User stories

User story 1

As for the user, I would like to create a vehicle simulator that can simulate the traffic status quo of a city. The users are to be able to add road,s traffic lights and kinds of vehicles to the city. As for the result, the user can get to run the simulator and monitor the traffic. Priority 1, takes 2 days.

User story 2

As for the user, I would like to build a function that allows user to type in the vehicle rate and simulate it on the simulator. The range of the vehicle rate is given.

Priority 2, takes 1 day.

User story 3

As for the user, I would like to add a function allows the users to save the changes the user made. The user may name the saving for the convenience of reload whenever the user want to.

Priority 2, takes 3 days.

User story 4

As for the user, I would like to add a function allows the users to reframe whatever the user created and save all the changes.

The user may stop the whole simulation and do some editing to the city.

Priority 1, takes 4 day.

User story 5

As for the user, I need to make sure the vehicles will not crash on each other. Priority 1, takes 3 day.

Developer stories

Developer story 1

As developer need to offer kinds of vehicles, roads and traffic lights for the user to layout. Priority 1, takes 2 days. For the testing, abstract the vehicle classes and call certain method to move the vehicles.

Developer story 2

As developer need to set different vehicle rate that allows the user to observe the difference. Priority 2, takes 1 day. As for the testing, change the number of the vehicles on the road as the vehicle rate changes.

Developer story 3

As developer need to allow the user to save the changes the user made, furthermore, the savings can be reload later.

Priority 2, takes 3 days. For the testing, save the data as a csv file and read the file whenever needed.

Developer story 4

As developer need to terminate the simulator when the user want to edit the city and save all the changes. Priority 1, takes 4 days. For the testing, stop the whole simulator and save current status, then change the mode to edit mode.

Developer story 5

As developer need to calculate the distance between vehicles and arrange the vehicle rate base on the distance to avoid collision. Priority 1, takes 3 day. For the testing, calculate the length of the existing roads and the length of the vehicles so that to decide the max rate.