

Daily Log

Monday January 6

I modified the method 'hasExpired()' to return true if the *Events* id is -1. I also reduced the amount of standard output. I added a variable 'oldEvents', which will be used in the *Event* exchange system.

Tuesday January 7

I altered the method 'exchangeEvents()' to assign the variable 'oldEvents' to the variable 'events'. It used to assign 'events' to 'events'. However, when I tested the program, it is not properly exchanging the *Events* since the web server displays all *Events* as having an id of -1.

Thursday January 9

I found the issue in my program that caused my *Events* to appear with ids of -1. I was not setting the 'oldEvents' to 'events' before I exchanged them. I also added a 'hasExpired()' check when setting the 'oldEvents' to 'events'. This set the 'oldEvents' to have an id of -1 if the 'events' was expired.

Timeline

Date		Goal	Met
1/6/20 1/12/20	-	Make <i>Event</i> only be exchanged between <i>Cars</i> that are directly within the communication range.	Yes
1/13/20 1/19/20	-	Reduce execution time and output data by not generating <i>Events</i> in certain circumstances	
1/20/20 2/2/20	-	Test varying percentages of DTD population	

Reflection

This week, I modified the *Event* exchange system to have consistent behavior. Previously, it was not guaranteed to only exchange *Events* between direct *Car* neighbors. A single *Event* could be spread through an entire network of *Cars* in a single time step. I added a new array of *Events* to each *Car*, which would be used as a placeholder variable when exchanging *Events*. This made the *Event* exchange behavior consistent and only exchange *Events* between *Cars* directly within the communication range. I was able to meet this week's goal, so I will make additional changes to my program. I want to reduce the execution time and amount of output by only generating *Events* when necessary. I also want to test different percentages of DTD population.