format changes
- You will:
 - Watch some short videos before class
 - Complete a take-home quiz during videos
 - Hand-in quiz at start of class
 - Work on the next "homework" assignment during class (hopefully not much of it will be left for homework), with lots of help from instructor and TAs
 - Come to class with head phones to review videos

Before Next Class

- Complete Game of SET implementation
- Prepare a **four minute** presentation for the class
 - Quickly show that your program works
 - Plan (and time) to show off the coolest parts
 - Describe your design, show us a little bit of code
- Watch the first two C videos
 - Note: Chrome can't stream mp4 videos ... sorry!
- Complete the take-home quiz over the videos
 - First 2-sided page from packet or print from schedule page

Team Project Work

- Demo session 19 milestone
- Continue working on next milestone
 - Project enhancements!
- Schedule team time to finish project work before next class