CSE 11
Accelerated Intro to Programming
Lecture 16

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This lecture is being recorded

Announcements

- PA7 due today @ 11:59pm
- PA8 due Sunday @ 11:59pm
- Lecture Quiz 7 due Friday @ 11:59pm
- Lecture Quiz 8 due Sunday @ 11:59pm
- PA4 & PA5 resubmissions due tomorrow @ 11:59pm
  - No tutoring hours tomorrow
- Exam 2
  - Friday – releasing at 12am
    - Due Saturday @ 4pm

Refined Class Definition

class Name <TypeVar1, TypeVar2, ...> {

    ...class body...

}

Refined Method Definition

```
<TypeVar1, TypeVar2, …> Type name(Type name, …) {
    …method body…
}
```

Wrapper Classes

- Integer
- Boolean
- Double

ArrayList

- Must import it from the Java util library
  - import java.util.ArrayList;
- https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/util/package-summary.html#CollectionsFramework
- https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/util/ArrayList.html

Method Overloading

- Same method name has more than one signature in a class or interface

Exceptions

- Throwing errors in order to give more specific and informative error messages
  - throw new <something throwable>;

File I/O (input/output)

- File.readString()
  - https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/nio/file/Files.html#readString(java.nio.file.Path)
- Path.get()
  - https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/nio/file/Paths.html#get(java.lang.String,java.lang.String...)

IOException

- IOException documentation
  - https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/io/IOException.html

List

- List documentation
  - https://docs.oracle.com/en/java/javase/13/docs/api/java.base/java/util/List.html

Challenge

- AverageFile
  - Read in doubles from the path given as the first argument, and print out the mean of those numbers. Assume the file has one number per line.
  - What if the file had the numbers separated by spaces rather than by lines?

- Region
  - Where could we add exceptions in the Regions examples?