

LEC 02

# ArrayList

# ArrayList

BEFORE WE START

*Talk to your neighbors:  
Any weekend plans?*

*Music: New Romantics – Taylor Swift*

**Instructor** Elba Garza

**TAs**

Abigail  
Autumn  
Claire  
Jacob  
Kevin  
Mia  
Rucha  
Shreya

Ambika  
Ayush  
Colin  
Jasmine  
Kyle  
Poojitha  
Saivi  
Smriti

Arthur  
Chaafen  
Elizabeth  
Jaylyn  
Marcus  
Rishi  
Shananda  
Steven

Atharva  
Chloë  
Helena  
Kavya  
Megana  
Rohini  
Shivani  
Zane

Questions during Class?

Raise hand or send here

sli.do #cse122



# Lecture Outline

- **Announcements** ◀
- Warm Up
- ArrayList Extended Application

# Announcements

- Quiz 0 next Tuesday, October 10<sup>th</sup>!
  - Topics: ArrayLists, Functional Decomposition
  - Taken in your *registered* quiz section
  - More details on quiz logistics in [Ed announcement](#)
- Creative Assignment 0 (C0) out later today!
  - Due next Thursday, October 12<sup>th</sup> by 11:59 PM
- P0 was due last night. How'd it go?
  - Being graded—expect grades back in a week-ish
  - Joined class late? Use Resubmission Cycle 0 to submit it!

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- **Warm Up** ◀
- ArrayList Extended Application

# addAll

Write a method called `addAll` that accepts two `ArrayLists` of `Characters`, `list1` and `list2`, and an integer `location` as parameters and inserts all of the elements from `otherList` into `mainList` at the specified `location`.

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- Announcements
- Warm Up
- **ArrayList Extended Application** ◀

# Movie Favorites

We will write a program called `MovieFavorites.java` that manages a list of favorite movies for a user (using an `ArrayList`) and allows the user to perform various different operations on their stored list of favorite movies.

Key skills used:

- User Interaction (UI) loop
- Iterative development strategies
- Functional decomposition
- Practice with `ArrayList` methods!

# Movie Favorites: Operations

- Load a list of favorites in from a file provided by the user.
- Compare the stored list of favorites to another list of favorites provided by the user in another file.
- Report the top  $n$  favorites according to the list, where the user can specify  $n$ .
- Move a specific favorite down in the list.
- Add a list of favorites in a user-provided file to the stored list of favorites at a specified location.
- Save the current list of favorites to a file provided by the user.



# Movie Favorites: Development Strategy

- Set up the main scaffold code
- Menu loop
- Develop each operation, one at a time

*You'll see a similar development strategy in Creative Project 0's specification — we recommend you follow it!*

# Movie Favorites: Operations

- Load a list of favorites in from a file provided by the user.
- Compare the stored list of favorites to a list of favorites provided by the user.
- Report the top  $n$  favorites from the list, where the user can specify  $n$ .
- Move a specific favorite down in the list.
- Add a list of favorites in a user-provided file to the stored list of favorites at a specified location.
- Save the current list of favorites to a file provided by the user.

**ALREADY DONE!**  
See In-class 2