

Data Structures and Algorithms

Session 4. February 2, 2009

Instructor: Bert Huang

<http://www.cs.columbia.edu/~bert/courses/3137>

Announcements

- * Homework 1 up on website (slight change)
 - * Due Feb. 9th before class
- * Office Hour reminder
 - * My OH after class.
 - * Manu's office hours Tuesday 4-6 this week

Today's Plan

- ✱ Dissect textbook's Java implementation of MyLinkedList and MyArrayList

Lists in Java

- * **Collection** Interface extends **Iterable**
- * A Collection stores a group of objects
- * We can add and remove from a Collection
- * **Iterator** objects let us iterate over objects in a Collection (also enhanced **for** loop)
- * Built in **LinkedList** and **ArrayList** implementations of Collection

List Public Methods

- * void clear()
- * int size()
- * boolean isEmpty()
- * boolean add(AnyType x)
- * void add(int idx, AnyType x)
- * AnyType get(int idx)
- * AnyType set(int idx, AnyType newVal)
- * AnyType remove(int idx)
- * String toString()
- * java.util.Iterator<AnyType> iterator()

Assignments

- * Start homework
- * Weiss Section 3.6 – Stacks!