

Traffic Lights Test Requirements

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In other documents, I have a list of different requirements and in this project, I am going to write whether my simulation system passed those requirements or not.

1. Requirements 1 is just about the signals present in each of the traffic poles. Each four traffic poles have three main lights, one left turn Signal and pedestrian signal for zebra crossing.
2. Requirements 2 is about the rules of different signals in road. So, for fulfilling this requirement I have made one model which shows what the different colors represent.
3. For requirement 3, I made sure that I have red in every other light except for the left turns.
4. Requirement 4 is about the time delay. I used 15 seconds for the transition between different signals.
5. Requirement 5 ensures that the traffic just flows North South lane when N-S traffic lights turn green. All other traffic lights remain red and only the N-S pedestrian light was on.
6. Requirement 6 ensures the smooth flow of traffic in N-S lane. All the lights were working properly. There was red signal on E-W lane. Pedestrian signal was on for E-W passing. All other left signals were off.
7. Requirement 7 ensures that the traffic just flows East West lane when E-W traffic lights turn green. All other traffic lights remain red and only the E-W pedestrian light was on.
8. Requirement 8 ensures the smooth flow of traffic in E-W lane. All the lights were working properly. There was red signal on N-S lane. Pedestrian signal was on for N-S passing. All other left signals were off.
9. Requirement 9 is for left turns. During turns, only the left signals were green while other were in off condition. For E-W turns and N-S turns, only their left turn was green. Pedestrian walking was red.

All the requirements' results were passed in the simulation.