Design Document

Iteration 2

version 1.0



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Introduction

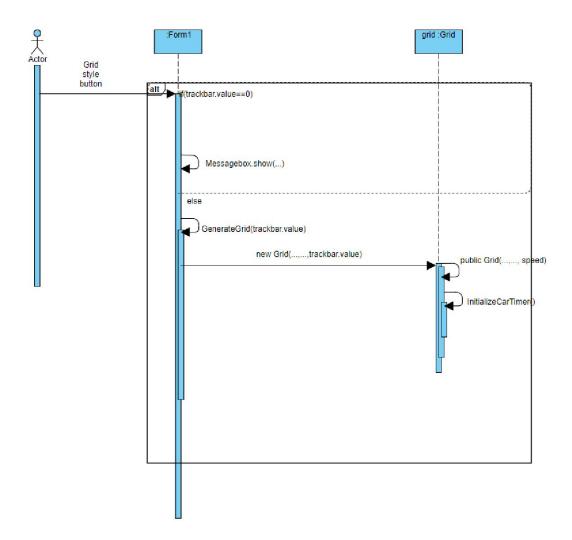
This document contains all the sequence diagrams from iteration 2 and the most up-to-date UML class diagram.

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

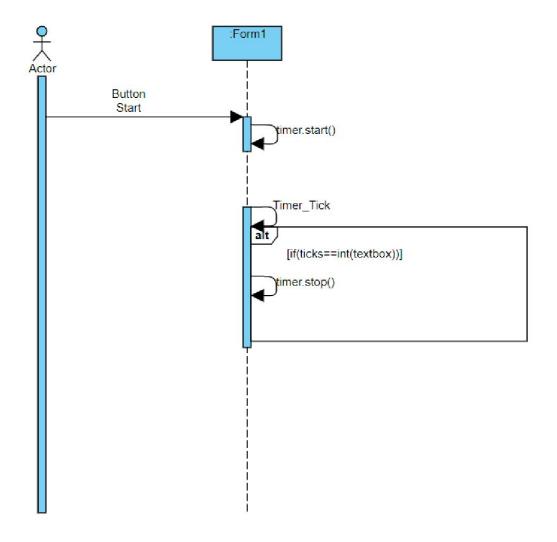
The sequence diagrams are based on the use cases we included in the "User Requirements Specifications" document, the details on these diagrams are found in that document.

Sequence Diagrams:

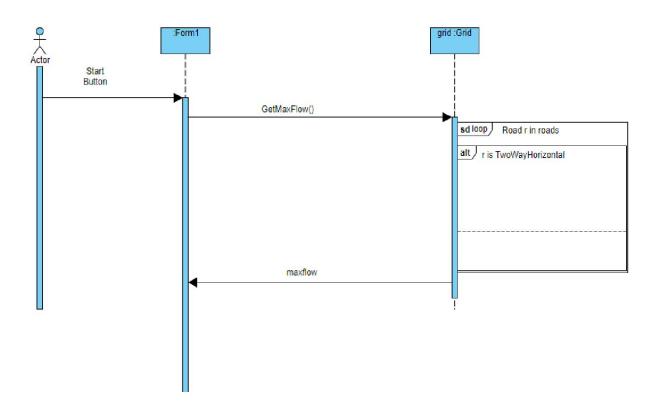
Adjusting the speed of the simulation



Adding duration to the simulation



Calculating maximum flow of cars on the road network

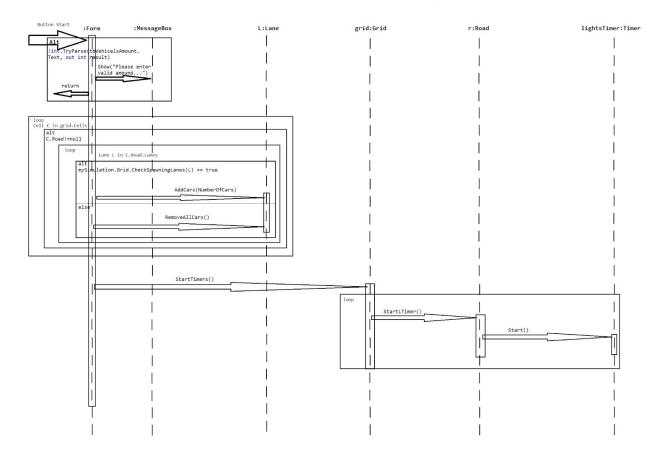


Calculating current flow of cars

Enable Surprise Elements

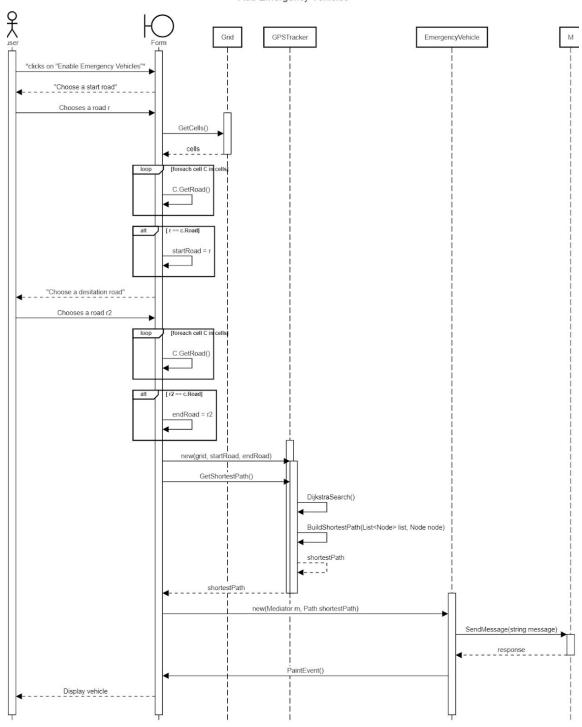
Enable Surprise Elements Mediator Simulation Car *clicks on "Enable surprise elements"* *enters amount of cars to be generated* SurpriseElements() click on "Start" Start() Go to: "Start Simulation" sequence diagram SendMessage(string message) DiceThrow() [return true] wrongResponse [return false] correctResponse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

Start the simulation: Sub-diagram



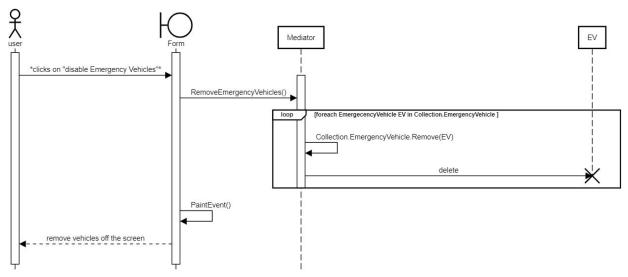
Add Emergency Vehicle

Add Emergency Vehicles

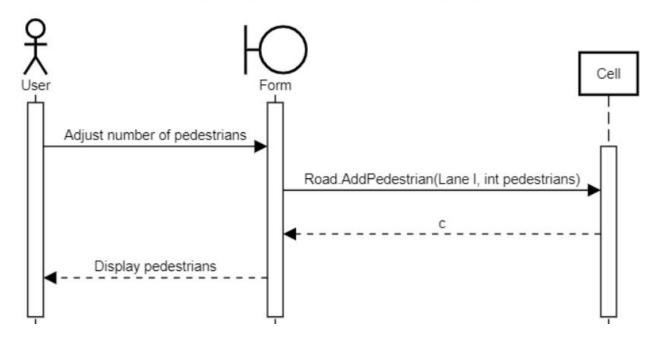


Disable Emergency Vehicle

Remove Emergency Vehicles

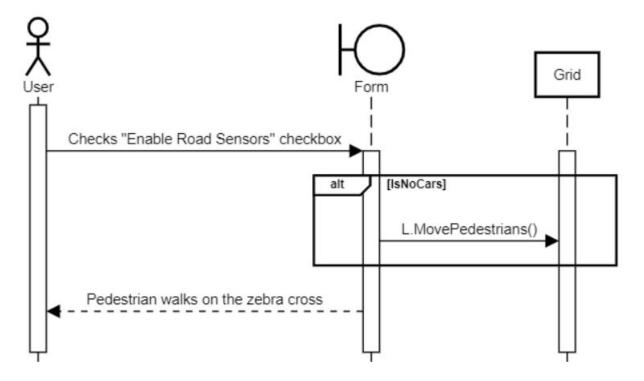


Adjusting Pedestrians Adjusting Number of Pedestrians



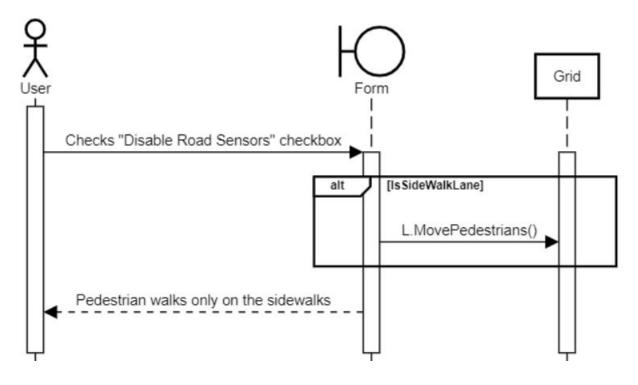
Enabling Road Sensors

Enable Road Sensors



Disabling Road Sensors

Disable Road Sensors



UML Class Diagram

