Algorithm Design

In the project the majority of the operations are simple functions, the only complexity is given by communication between them. However, there are a few algorithms that are worth mentioning besides the classic sort and search processes:

* Expected Time Computation

This procedure is thought to show a user an estimated time to wait before the arrival of the requested taxi.

It asks the GPS service to calculate the distance between taxi and user, and using this data make a valuation of the remaining time.

* Expected Fare

In view of a possible future implementation, it is possible to think of an algorithm that gives the user a possible fare for the current ride. It obtains, using GPS, the actual distance between start and end points, calculates an estimated travel time and by retrieving the average cost of fuel and considering some additional factors like traffic or service it provides a plausible fare (subject to changes) to give an indication to the passenger.