

SWE 619 Assignment 8

Fall 2019

Goal: Generics

Consider the [BoundedQueue](#) example from in-class exercise #7C.

Complete the generic part of the exercise: The result should be fully generic, and there should not be any compiler warnings. You should adopt Bloch's advice about lists vs. arrays; doing so will eliminate the need for many of the instance variables.

Keep the same methods, but update the behavior (and document with contracts!) to include exception handling for all cases not on the happy path.

Include the constructor in your considerations. In particular, consider whether you think a zero-sized buffer is a reasonable possibility. Document your reasoning.

Implement `repOk()` and `toString()`. (Note that adopting Bloch's advice has the beneficial side effect of greatly simplifying the rep-invariant.)

Add `putAll()` and `getAll()`. Define the method signatures carefully. Use exception-handling consistent with that for `get()` and `put()`. Use bounded wildcards as appropriate.

As before, turn in a clear, concise *story* demonstrating completion of the assignment.

Note: There are quite a few decisions in this assignment. I expect to see robust Piazza discussions.