Chair for Algorithms and Data Structures Prof. Dr. Hannah Bast Mirko Brodesser

## Efficient Route Planning SS 2011

http://ad-wiki.informatik.uni-freiburg.de/teaching

IBURG

## Exercise Sheet 4

Submit until Friday, June 24 at 2:00pm

## Exercise 1 (6 points)

Follow the example from the lecture and write a web application, using the Google Maps JavaScript API, with the following features.

- A map is displayed which can be zoomed and dragged.
- Source and target location can be specified by clicking on the map.
- When both source and target have been picked, the shortest path is computed and displayed as a polygonal line.
- The shortest path is to be computed by a separate (server) program, using one of your algorithms from the previous exercises.
- Communication between the web application and your server program is via AJAX.

## Exercise 2 (3 points)

Add one or two more fancy features of your choice to your web application. Here are two possible such features.

For example, make it possible that the source and target location can be dragged with the mouse, with the shortest path begin recomputed at the end of or even during the dragging operation.

Or display the result of your algorithm (computed on the graph from OSM) together with the result computed by Google Maps, which can be accessed via the Google Directions API: http://code.google.com/apis/maps/documentation/directions/

Exercise 3 (1 point)

Don't forget your *feedback-exercise-sheet-4.txt* !