Elevator Simulation Write Up

While testing the different configurations, we can conclude that configuration 3 is the most efficient output of data. This was confusing at first because it has the lowest capacity We think that configuration 3 has the best performance compared to the other configurations with config 1 coming in second while config 2 had by far the worst performance in the metrics measured.

Based on the data analyzed we determined that configuration 3 has the best performance due to the percent of give ups being the lowest in this configuration. Also the average wait time was the lowest of the 3 configurations. Finally the total time for the simulation was the fastest. This leads us to recommend configuration 3 based on the above data. As such configuration 3 has the best user experience. 99.60% Success rate on configuration 3 compared to the 99.40% from config 1, and a 98.04% from config 2 proves this further. Conceptually, having an elevator with the most capacity might seem best fit. But, this causes the elevator to spend more time picking up passengers than offloading, which is crucial to avoid in a time based simulation.

DATA