LEC 16

CSE 121

Victory Lap! (+ exam review)

BEFORE WE START

Talk to your neighbors:

What is your go-to end-of-finals celebration?

Instructors: Hayden Feeney

TAs: Anisha Savannah William Cayden Tamsyn

Questions during Class?

Raise hand or send here

sli.do #cse121

Announcements, Reminders

- P3 due **Friday, August 21st**
- R5 due **tomorrow, August 20th**
- R6 (and R-Extra) due **Saturday, August 22nd**
  - all assignments are eligible for resubmission!
  - R-Extra email has gone out!
- Tomorrow is the last day for IPL
- Final Exam: **Friday, August 21st from 12:00– 1:00 PM, in SIG 134** (this room)
  - Review the Exam page of website (with policies & resources)
  - Can't make it? Email me **ASAP**

Evaluations and Awards

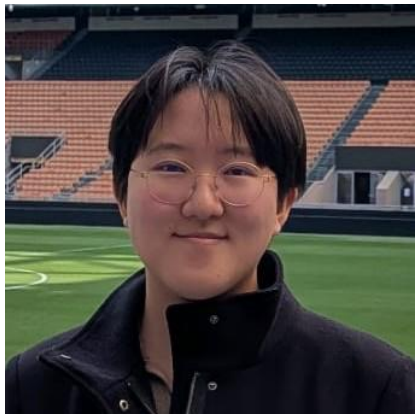
Please give us feedback!

- **Course Evaluations** are due **Sunday, August 23rd at 11:59 PM**
- **TA Evaluations** are due **Sunday, August 23rd at 11:59 PM**
- We read *every* piece of feedback!

Bob Bandes TA Award nominations open!

- thought your TA was goated? write them a nomination!
- fun fact: some of our faculty won the award when *they* were TAs!

Thank your fabulous TAs!



What is `String[] args`?

- Live demo in class ☺
- Note: this is *not* tested material!

Future Courses

or "What can I do next?"

Non-majors

Course	Overview
CSE 154	Intro to web programming (several languages)
CSE 160	Intro programming, data analysis (Python)
CSE 163	Intermediate programming, data analysis (Python)
CSE 180	Introduction to data science (Python)
CSE 373	Data structures and algorithms (in Java)
CSE 374	Low-level programming and tools (C/C++)
CSE 412	Intro to Data Visualization
CSE 416	Intro. to Machine Learning
CSE 493E	Accessibility

More 12X!

Course	Overview
CSE 122	Data structures, object-oriented programming
CSE 123	More OOP, recursion

Majors

Course	Overview
CSE 311	Mathematical foundations
CSE 331	Software design/implementation
CSE 340	Interaction programming (apps)
CSE 341	Programming languages
CSE 351	Hardware / Software Interface
CSE 480	Social impacts of computing

Related majors: Informatics, ACMS, HCDE, ECE, …

See: https://www.cs.washington.edu/academics/ugrad/current-students and https://www.cs.washington.edu/academics/ugrad/nonmajor-options/nonmajor-courses

Summer Break Project: Tic Tac Toe

Build your own Tic Tac Toe game + "AI"!

1. How would you represent a Tic Tac Toe game in Java?

   (hint: arrays will be very, very helpful!)

2. Write a method that tells you if a Tic Tac Toe game is won.

3. Write a method that gets input from the user and "makes" a move.

4. Wrap it all up – into a nice two-player game!

Summer Break Project: Tic Tac Toe++

Make some "AI" that…

- just makes a random valid move (you should be able to beat this!)
- tries to make a "good" move (~ some if statements)
- never loses
  - Tic Tac Toe is a "solved game": a perfect player will never lose.

Or, extend this idea to other grid-based games!

- similar-ish: connect four, checkers, battleship
- much harder: sudoku, chess, go, othello

In-Class Exam Review

- Mini-exam overview
  - This mini-final does **not** reflect the difficulty and length of the actual final
  - Opportunity to practice exam-style problems on paper
- 3 problems
  1. Code Comprehension
  2. Debugging
  3. Programming
- Task for today:
  1. Work through each problem (one at a time) independently or with peers
  2. Afterwards, we'll walk through our solutions & thought processes
  3. Problems & key also on Ed (look *after* class!)