LEC 02

ArrayList

More ArrayLists!

Questions during Class?

Raise hand or send here

sli.do   #cse122

BEFORE WE START

Talk to your neighbors:
What's your all-time favorite album?

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TAs

Ambika	Evelyn	Poojitha
Andrew	Jacob	Rishi
Audrey	Jaylyn	Rucha
Autumn	Jin	Shivani
Ayush	Joe	Shreya
Ben	Kevin	Steven
Colton	Leon	Suhani
Di	Megana	Yijia
Eesha	Melissa	Ziao
Elizabeth	Mia	

Lecture Outline

- **Announcements**
- Warm Up
- Large Practice Problem
  - (highly relevant for C0)

Announcements

- Quiz 0 next Tuesday

  - Topics: ArrayLists, Functional Decomp

- Creative Assignment 0 (C0) out this morning

  - due next Thursday, 4/13 @11:59pm

- P0 was due last night

  - Expect grades in about a week

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addAll

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

https://edstem.org/us/courses/37899/lessons/58237/slides/326839

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Example - Movie Favorites

Key skills from this example:

- User Interaction (UI) loop

- Iterative development strategies

- Functional decomp

- Practice with ArrayList methods

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.

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Movie Favorites Operations

- Load a list of favorites in from a file provided by the user.
- 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 main scaffold code

- Menu loop

- Each behavior, one at a time

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

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Movie Favorites Operations

- ~~Load a list of favorites in from a file provided by the user.~~
- ~~Report the top *n* favorites according to the list, where the user can specify *n*.~~

Implemented on
[Wednesday](#)!!

- ~~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.

PrintStream!

PrintStream

Allows us to print to an output file.

```java
PrintStream output = new PrintStream(new File("output.txt"));
```

```java
output.print("hi");
output.println("hello");
```

Movie Favorites - Extension w/Feature Flag

When EXTENSION_FLAG is true, in addition to the usual operations, a user can:

- Compare the stored list of favorites to another list of favorites provided by the user in file.