Design Document

version 1.3



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Introduction

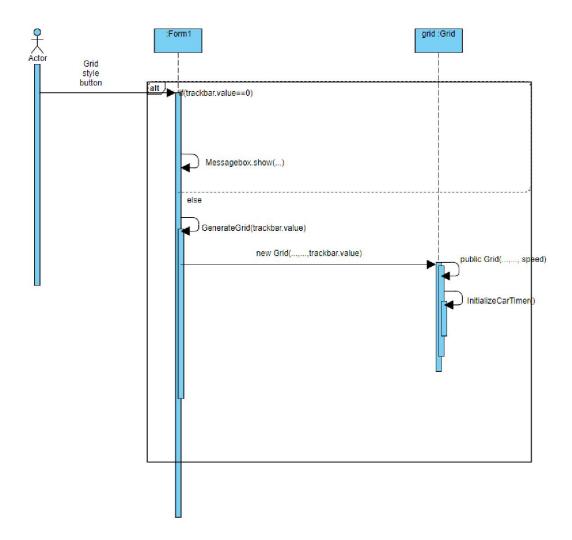
This document contains all the sequence diagrams from iteration 2 and the most up-to-date UML class diagram.

The UML class diagram contains all the classes in our application and their relationships.

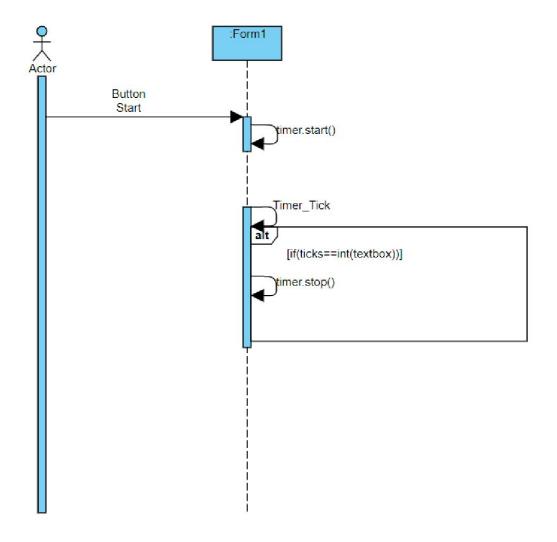
The sequence diagrams are based on the use cases we included in the "User Requirements Specifications" document, the details on these diagrams are found in that document.

Sequence Diagrams:

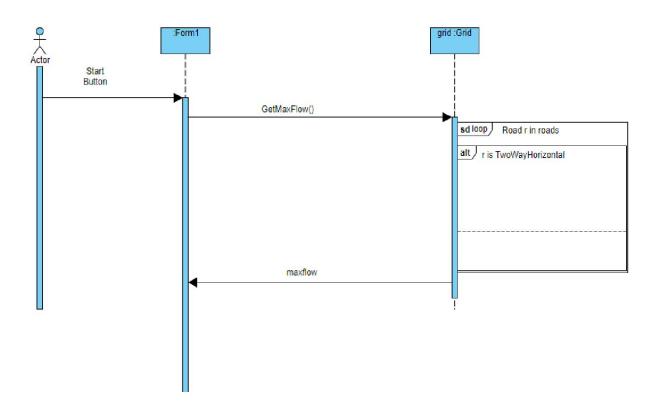
Adjusting the speed of the simulation



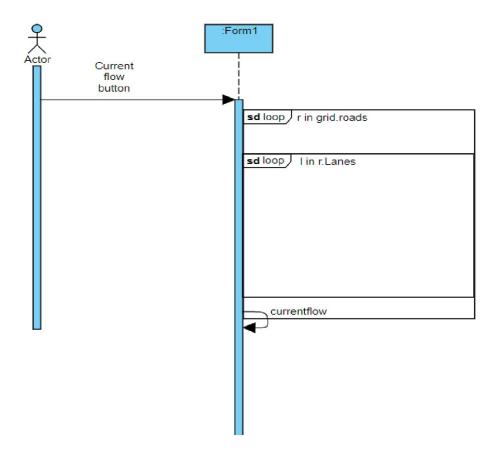
Adding duration to the simulation



Calculating maximum flow of cars on the road network



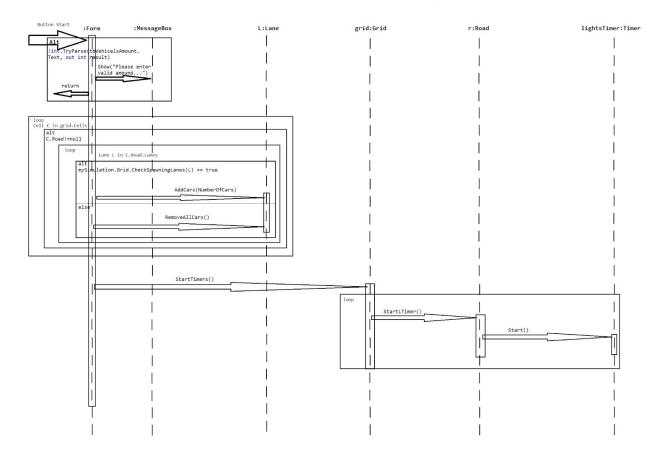
Calculating current flow of cars



Enable Surprise Elements

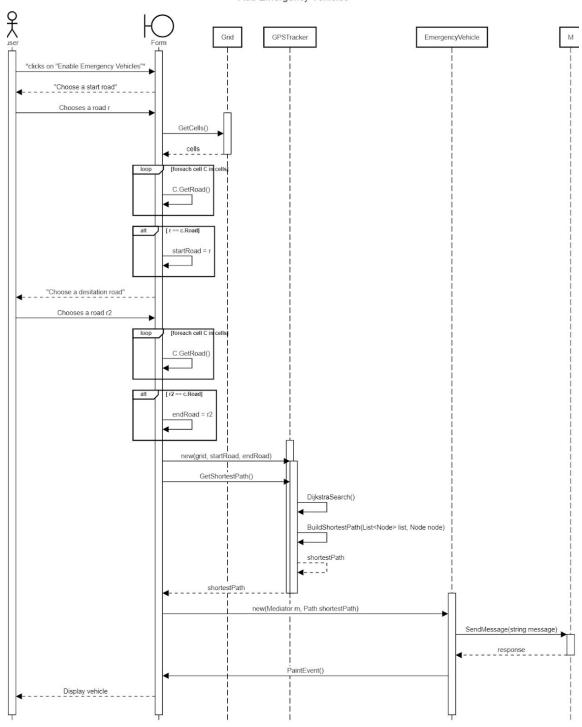
Enable Surprise Elements Mediator Simulation Car *clicks on "Enable surprise elements"* *enters amount of cars to be generated* SurpriseElements() click on "Start" Start() Go to: "Start Simulation" sequence diagram SendMessage(string message) DiceThrow() [return true] correctResponse Draw() PaintEvent() move car

Start the simulation: Sub-diagram



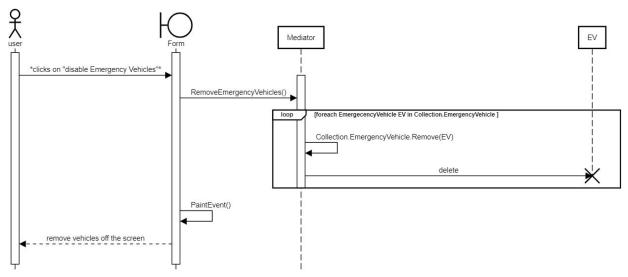
Add Emergency Vehicle

Add Emergency Vehicles

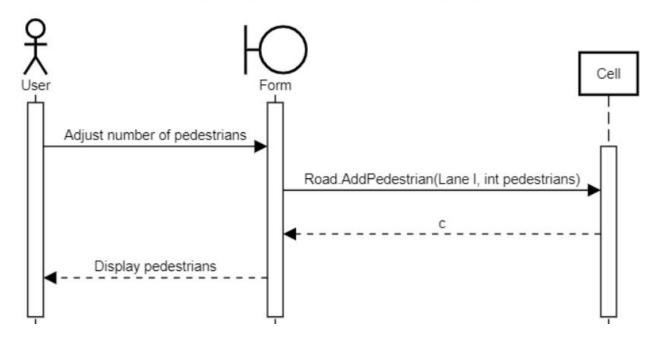


Disable Emergency Vehicle

Remove Emergency Vehicles

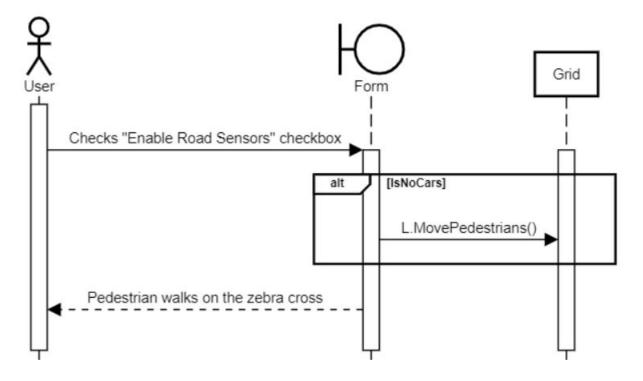


Adjusting Pedestrians Adjusting Number of Pedestrians



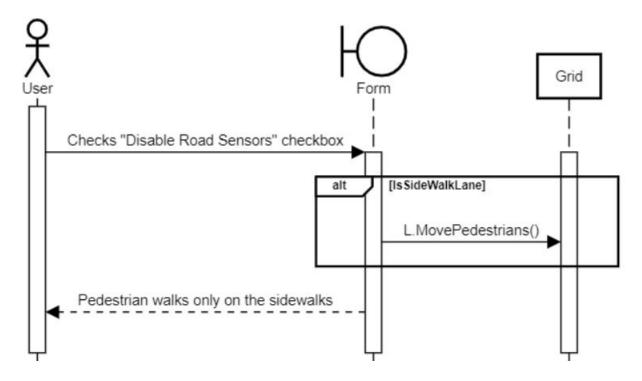
Enabling Road Sensors

Enable Road Sensors

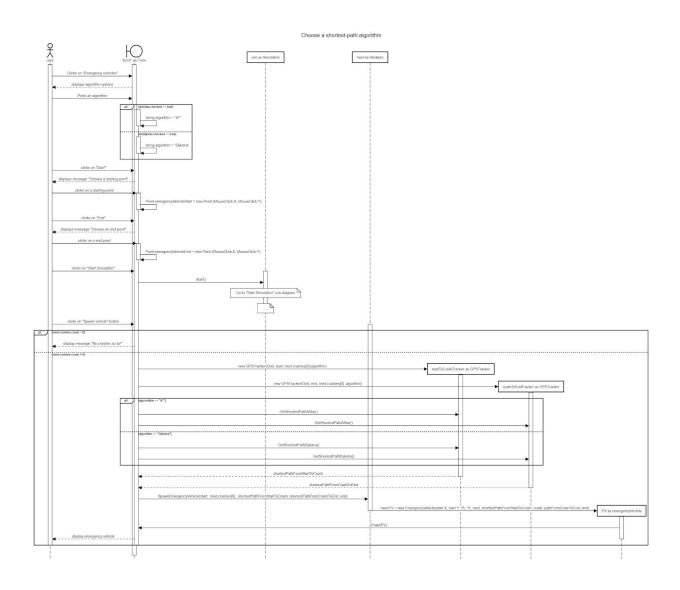


Disabling Road

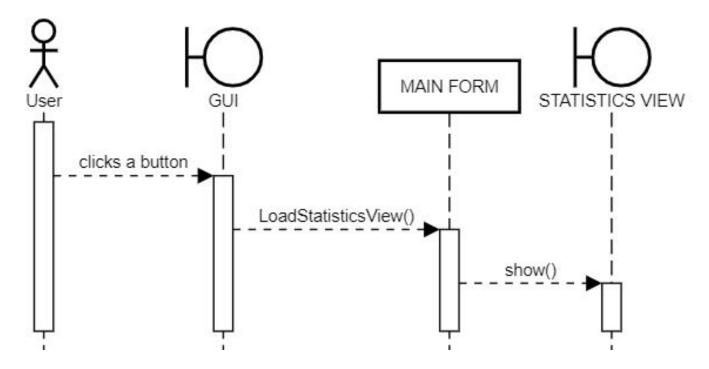
Disable Road Sensors



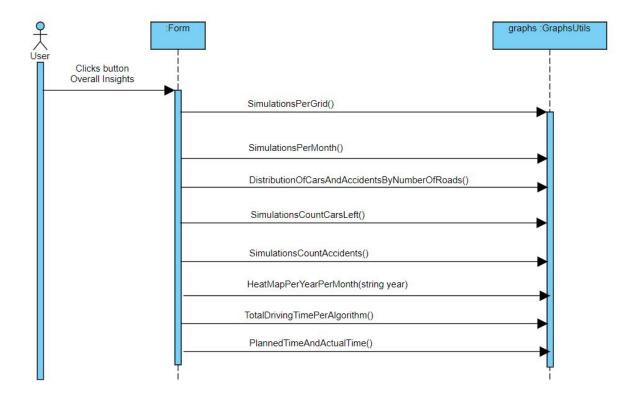
Choose shortest-path algorithm



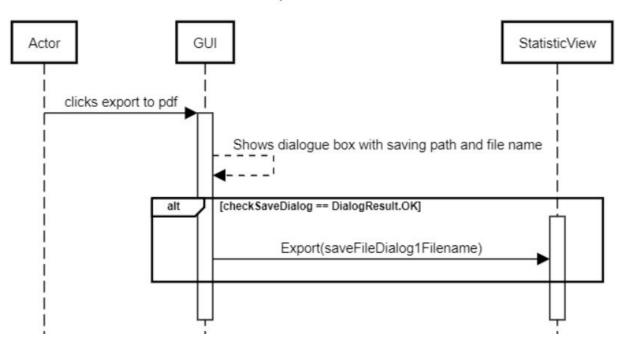
Statstics View Loading



Show Overall Insights and Statistics



Export to PDF



UML Class Diagram

