Driver Planner – User guide

The Driver Planner application consists of two separate applications: the algorithm and the UI. Please remember that these applications are prototypes, not highly polished apps. This guide will briefly explain how to use the applications.

Best of luck,
Mats Gottenbos

Algorithm
Settings for the algorithm can be configured in the Excel files in the *Input* folder:

- *Input/Settings* contains the general settings
- *Input/Drivers* contains driver details
- *Input/Station addresses* contains settings about the locations of stations

After configuring the right settings, you can start the algorithm by opening the *Driver Planner Algorithm* application. This is a console application, so is has no graphical user interface.

If new stations have been added in the settings, the algorithm application will first ask for confirmation to request the corresponding travel information from the Google Maps API. When this is done, or if no new stations were added, the algorithm will start automatically, signified by the message *Starting simulated annealing*. When this message is shown, you can safely let the algorithm run without supervision until it is complete.

Performing a run of the algorithm with the recommended number of 4 billion iterations should take between 1 and 2 hours. The exact time is heavily influenced by the speed of the computer's processor. For the highest speed, it is recommended to close all other programs on the computer and to not use the computing for anything else when the algorithm is running.

UI
After a run of the algorithm is complete, the results can be viewed via the web-based UI. Open the *Driver Planner UI* application and keep it running until you are done with the UI. Go to http://localhost:8000 to view the UI.

Notes
When opening the programs, your computer may notify you that they are made by an unknown publisher. This is normal, since I am not a registered publisher. You can ignore these warnings.

Furthermore, your antivirus program may warn you about outgoing connections from the program. These are normal behaviour as well, since the application must connect to RailCube and the Google Maps API. These warnings can also be ignored.