CSCI 136: Data Structures and Advanced Programming

Lecture 4

Java Crash Course

Instructor: Dan Barowy

Williams

Outline

Study tip

Program design (continued)

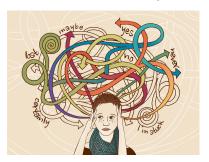
Class syntax

git

Generics (tease)

Life skill #4

Confusion is not necessarily a bad thing.



Life skill #4

Sometimes Confusion is a Good Thing

Tania Lombrozo NPR, December 14, 2015

"Students who were confused ... as reflected in inconsistent responses on subsequent questions ... ultimately did better on a final test assessing whether they learned the key points from the lessons."

https://www.npr.org/sections/13.7/2015/12/14/459651340/sometimes-confusion-is-a-good-thing

Life skill #4

Sometimes Confusion is a Good Thing

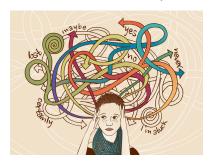
Tania Lombrozo NPR, December 14, 2015

"... [C]onfusion is itself a step toward learning — an experience that motivates the learner to reconcile an inconsistency or remedy some deficit. In this view, confusion isn't just a side effect of beneficial cognitive processes, but a beneficial process itself. ... [T]here's evidence that experiencing difficulties in learning can sometimes be desirable, leading to deeper processing and better long-term memory."

https://www.npr.org/sections/13.7/2015/12/14/459651340/sometimes-confusion-is-a-good-thing

Life skill #4

Confusion is not necessarily a bad thing.



It is a signal that you are not confident in your knowledge.

Use this signal to guide your study (i.e.: glossary).

Last day of drop/add is today



WordSeq class

Q: How might we represent a sequence of words using a class?

See website for posted code.

One way to get familiar with Java:

retype the code!

How I organize a class

```
class Foo {

/* INSTANCE VARIABLES */
int bar; // number of foos
String baz; // foo name

/* CONSTRUCTOR */
public Foo() { ... }

/* INSTANCE METHODS */
public int getBar() { ... }
public void setBar(int b) { ... }

/* STATIC METHODS */
public static void main(...) {...}
```

Let's start with git

Recap & Next Class

Today we learned:

- More Java
- Class syntax
- •git

Next class:

- Generics
- Version control
- Generics