Main use case diagram:

The use case diagram represent how the user interact with our autonomous car system and also show the relation between the user, differents use cases (in which the user is involved) and others actors in the system.

Sequence Diagram : Scenario 1 - Vehicle Reservation

In this scenario, we describe how and in what order the objects in our autonomous car system (user, application, vehicle interface and autonomous vehicle) function during the process of reserving the vehicle.

Sequence Diagram : Scenario 2 - Obstacle Detection

The 2nd scenario is used to show objects (LiDAR, interface, autonomous vehicle, brake) as they interact over the time and they organized according to other object and time when an obstacle is detected.

Sequence Diagram: Scenario 3 - V2I Communication

This scenario represent how objects in our autonomous car system communicate with the infrastructure in time sequence (autonomous vehicle, station and display)