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Overview

Our implementation of the request scheduler in Java is similar to our C implementation. To run, `cd` into the `Part2-Task2/` directory and run `javac Part2.java`, then `java Part2`. Sample output and additional instructions are provided in `solution.txt`.

Implementation

A key aspect of our implementation is that it is relatively simple, being contained in just one java file. The Producer, Consumer, and Monitor classes are all defined within the larger Part2 class. User input defines key variables such as buffer size, slave thread number, producer sleep time, etc. In addition, all the main method of Part2 has to do is set up a Producer and an array of n Consumers, then start them all. The thread processes handle the work from there, printing output to the console so that users can follow along with what is happening.

In what could be considered standard practice, both the Producer and Consumer classes extend the Thread class from the Java library. The built-in synchronization features provided by Java helped to make our implementation very straightforward.