

Other Collections

9-9-2011

Opening Discussion

- Minute essay comments:
 - Can we make type parameters be abstract types?
 - Comparing Java and Scala type parameters.
 - Type parameters can be put on classes. We'll see examples of that in a few weeks.
 - Parametric vs. inclusion

Finishing Sorts

- Ideally I'd like to put these into commands in the drawing program. I don't know if we can get that far.
- Do sort with comparison function first.

scala.collection

- <http://www.scala-lang.org/docu/files/collections-api/>
- The collection API in Scala is really powerful. This is a big part of what makes the language so great to use.
- In the first semester we focus on basic sequence types.
- We gain a lot of power by adding Map, Set, and Buffer.

Map

- Stores (key, value) pairs. Let's you do fast look-up by key.
- Two type parameters.
- A sequence is indexed by Int and need “all slots filled”.
- A Map can be indexed by anything and can be sparse.
- You should only use immutable values for keys.

Set

- Based on math idea.
- Order doesn't matter.
- Elements have to be unique.

Buffer

- Like an array with the ability to grow and shrink.

Drawing Program

- Let's add more code do the drawing program.
- The command processor is a great example of a place where a Map can come in handy.

Minute Essay

- Questions?
- How do you see various collections being used in your projects?