You Made It!
Announcements

● P3 due tonight
● R7 due Sunday
  ○ Can use to extend P3
● Final exam next Wednesday, 12:30-2:20
  ○ Read exam policies
    ■ One note page, no more than 8.5” x 11”
    ■ Reference sheet provided
    ■ Assigned seats
● Grade guarantee calculator posted later today
Thank your TAs!
Learning Objectives

or, “What did I learn in this class?”

1. Computational Thinking Create an algorithm to solve a given problem and express that algorithm in a structured way (e.g. pseudocode)
2. Comprehension Trace and predict the behavior of programs and systems
3. Code Writing Write functionally correct Java programs that meet a provided specification using control structures, primitive data types, and basic data abstractions
4. Communication Clearly and effectively describe the behavior of a given code snippet
5. Debugging Identify errors in a method’s behavior & implement fixes for identified errors
6. Decomposition Solve problems by breaking them into subproblems and recombining the solutions using techniques such as methods
7. Ethics/Impact Describe ethical and sociotechnical issues related to software and technology and explain how their choices as programmers can impact those issues
Digression: My New Hobby

*Amigurumi*: Japanese art of creating crocheted or knitted stuffed toys
You made some pretty cool crafts yourself!

I have two options to live or to live.

I have two thoughts to live and to live.
You made some pretty cool crafts yourself!
You made some pretty cool crafts yourself!
Applications of CS

or “What can I do with what I learned?”

- Detect and prevent toxicity online
- Digitize basketball players
- Help DHH people identify sounds
- Figure out how to best distribute relief funds
- Recognize disinformation online
- Make movies
- Improve digital collaboration
- Fix Olympic badminton
- And so much more!
# Future Courses

or “What can I do next?”

<table>
<thead>
<tr>
<th>Course</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 311</td>
<td>Mathematical foundations</td>
</tr>
<tr>
<td>CSE 351</td>
<td>Low-level computer organization/abstraction</td>
</tr>
<tr>
<td>CSE 331</td>
<td>Software design/implementation</td>
</tr>
<tr>
<td>CSE 341</td>
<td>Programming languages (!)</td>
</tr>
<tr>
<td>CSE 340</td>
<td>Interaction programming</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 154</td>
<td>Intro. to web programming (several languages)</td>
</tr>
<tr>
<td>CSE 163</td>
<td>Intermediate programming, data analysis (Python)</td>
</tr>
<tr>
<td>CSE 180</td>
<td>Introduction to data science (Python)</td>
</tr>
<tr>
<td>CSE 373</td>
<td>Data structures and algorithms (non-majors)</td>
</tr>
<tr>
<td>CSE 374</td>
<td>Low-level programming and tools (C/C++)</td>
</tr>
<tr>
<td>CSE 416</td>
<td>Intro. to Machine Learning</td>
</tr>
</tbody>
</table>

Frequently Asked Questions

• How can I get better at programming?
  • Practice!

• How can I learn to X?
  • Search online, read books, look at examples

• What should I work on next?
  • Anything you can think of! (Here are some ideas)
  • Beware: it’s hard to tell what’s easy and what’s hard.

• Should I learn another language? Which one?
  • That depends—what do you want to do?

• What’s the best programming language?
  • 😊 (take CSE 341)
Thank you!!!

Ask Us (Almost) Anything!