LEC 05: ArrayList Applications

Questions during Class?
Raise hand or send here
sli.do  #cse122

BEFORE WE START

Talk to your neighbors:
Any weekend plans?

Music: 122 24sp Lecture Tunes

Instructor
Miya Natsuhara and Kasey Champion

TAs
Ayush
Pooyitha
Chloe
Ailsa
Jasmine
Lucas
Logan

Kyle
Jacob
Atharva
Rucha
Megana
Eesha
Zane

Colin
Ronald
Saivi
Shivani
Kavya
Steven
Ken

Chaafen
Smriti
Ambika
Elizabeth
Aishah
Minh
Katharine
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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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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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 with another list of favorites provided by the user.
• Report the top $n$ favorites in 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