LEC 03

CSE 122

ArrayList Continued

Questions during Class?

Raise hand or send here

sli.do   #cse-122

BEFORE WE START

Talk to your neighbors:
Share a boring fact about yourself

Music: Hunter/Miya's Playlist

Instructor	Hunter Schafer **/ Miya Natsuhara**		
TAs	**Ajay**	**Gaurav**	**Melissa**
	Andrew	**Hilal**	**Noa**
	Anson	**Hitesh**	**Parker**
	Anthony	**Jake**	**Poojitha**
	Audrey	**Jin**	**Samuel**
	Chloe	**Joe**	**Sara**
	Colton	**Joe**	**Simon**
	Connor	**Karen**	**Sravani**
	Elizabeth	**Kyler**	**Tan**
	Evelyn	**Leon**	**Vivek**

Lecture Outline

- **Announcements**

- Warm Up

- Large Example

  - Helpful for Creative Project 0

Announcements

- Quiz 0 will be held in your quiz section on Tuesday (Oct 11)
  - Details and logistic information in announcement

- Programming Assignment 0 (P0) was due on yesterday (Thursday, Oct 6)
  - You can expect grades and feedback to be released sometime around Thursday next week

- Creative Project 0 will be released later today
  - It will be due next Thursday (Oct 13)

Lecture Outline

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- Large Example

    - Helpful for Creative Project 0!

topN

Write a method called `topN` that accepts an `ArrayList` of characters `list` and an `int n` and returns a new `ArrayList` of characters that contains the first `n` elements of list.

For example, if `list` contained
`['g', 'u', 'm', 'b', 'a', 'l', 'l'],`
a call to `topN(list, 4)` would return an `ArrayList`
containing `['g', 'u', 'm', 'b']`

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- **Large Example** ◀

    - Helpful for Creative Project 0!

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.

- 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

- 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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- ~~Move a specific favorite down in the list~~ **PrintStream!**

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PrintStream

Allows us to print to an output file.

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


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

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`.