

## Sprint 3 Plan

**Goal:** Clean up and update rogue car class, implement multiple TraCI callable python functions that allow deployment and specifications of rogue car class.

**Total points: 62 points**

### User Stories:

- 1. As a SUMO user, I want to be able to modify and specialize the rogue car class so that specific nodes and edges can be modified to affect the behavior of the rogue car class differently [Ryan] (28).**
  - a. Modify TraCI source code to implement `traci.vehicle.setRogue()` function class. (11)
  - b. Configure behavior so that mingap and impatience are modifiable via python OR via an additional vehicle class (i.e. `ROGUE_IMPATIENCE` `ROGUE_MINGAP` etc.) (7).
  - c. Implement ability to change which lights to run (10).
  
- 1. As a developer, I want a more complex traffic simulation with pedestrians, emergency vehicles, and other abnormalities in speed, safety, and traffic in our simulation for demonstration as well as testing purposes. [Harshaan] (16)**
  - a. Add to the cupertino OSM and use netedit to add variation/debug problematic edges. (7)
  - b. Use the same rerouters and stop lights that were implemented in the example sim into the cupertino OSM. (5)
  - c. Look into VLCx11 Server to remotely display simulation to front end and combining DSRC and TraCI scripts. (4)
  
- 2. As a developer, I want to extend the SUMO open source software by fully implementing a DSRC devices with Basic Safety Messages [Alexis] (18)**
  - a. Fill in BSM parameters and format output for DSRC message encapsulation (11)
  - b. Add a Makefile that compiles the new devices and adds it to the SUMO framework (7)

### Backlog:

- 1d. Implement ability to change which roads to speed across (10).