# **API Reference**

# Simulator API

API Version: 1.0

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## API

# 1. SCENARIOCONTROLLER

### Endpoint for controlling the simulation

#### 1.1 GET /simulator

#### Get status of simulation

Returns the information of the simulation or null

#### **REQUEST**

No request parameters

#### **RESPONSE**

}

```
STATUS CODE - 200: Successful response
  RESPONSE MODEL - application/json
     id
                                 string
                                                  ID of scenario
     trafficLights [{
     Array of object: Collection of all the traffic lights we want to simulate
                                 string
                                             ID of the traffic light
                                 integer >=0
        position
                                             The position of the traffic light
        scanDistance
                                 integer >=10
                                             The scan distance of the traffic light
        entryDelay
                                 integer
                                             The entry delay in ms after when the first state change should be triggered
        stateHoldSeconds integer
                                             How long a state holds in seconds
        stateHoldInMs
                                 integer
     }]
     cars [{
     Array of object: Collection of all the cars we want to simulate
        vin
                          string
                                      The vin of the car
        oem
                                      The oem of the car
                          string
        model
                                      The model of the car
                          string
        entryTime
                          integer
                                      After how many ms the car should enter the scene
        speed
                          integer
                                      The speed of the car
        location
                          integer
                                      The start location of the car
        destination integer
                                      The desired destination of the car
     }]
     scenarioLength
                                 integer
                                                  The length of the scenario in meters
     timelapse
                                 boolean
                                                  Whether the simulation should be run in timelapse mode or not
                                 boolean
     done
                                                  Boolean flag to indicate if the simulation is completed or not
```

#### 1.2 POST /simulator

#### Get status of simulation

Returns the information of the simulation or null

#### **REQUEST**

```
REQUEST BODY - application/json
   id
                              string
                                                ID of scenario
   trafficLights [{
   Array of object: Collection of all the traffic lights we want to simulate
      id
                               string ID of the traffic light
      position
                               integer >=0
                                           The position of the traffic light
                               integer >=10
      scanDistance
                                           The scan distance of the traffic light
      entryDelay
                               integer >=0
                                           The entry delay in ms after when the first state change should be triggered
      stateHoldSeconds
                              integer >=1
                                           How long a state holds in seconds
      stateHoldInMs
                               integer
   }]
   cars [{
   Array of object: Collection of all the cars we want to simulate
      vin
                        string
                                   The vin of the car
      oem
                        string
                                    The oem of the car
      model
                        string
                                    The model of the car
      entryTime
                        integer >=0
                                    After how many ms the car should enter the scene
      speed
                        integer
                                   >=0
                                    The speed of the car
      location
                        integer >=0
                                    The start location of the car
      destination integer >=0
                                    The desired destination of the car
   }]
   scenarioLength
                              integer
                                                The length of the scenario in meters
   timelapse
                              boolean
                                                Whether the simulation should be run in timelapse mode or not
   done
                              boolean
                                                Boolean flag to indicate if the simulation is completed or not
}
```

#### **RESPONSE**

```
STATUS CODE - 201: Successful response

STATUS CODE - 400: Validation error, see error message for more information
```

#### 1.3 DELETE /simulator

#### Stops the simulation

Stops an active simulation and makes sure the other services return to an pre simulation state

#### **REQUEST**

## **RESPONSE**

STATUS CODE - 200: Successful response