

LEC 05

ArrayList Applications

BEFORE WE START

*Talk to your neighbors:
Any weekend plans?*

Music: [122 24wi Lecture Tunes](#) ❄️

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TAs	Ailsa	Chaafen	Helena	Megana	Sahej
	Alexander	Chloe	Jessie	Mia	Shivani
	Ambika	Claire	Katharine	Minh	Smriti
	Andy	Colin	Kavya	Nicolas	Steven
	Arkita	Colton	Ken	Poojitha	Vinay
	Atharva	Connor	Kyle	Rohini	Zane
	Autumn	Elizabeth	Logan	Ronald	
	Ayush	Hannah	Marcus	Rucha	


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, January 25th by 11:59 PM

Lecture Outline

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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 `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