Scope

The aim of this project is to model a software application whose intent is to provide an easy, comfortable and intuitive access to a city’s taxi service. The name of the application is MyTaxiService (MTS).

The front-end layer of the system is composed by a web application, dedicated exclusively to people requesting the service, and a mobile application, dedicated both to taxi drivers and customers. Customers and taxi drivers have access to different functionalities. Access to the actual service on both sides is granted only to registered users, meaning that a registration is required. The only functionality available for guests is to visualize the homepage.

The back-end of the application manages the taxis’ distribution around the city via GPS information and the forwarding of incoming requests to near taxis via a queue policy based on a taxi zones division. It also manages the forwarding of notifications to the users.

*MTS functionalities on the customer side:*

MTS allows customers to request a taxi in a specific location. In such case, the user is given a code and a waiting time estimated by the system. MyTaxiService also allows customers to make a taxi ride reservation for a specific time, origin and destination. The reservation must be done at least two hours before the given time, otherwise the system will send a notification about the rejected reservation’s request.

*MTS functionalities one the taxi driver side:*

MTS allows the user to communicate his availability. If the user is available, the system can send him notifications about incoming requests. The user may or may not confirm his will to take care of the request.