

LEC 15

CSE 122

Collections

BEFORE WE START

Slido vote & chat with your neighbors:

*What are you doing for Thanksgiving
break?*

Music: [122 26Wi Lecture Tunes](#) 

Instructor: Adrian Salguero

TAs:

Ava	Dalton	Neal	Shreyank
Blake R	Dani	Neha	Sthiti
Blake P	David	Nicolae	Sushma
Cady	Diya	Nicole	Suyash
Caleb	Hanna	Rio	TJ
Cole	Ivy	Rohan	Wesley
Colin	Mahima	Saachi	Yang
Connor	Medha	Shreya	

Questions during Class?

Raise hand or send here

sli.do #cse122



Lecture Outline

- **Announcements** 
- Nullish Nuance
- Recap of Collections
- Dumb Data Structures
- Collections

Announcements

- Resubmission Cycle 5 (R5) out; due Tuesday, Mar 3rd by 11:59pm PT
 - Eligible Assignments: **P1**, P2
- Programming Assignment 3 (P3) out tonight!
 - Due March 5th by 11:59pm PT
- Quiz 2 Tuesday, March 3rd
 - Practice Quiz 2 out now! Solutions will be posted tomorrow!
 - Quiz 1 grades out this weekend/early next week?
 - **Note:** TAs go to sleep at 9pm day before; Ed Board blackout on quiz-related topics during quiz from 8:30am to 4:30pm

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Nullish Nuance

In Java, a reference type* may or may not contain a value

- By definition, `null` refers to the complete absence of an object
 - Note this is not the same as empty (e.g. `""`) and not `0` !!
- In classes, `null` is the default value of a reference type field unless otherwise stated

*Objects, Strings, Arrays

Student / Course Example one more time...

Let's add two more methods to `Course.java`:

```
public void setCourseEvalLink(String url)
```

```
public String getCourseEvalLink()
```

The link to the evaluations for a course doesn't usually exist until the last few weeks of the quarter. What if a client calls `getCourseEvalLink` before one is set up?

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Goal for Today

Review some of the data structures we've talked about this quarter

Understand how Java organizes them with interfaces

Collections: What classes have we seen so far?

...

Array,

ArrayList,

LinkedList,

Stack,

HashSet & HashMap,

TreeSet & TreeMap

Collections: What interfaces have we seen so far?

...

Set,

Queue,

List,

Comparable

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Dumb Data Structures

We're going to create our own versions of these classes so we can dig into how they all relate to each other!

BUT they're going to be real dumb.

If you want to get a sense of how they're actually implemented, go take CSE 123!

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IntCollection Relationships



