

# CS W3134: Data Structures in Java

Lecture #2: Java refresher

9/9/04

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## Administrivia

- Possible recitation times:
  - Thursday - after 5:30p
  - Friday - between 11:00a and 5p
  - Monday - between 9a and 10:45a; after 4p.

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## Agenda

- Refresher on Java, focusing primarily on OO concepts
  - Will reinforce OO concepts throughout semester, so don't worry too much
  - To be done on board – these slides aren't significant
- Start with “Hello World” and build up from there
  - If recitation: intro refresher on using the SDK, I/O, etc.
- Lead up to using data structures
- This is intended to be interactive, not a fixed review, so if you're unsure of anything, yell!

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## Java refresher

- Hello world!
  - Explain all keywords in hello world program
  - Variables vs. methods
  - Static vs. nonstatic
- Primitive vs. reference types
  - What's a reference?
  - .equals() vs. ==
  - Assignment differences
  - Example: myInteger wraps a standard int
- Garbage collection

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## Java refresher (II)

- Static vs. nonstatic
  - Why static *methods*? Just a convenience convention
- Primitive vs. reference types, continued
  - int vs. Integer
  - Getter/setter methods
  - Wrapper classes
    - When to use wrapper classes? Both inserting into Collections and using *static* utility methods
  - Garbage collection, reviewed
  - Strings are both? "=" overload
- Packages
  - What does it mean to *import*?
  - java.util.\* or java.io.\*
- Exceptions
- Javadocs, books – can't guarantee board code

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## Next Time

- Finish up Java refresher/OO concepts
- Start looking at Lists in detail

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