Specification of project in advanced data models and systems
22nd April 2002

1 Members

- Jonas Domeij (dva99jdj)
- Peter Gardfjäll (peterg)
- Simon Nordberg (tfy99sng)
- Joakim Vesterlund (di98jvd)

2 Taxi simulation

We all know that getting a cab home from Blå during rush hours can be a real hassle, especially if you're drunk and eager to get home asap ☺. The problem is that most cab companies handle their drive load in a highly inefficient manner.

In this project we will develop a system to help cab companies optimize their routes and the distribution of assignments among available cabs.

Due to lack of financial resources and GPS equipment this project will take the form of a simulation including fictive maps and artificial cars.

In conclusion, the system will simulate a taxi company whose cars are equipped with GPS transmitters allowing them to report their positions and to receive instructions from the database.

The database accepts calls and determines the most appropriate car for the job using the information on the cars' current status.

Database features include spatial and temporal data to model this simulated world in the best possible way, as well as triggers for sending messages between the database and the cars. Furthermore, we haven't ruled out the possibility to use recursive queries in the algorithm for finding shortest paths through the graph.