User Stories

User Story 1:

As a user, I want to control the number of vehicle spawn, so that I can control the traffic flow.

Priority: High

Estimate: 3 hours

Test: change the time creating per vehicle

User Story 2:

As a user, I want to refresh the application to restart the program.

Priority: Low

Estimate: 1 hour

Test: Refresh the program

User Story 3:

As a user, I want to change the speed of different vehicles to make the traffic condition more realistic.

Priority: Medium

Estimate: 2 hours

Test: change the speed of vehicles

User Story 4:

As a user, I want to set the lasting time of traffic lights to create a traffic.

Priority: Medium

Estimate: 2 hours

Test: change lasting time of traffic lights

Users:

* Pause the program
* Refresh the program
* Change mode of the application
* Create, open, edit, and save cities

System:

* Each road has two lanes
* Vehicle self-driving
* A road is at least twice the length of a bus at most five times
* A lane can have a traffic light only at its start or end
* The application contains a menu bar and a status bar
* The application has two main modes: 1) city editing, and 2) simulation
* The menu bar contains the menu items for each mode
* In city editing mode you can create a new city, edit a city, open a city, and save a city
* In simulation mode you can set the update rate, run the simulator, stop the simulator, set the vehicle spawn rate by popup dialog boxes which are used to enter rate values
* In city editing mode, the main window displays the city and set of road shapes and traffic lights that can be selected and placed on a city