

LEC 05

ArrayList Applications

BEFORE WE START

*Talk to your neighbors:
Any weekend plans?*

Music: [122 24sp Lecture Tunes](#) 

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TAs	Ayush	Kyle	Colin	Chaafen
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	Lucas	Eesha	Steven	Minh
	Logan	Zane	Ken	Katharine


Questions during Class?

Raise hand or send here

sli.do #cse122




Lecture Outline

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

Announcements

- C0 grades and R0 out yesterday
 - Now that you have your first set of grades, review the [Course Grades](#) section of the syllabus to understand how they factor into your grade at the end of the quarter!
 - [Grade Checker spreadsheet](#) also linked from the syllabus to help track your grades throughout the quarter.
- Creative Assignment 1 (C1) out later today!
 - Focused on ArrayLists
 - Due next Thursday, April 18th by 11:59 PM
- First quiz in section on Tuesday April 16th

Quiz Tips!

- Hit run often!
 - Run, change, run, ... 
- Quizzes are graded based on tests that you do or don't pass – make sure your submitted code is able to run!
 - NOTE: You should be testing your own code – we don't provide test results!
- Quizzes are open-note, open-internet
 - BUT no generative AI (e.g., ChatGPT)
 - Have relevant PCMs, section problems, etc. open in other tabs!
- Grading rubrics on slides – think strategically!
- Time budgeting – quizzes are 45 minutes

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- 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 `list2` into `list1` at the specified `location`.

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- **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 1'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 the 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 4