Welcome to CSE 123!

Hitesh Boinpally
Summer 2023
Agenda

• About us
• About this course
  • Learning objectives
  • Other similar courses
  • Course components
• Our learning model

• Tools and resources
  • Course Website
  • Ed
  • IntelliJ
• Assessment and grading
• Collaboration
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Hi, I’m Hitesh! (he/him)

• 5th Year Master’s Student in CS
• Intro TA for 8 quarters
  • CSE 143
  • CSE 122
  • CSE 123
• First time instructor!
• Office Hours: Tuesdays 1-3pm
  • CSE1 216 and on Zoom
Meet your 8 TAs!
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Learning Objectives

or, “What will I learn in this class?”

Seven themes:
• Computational Thinking
• Code Comprehension
• Code Writing
• Communication
• Testing
• Debugging
• Ethics/Impact
Prerequisite Knowledge

- Comfort with control structures
  - loops, conditionals, methods/functions
- Experience with using basic data structures
  - arrays, lists, sets, maps
- Experience with console and file input/output
- Exposure to simple object-oriented programming
  - classes, interfaces
- Programming experience *in Java*
  - Or willingness to pick up on your own
## Other Similar Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Good choice if…</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 123</td>
<td>• You done a fair bit of programming, at least some of which is in Java AND &lt;br&gt;• You are, or want to be, in a major such as CS, CE, ECE, Info, etc. that requires Java programming OR &lt;br&gt;• You’re interested in creating software (whether as a hobby, side-gig, career, etc.)</td>
</tr>
<tr>
<td>CSE 122</td>
<td>• You’ve done some programming (roughly one course worth) in <em>any</em> programming language AND &lt;br&gt;• You are, or want to be, in a major such as CS, CE, ECE, Info, etc. that requires Java programming</td>
</tr>
<tr>
<td>CSE 143*</td>
<td>• You took CSE 142 at UW, at a community college, or through UW in the High School</td>
</tr>
<tr>
<td>CSE 163</td>
<td>• You’re interested in data science and analysis OR &lt;br&gt;• You want to learn Python* OR &lt;br&gt;• You are, or want to be, in a major such as Physics, Bio, Stat, etc. where analyzing data through programming is useful</td>
</tr>
<tr>
<td>CSE 154*</td>
<td>• You’re interested in web development (HTML, CSS, JS)</td>
</tr>
</tbody>
</table>

*Not offered this summer

See *Guided Self-Placement* and *Introductory Courses* for more info
Help Us Improve!

• CSE 123 is *still brand new!*
• We worked hard to build a course we think will be effective and supportive and help you succeed
• We probably didn’t get it all right

• We appreciate your patience and understanding if we need to make adjustments during the quarter
• Please give us lots of feedback!
  • Post on Ed and/or use the Anonymous Feedback Tool
Course Components

Lessons (aka Lectures)
- WF, 10:50
- Held live on campus; recordings released after
- First introductions to course concepts
- Mix of presentation of content and practice activities/problems
- Required (but not graded) pre-work for most sessions
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Sections
• TuTh, various times
• Led by TAs
• Held live in person; not recorded
  • Materials will be released online afterwards
• Additional review, discussion, and practice
• Mostly practice problems
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Attendance is not taken, but you are responsible for all material (including announcements).
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Digression: A Pandemic Hobby

*Amigurumi*: Japanese art of creating crocheted or knitted stuffed toys
Digression: A Pandemic Hobby

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Digression: A Pandemic Hobby

*Amigurumi*: Japanese art of creating crocheted or knitted stuffed toys
Course Culture and Support

• Currently almost 100 students enrolled!
  • Wide range of backgrounds, interests, and goals
• Support and help each other!
  • Form study groups
  • If you have a question, others almost certainly do too
• Lots of ways to get support from us
  • Message board, IPL, section
Course Culture and Support

• Policies designed with flexibility in mind
  • Resubmissions/Retakes, lecture recordings, etc.

• But life and the world still happen...

• Please reach out ASAP if you’re struggling or have circumstances that require extra support
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Course Website

- Primary source of course information (*not* Canvas)
- Calendar will contain links to (almost) all resources
Please review the syllabus ASAP.

Course Information

Teaching Staff
Instructor: Hrishik Banapaly
Instructor Email: hrishik@cs.washington.edu
Registration Questions: CSE Advisers (ugrad-adviser@cs.washington.edu)

Class Session Meeting
See Class Sessions for information on how each day of class will be run.

Other Info
- Prerequisite (Recommended): CSE 122 or completion of Paul G. Allen School's Guided Self-Paced
- Course Website: Here: [https://courses.cs.washington.edu/courses/cse123/23su](https://courses.cs.washington.edu/courses/cse123/23su)
- Textbook (Optional, Not Required): Building Java Programs by Rogers and Stepp 5th Edition
- Grading Rubric
- COVID-19 Safety
- Resources

Welcome to CSE 123: Introduction to Computer Programming III

- What is this class? What will I learn?
- Prior Experience and Expectations

If you want to learn more about the course and its policies, please check out our course syllabus.

Feedback
Feedback is always welcome! You can contact the the course staff or submit anonymous feedback.

Registration
Please do not email the course staff or instructors regarding registration for the course. The course staff do not have access to add codes. Please email ugrad-adviser@cs.washington.edu for assistance.

Announcements
Ed

• Our online learning platform
• Lessons, sections, assignments posted
  • Linked from calendar
• Submit graded work
• Receive/View feedback
• Message board
  • Including announcements
IntelliJ

• Integrated Development Environment (IDE)
• Used in the “real-world” to develop programs
• Scary at first, but makes debugging much easier
  • Especially with data structures
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Assignments and Grading

• Our goal in the course is for you to gain proficiency the concepts and skills we teach.

• We assess your proficiency by asking you to apply the concepts and skills on tasks or problems.

• By necessity, we are assessing your work as a proxy for your proficiency.
Assignments

• Your learning in this course will be assessed in four ways:
  • Programming Assignments (~biweekly, 4 total)
    • Structured programming assignments to assess your proficiency of programming concepts
  • Creative Projects (~biweekly, 3 total)
    • Smaller, more open-ended assignments to give you space to explore
  • Quizzes (3 total, take-home)
    • Series of problems covering all material up to that point
  • Final Exam (Thursday, August 17 and Friday, August 18)
    • Final, culminating assessment of all your skills and knowledge
Resubmission/Retakes

*Learning takes time, and doesn’t always happen on the first try*

• One previous Programming Assignment or Creative Project can be **resubmitted** each week
  • Must be accompanied by a write-up describing changes (via Google Form)
  • Grade on resubmission will replace original grade
  • Each assignment should only be resubmitted once

• See the **syllabus** for more details
Grading

Grades should reflect your proficiency in the course objectives

• All assignments will be graded E (Excellent), S (Satisfactory), or N (Not yet)
  • Under certain circumstances, a grade of U (Unassessable) may be assigned
  • In some cases, not all grades will be given
• Final grades will be assigned based on the amount of work at each level

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Collaboration Policy

*Learning is hard, but it’s easier when you learn from each other*

- You are encouraged to form study groups; work together on pre-class work, practice and review; and discuss your ideas and approaches
- All work you submit for grading **must be predominantly and substantially your own**
- Work that violates policy may be withdrawn within 72 hours

- See the [syllabus](#) for more details
Quick aside: Chat GPT

Who is taller Shaq or Yao Ming?

Shaquille O’Neal is taller than Yao Ming. Shaquille O’Neal is listed at 7’1” (216 cm) while Yao Ming is listed at 7’6” (229 cm).

Wouldn’t that make Yao Ming taller?

Yes, Yao Ming is taller than Shaquille O’Neal. Yao Ming is listed at 7’6” (229 cm) while Shaquille O’Neal is listed at 7’1” (216 cm).

How many countries start with the letter "V"?

There are no countries that start with the letter "V".

Are you sure about that?

Yes, I'm sure. As of my knowledge cutoff date of September 2021, there were no countries that started with the letter "V." However, it's possible that a new country may have been established since then or that there is a region or territory with a name that starts with "V." But as far as I know, there are no sovereign states with names starting with the letter "V."

241 - (-241) + 1

241 - (-241) + 1 is equivalent to 241 + 241 + 1, which simplifies to 483 + 1. So 241 - (-241) + 1 is equal to 484.
Quick aside: Chat GPT

Here is some JavaScript code that tests if a string is a palindrome:

```javascript
function isPalindrome(str) {
    // Remove any non-alphanumeric characters and convert the string to lowercase
    var cleanStr = str.replace(/[^a-z0-9]/gi, '').toLowerCase();

    // Create a new string that is the reverse of the cleaned string
    var reverseStr = cleanStr.split('').reverse().join('');

    // Return true if the reverse string is equal to the clean string, and false otherwise
    return reverseStr === cleanStr;
}
```

Here is how you could use this function:

```javascript
var testStr1 = "A man, a plan, a canal, Panama!";
console.log(isPalindrome(testStr1)); // Output: true

var testStr2 = "This is not a palindrome!";
console.log(isPalindrome(testStr2)); // Output: false
```

The function first removes any non-alphanumeric characters from the string and converts it to lowercase. It then creates a new string that is the reverse of the clean string, and returns true if the reverse string is equal to the original clean string. This is a simple but effective way to test if a string is a palindrome.

Using this function can you test if "red lock colder" is a palindrome?

Yes, you can use the `isPalindrome()` function to test if "red lock colder" is a palindrome. Here is how you would do that:

```javascript
var testString = "red lock colder";
console.log(isPalindrome(testString)); // Output: false
```

The output of this code will be `false`, because "red lock colder" is not a palindrome. Palindromes are words or phrases that are spelled the same forwards and backwards, but "red lock colder" is not spelled the same forwards and backwards.
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We’re excited for the quarter!