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Data structure choices

Elevator:

For the elevator class I used a few different data structures. A queue, an up and down heap. For the queue I did the same thing as the floors where the elevator is going to give priority to the first person that pressed the button. I used a min heap for when the elevator is going up. When the elevator is going up it's checking each floor of the passengers destination to go to the smallest number first. For the max heap, I used it for when the elevator is going down. I did the same process for the max heap as I did for the min heap.

Passenger:

No data structure use

Floors:

The data structure that I used for the floor class was a queue to hold both passengers that are going up and down. The reason I used this was to make sure that the person that pressed the button first gets priority for the elevator, first in first out. In the floors method, I made an if loop that checks the file to see whether it's a linked list or an array dequeue. If the file says "linked" then we'll use the linked list data structure to hold everything. If the file says "array" then we are going to use the ArrayDeque data structure.

Main:

I did the same as the other files