

LEC 03

CSE 122

# ArrayList Applications

BEFORE WE START

*Talk to your neighbors:**What's the best Disney/Pixar movie?*Music: [cse 122 su 23 tunes](#)

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Questions during Class?

Raise hand or send here

sli.do #cse122




# Lecture Outline

- **Announcements** 
- Review
- Warm Up
- Large Example
  - Helpful for Creative Project 0!

# Announcements

- Programming Assignment 0 (P0) was due yesterday (June 29)
  - You can expect grades and feedback to be released next week on Wednesday
  - Resub 0 is due Wednesday
- Creative Project 0 released today
  - It will be due next Thursday (July 6) at 11:59pm
- Next Tuesday is a holiday, no quiz section!
- Looking ahead, Quiz 0 is on July 10

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# PrintStream

Allows us to print to an output file.

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

```
output.print("hi");
```

```
output.println("hello");
```


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# addAll

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

# 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
- Save the current list of favorites to a file provided by the user.
- Add a list of favorites in a user-provided file to the stored list of favorites at a specified location.

# 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  $n$ .~~
- ~~• Move a specific favorite down in the list~~
- Save the current list of favorites to a file provided by the user. **PrintStream!**
- ~~• Add a list of favorites in a user-provided file to the stored list of favorites at a specified location.~~

# 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.