Project GEO1005 2017-2018

**Spatial Decision Support for Planning and Manajement**

Group number: 6

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**Story for**

**Project Name: Criminal Counter**

Our protagonist is an officer-on-duty in a police department sited in Rotterdam. The name of the officer is Daan. Daan sits in the office, and watches the screen which shows relevant information from the area under jurisdiction of his police department, while also staying close to the phone. A wireless communicator for access to the radio network of patrolling policemen is also nearby.

On Daan’s screen, an alert pops-up. The alert is an event, showing that a criminal case has occurred, so it is up to the police force to solve the problem.

On screen, Daan has available the map of the city. On it, a small symbol reveals the position where a case has appeared. By clicking on that symbol, it is possible to view details on the crime. As much information as possibly available are given for both the crime and the criminal.

In this case, a robbery has taken place on a local bank. Since the robbery alarm has started early, it is known that the culprit is still inside the building, but it is unknown for how long. As such, the best course of action is to set a perimeter around the crime scene, in a set radius, as to block off any possible escape route the criminal might select.

To do this, the application that Daan uses - “Criminal Counter” – is able to do some calculations, and even some decisions for him. It is able of locating in real-time all patrolling policemen. Then, it calculates the set area that needs to be cordoned, and where blockades need to be set. As a result, points at intersections of the local road network are selected, and shown to the user. The next step is that taking into account the positions of policemen on the field, it can calculate which person (or team) has to go on which road intersection, and shows that to Daan, along with the time that would take for these people to hasten to their set positions. On screen, each person is symbolized, as are the positions they need to go, and the route for each one is lit on the map. Whenever a policeman arrives on location, a message can be viewed from the application. So, when everyone is where they’re supposed to be, a message about the area being secured will be shown.

The final result of this procedure is that Daan knows exactly who has to go where, how much time it takes them to get to that position, and when the whole area will be closed-off by police. Then, he can inform everyone on site what they are supposed to do, and where to go.

When the particular case is closed, Daan can again go to the main screen, and be on alert for any new cases that might occur.