

Slide 1

Administrivia

- Homework 2 grades, and summary of grades so far, sent by mail.
- Reminder: Homework 4 design due today, code Tuesday.

Slide 2

Lists — Recap

- List ADT (review):
 - “Values” are lists of elements.
 - Many operations possible — add element, remove element, search for element, etc., etc.
- More than one possible implementation, but a typical one is a “linked list”.
(We wrote some code last time. Finish method to remove element.)

Iterators

- Something we often want to do with this and other “container classes” is do something to all elements — i.e., we want a way to visit all elements, in some (or any) order.
- An object-oriented way to address this is to have “iterator” objects with methods to support “visit every element, one at a time”. In Java — `java.util.Iterator` interface. (Look at its methods.)

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Iterators, Continued

- To see how this plays out in code, we could define a simple interface for lists, including an iterator, and implement it using `java.util.Vector` (something that more or less behaves like an array but can grow and shrink).
- Let's do that ...
(No, it's not a very sensible implementation of the list ADT, but it's one I'm willing to put on the Web as sample code. You'll write a linked-list class as part of Homework 4.)

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Minute Essay

- None — quiz.

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