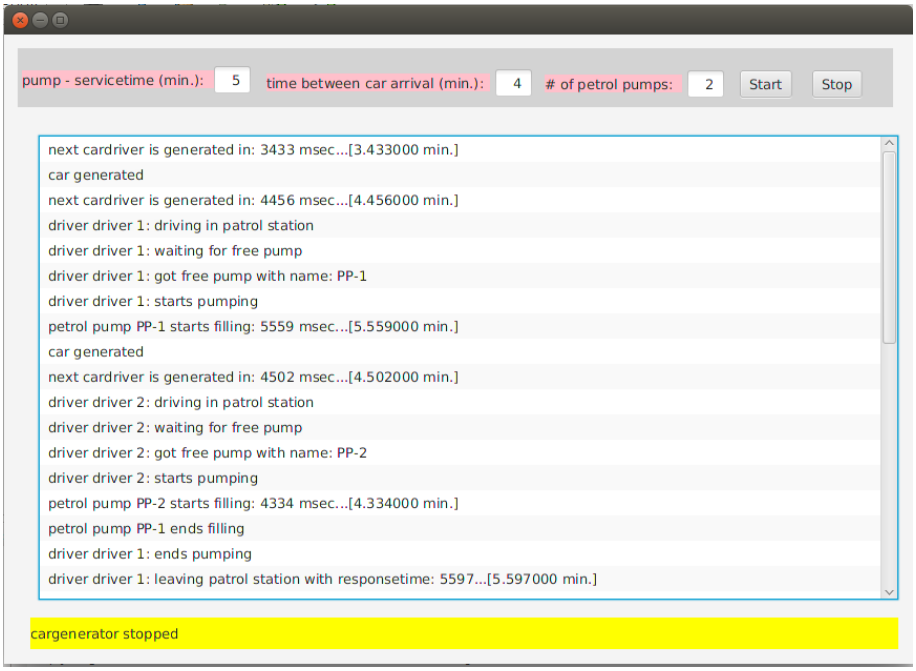
Overview

Simulation of a Petrol – Station

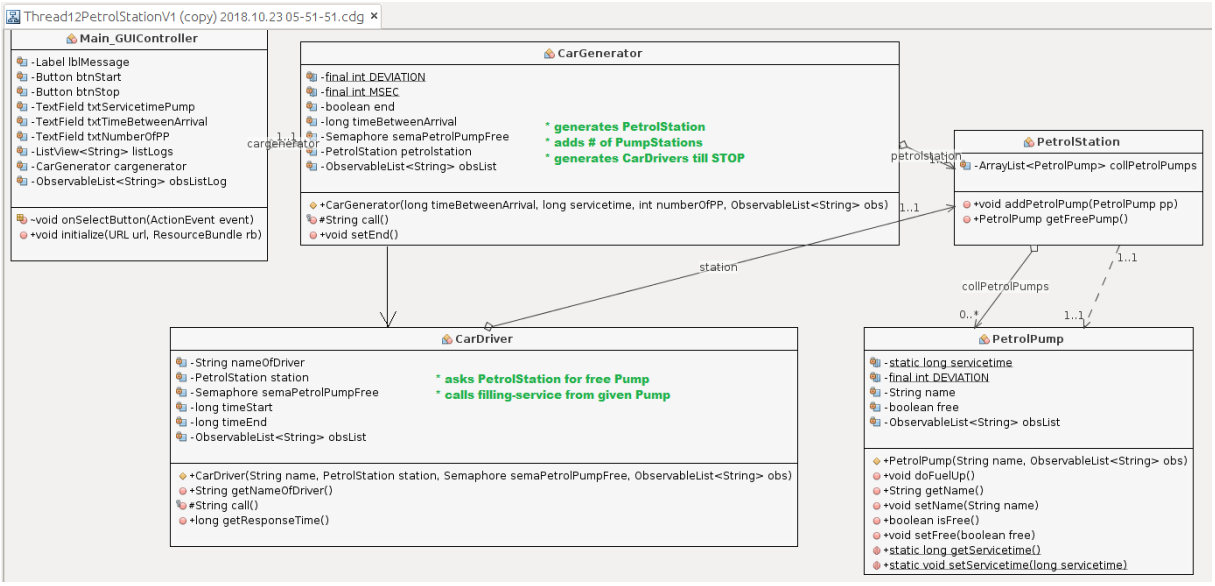
User's View



Station – Workflow

- new car enters petrol station after a given "time between next car".
- car asks for service on a free petrol pump
- free pump is assigned and filling lasts a given "servicetime"
- car leaves station and displays total time in station (= "response time")

Class Diagram



Hint for Developers

- Make protocol displayed on console; last step assign output to observable list
- time-conversion: 1 minute in real ➔ 1000 msec in simulation
- random servicetime: given servicetime +/- 20%
- random time between arrival: given time +/- 20%
- response-time:= total service time + total queuing time (eg. waiting for free pump)

Hint for Testers

- if servicetime equals time-between-arrivals AND 1 service station
- then responsetime increases rapidly (do the math in queueing-calculations (NVS))