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For this project, I was unable to complete the second part of the assignment, the cars moving along the east west road, so I will be reflecting on mostly the design of the second railway. I did not make major changes to the code design itself. The program still utilizes the observer pattern as the gates observe both trains crossing, the first car observes the gate, and the other cars observe the one in front of them. I believe this design is a decent and simple simulation of the real scenario of cars at a railroad crossing. Though the code is prone to bugs regarding cars not stopping for when they are supposed to due to malfunctioning observer behavior, overall, I do not see any major design flaws. I believe that the car factory is the best possible way to generate cars for the street and that the ongoing train traffic delivers the necessary mechanics to run the program as a railroad crossing program. Possible improvements that would make the simulation even more realistic include adding two lanes to the roads and two way traffic, adding another train track far enough away from the current ones that would require more crossing gates, having different train lengths, and having cars travel at randomly different speeds. In this sense, the design could scale up for a bigger project that could also contain more streets and even new functionalities such as stop signs or stop lights. Things that would not scale as well could be the heavy traffic factor, that is, many cars getting blocked up by one another, perfectly timed trains such that there is barely enough time for a car to cross between them, a risk in real life, and even the pure capacity at which the program could run that many streets and cars.