

CS 1632 - DELIVERABLE 5: Static Analysis

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<https://github.com/jordangrogan/CitySim9006StaticAnalysis>

Deviations from Rubocop Suggestions

None

Deviations from Reek Suggestions

1. Control Parameter in Avenue Class

```
avenue.rb -- 1 warning:
```

```
[17, 19]:ControlParameter: Avenue#to_location is controlled by argument 'from_location'  
[https://github.com/troessner/reek/blob/master/docs/Control-Parameter.md]
```

The `to_location` method determines which location is the next location to go to. I chose to ignore Reek's warning on this method for two reasons. The `ControlParameter` warning suggests moving this logic to the caller of the function, however; if I did that, it would have made the method too long, causing Reek & Rubocop to warn me of that. Secondly, I wanted this simple function a part of the Avenue class for unit testing purposes. It made sense to me to keep it a part of this class.

2. Control Parameter in Street Class

```
street.rb -- 1 warning:
```

```
[15, 17]:ControlParameter: Street#to_location is controlled by argument 'from_location'  
[https://github.com/troessner/reek/blob/master/docs/Control-Parameter.md]
```

The `to_location` method determines which location is the next location to go to. I chose to ignore Reek's warning on this method for the same two reasons as keeping it in the Avenue class. The `ControlParameter` warning suggests moving this logic to the caller of the function; however, if I did that, it would have made the method too long, causing Reek & Rubocop to warn me of that. Secondly, I wanted this simple function a part of the Street class for unit testing purposes. It made sense to me to keep it a part of this class.

3. Control Parameter in Driver Class

```
driver.rb -- 2 warnings:
```

```
[56]:ControlParameter: Driver#pluralize is controlled by argument 'num'  
[https://github.com/troessner/reek/blob/master/docs/Control-Parameter.md]
```

The `pluralize` method is a helper method that takes a string and pluralizes it depending on the number of objects. For example, it determines that "2 classes" should be printed instead of just "2 class". I chose to ignore Reek's warning on this method for similar reasons that I ignored it in the Street and Avenue class. The `ControlParameter` warning suggests moving this logic to the caller of the function; however, if I did this, it would have made the method too long, causing Reek & Rubocop to warn me of that. It made more sense to make this a separate method with specific functionality, particularly because I call this `pluralize` method multiple times in throughout the class.

4. Pluralize is a Utility Function Not Dependent on Instance State

`driver.rb` -- 2 warnings:

[55]:UtilityFunction: Driver#pluralize doesn't depend on instance state (maybe move it to another class?) [<https://github.com/troessner/reek/blob/master/docs/Utility-Function.md>]

To remedy this warning, I tried putting the pluralize method in its own helper function class, but it still gave me this same warning. The issue remained because there's nothing about this function that depends on instance state of the class. So, I chose to ignore this warning because I don't think that the fact that this is a pure function (only dependent on method input) is a bad thing, and it is a necessary helper method to the Driver class.

Results of Simplecov Statement Coverage

<i>File</i>	<i>Lines Covered</i>	<i>Relevant Lines</i>		
args_checker.rb	6	6		
avenue.rb	12	12		
city.rb	78	84		
city_sim_9006.rb	0	5		
driver.rb	34	34		
location.rb	10	10		
street.rb	11	11		
TOTAL	151	/ 162	=	93.21%