Sprint 1 Plan

Goal: For the front end team, .
For the back end team, extend SUMO to implement a new car class and modify SUMO vehicle utilities.

User Stories:
Subteam 1

1. As a user I want to be able to log-in and access my AWS clusters within my Jupyter interface. (16)
2. As a developer, I want to be able to use DataBricks to use Jupyter to manage a cluster

Subteam 2

1. As a user, I want to be able to simulate rogue cars within a traffic simulation by adding a simple flag to my vehicle type definitions so that we can mimic unwanted network behavior within a real computer network. (14)
    a. Find where cars interact with stop lights within the source code. (2)
    b. Implement rou.xml Vtype flag that changes vehicle behavior (to ignore stoplights). (5)
    c. Implement alternative vehicle behavior software that is called when flag is detected. (7)
2. As a user, I want to be able to simulate randomness in the current test program. (2)
3. As a developer, I want to be able to edit SUMO scripts to retrieve and show data from road traffic simulations.
4. As a developer, I want to be able to compare the expected trip times between a normal car and a modified rogue car
    a. Implement a rogue car inside a simulation network
    b. Give all cars the same route to complete with an expected time
    c. Have the cars follow all the protocols assigned to them such as stopping at their designated lights
    d. Have the rogue car bypass all designated protocols