Static Fields

CSE 114 INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING

Announcements

General:

Topics:

- Static fields
- Program structure expanded
- String class
- Command line arguments
- Measuring execution time

Reading:

- For today's lecture, read the notes
- For lectures in the coming weeks, follow the notes closely and use the textbooks as a reference

Static fields

Expanding our universe with static fields

- See program_structure_3.txt (v. 3)
- See StaticFields.java
  - We will draw a memory diagram with static fields

The java.lang.String class

See string.txt

In string.txt you will also see the following very important files:

- StringTest.java
- SplitTest.java

Command line arguments

That is, what is (String[] args) in main for?

Now that we have seen arrays and strings, we can discuss this

See ArgsTest.java

See ArgsTest2.java

See SimulateOS.java

Measuring execution time

See Benchmark.java

Side notes on coding style

Code should be understandable

- Good variable names (temperature, velocity,… not t, v, etc)
- Indentation and spacing should be consistent
- Comments should be informative and not just restate the code

Don’t do this! ====➔

Indenting your code nicely

The indentation that you use should reflect the structure of your Program

See Digits.java for an example (a bad one at that, done by a student)

- This example shows not only bad indentation but also bad logic as well. Take a look and see what a grader would have to go through to grade a program like this.
- Imagine one of your co-workers wrote a program like this – would you want to work with someone like that?

Creating your own types (classes)

And writing a program consisting of multiple classes

That will be the second phase of the semester, coming soon!