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PA3: Synchronization

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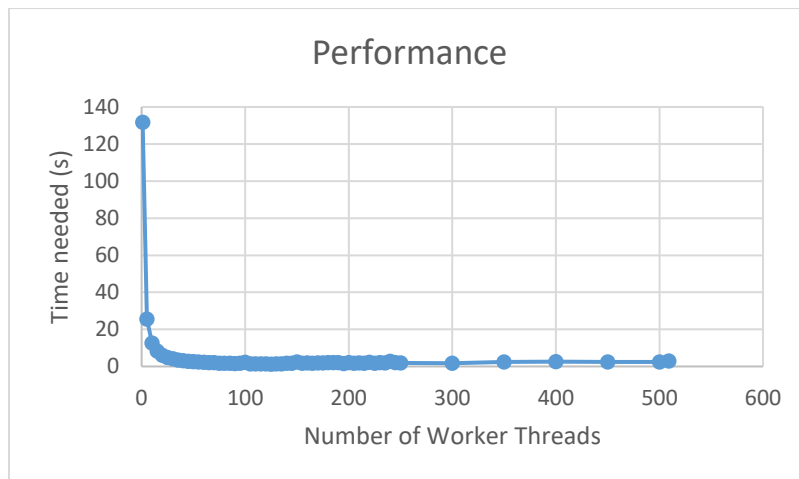
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Code Differences:

One of the biggest changes is that threads now run all at once rather than letting the buffer fill up. This buffer has a set size that can hold a limited amount of thread requests from its clients. In addition to, there are now three statistics buffers that will gather pushed responses. These threads will update the histogram independently rather than all at once like before. Lastly, the BoundBuffer class now has synchronization variables to help manage these new thread structures. In this case's program of 10k requests, the new program wasn't really that much more efficient or inefficient. However, I can see it being better as you require tons (like billions) of requests at once and you don't just want to fill up a buffer to that size.

Worker Threads Ran:

The time needed to process is about as expected, increasing in performance with the number of threads. It gets better up until 509 threads where it can no longer open any more. Number of requests is 10k.



Buffer Size Changes:

The buffer size changes however doesn't have as much of a prominent effect. 10k threads ran. Worker threads is kept at 25.

