Daily Log

Monday January 13

I started modifying my code to only create *Events* when there are nearby *Cars*. I altered the method 'createEvents()' to include a check for nearby *Cars*.

Tuesday January 14

I finished modifying my 'createEvents()' method to not create a new *Event* when there are no nearby *Cars*. While testing it, I found that the output *Event* file size decreased, but surprisingly, the execution speed was slower. This was caused by the check actually taking longer than producing a new *Event*.

Thursday January 16

I rewrote the check in my 'createEvents()' to keep track of whether or not the most recently generated *Event* has been exchanged with another *Car*. If so, a new *Event* is created. This doesn't require iterating through all of the *Cars*, which allows the modification to save time and memory.

Timeline

Date		Goal	Met
1/6/20 - 1/12/20	-	Make *Event* only be exchanged between *Cars* that are directly within the communication range.	Yes
1/13/20 - 1/19/20	-	Reduce execution time and output data by not generating *Events* in certain circumstances	Yes
1/20/20 - 2/2/20	-	Test varying percentages of DTD population	
2/3/20 - 2/9/20	-	Visualize input data on web server without running the program	

Reflection

This week, I modified my program to not produce new *Events* when the latest *Event* has not been exchanged with another *Car*. This saves execution time and output data since fewer *Events* are produced. I met this week's goal, so I will continue with the currently scheduled goals. It would be useful to visualize input files before running the simulation to ensure that no mistakes were made.