<table>
<thead>
<tr>
<th>Item</th>
<th>Comments</th>
<th>Mark</th>
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</table>
| Correctness | - Runs all benchmarks  
- No apparent memory leaks  
- No apparent synchronization problems | [+1] for each benchmark for each number of threads (1-8) that runs successfully  
[+1.5] for each benchmark with total memory use < 20x kheap (4 total)  
[+2] for handling large (>4K) allocations (not tested in performance benchmarks, we will check using visual inspection) | / 40 |
| Performance | - Sequential speed (8)  
- Scalability (12)  
- False sharing avoidance (12)  
- Fragmentation (8) | Can only get marks here if all threads run successfully!  
Sequential speed pts (maximum 8) = \( \sum_{all\ bench} \frac{T_{\text{ibc}}}{T_{\text{atoc}}} \times 8 \)  
Scalability pts = scalability of threadtest, and, Larson (maximum 12)  
False sharing pts = scalability of cache-scratch and cache-thrash (maximum 12)  
Fragmentation pts (maximum 8) = \( \sum_{all\ bench} \frac{\min_{\text{mem}}}{\text{mem\ used}} \)  
scaled such that  
\( \geq 0.1 \rightarrow 1 \),  \( \geq 0.3 \rightarrow 2 \),  \( \geq 0.5 \rightarrow 3 \),  \( \geq 0.6 \rightarrow 4 \),  \( \geq 0.7 \rightarrow 5 \),  \( \geq 0.8 \rightarrow 6 \),  \( \geq 0.9 \rightarrow 7 \),  \( \geq 1.0 \rightarrow 8 \) | / 40 |
| Style | - Overall design  
- Readability of code | Example deductions:  
[-2] for many short or otherwise cryptic variable names  
[-2] for poor or misleading comments  
[-2] poorly organized code, etc. | / 10 |
| Writeup | - Description of allocator  
- Performance analysis | Example deductions:  
[-1] for > 2 grammatical errors  
[-1] for > 2 spelling errors  
[-1] for not discussing alternatives  
[-1] for no references  
[-3] for no design  
[-3] for no analysis  
[-2] for analysis with no or very few numbers  
[-1] for no discussion of fragmentation or memory use in performance analysis | / 10 |
| TOTAL | Other deductions:  
[-2] for using more than 1 KB of globals | / 100 |