Functional Requirements

[G1] Allow users to require a taxi ride in any moment, whether they are at home or anywhere else in the city

R1: the system should be available 24/7.

R2: customers should be able to access the service both through the web application and the mobile application, possibly at the same time.

[G2] Allow users to reserve a taxi ride at a specific time with a given origin and destination

R3: the system should allow taxi reservations for a specific path communicated by the customer.

R4: the system should not allow overlaps between reservations made by the same customer.

R5: the system should allow to delete a taxi reservation made by the same customer.

[G3] Allow taxi drivers to answer a ride request and take care of customers.

R6: taxi drivers should be able to communicate their current availability state to the system.

R7: if available, a taxi drivers should be able to receive incoming requests.

R8: after receiving an incoming request, the taxi driver should be able to either confirm or not his intention to take charge of the request.

[G5] A ride request must always be satisfied within a considerable short amount of time, 15 minutes on average.

R9: the system should always search an available taxi giving maximum priority to the taxi zone related to the request and lower priority to the immediate near zones. Any other taxi zone should be ignored.

R10: if no taxis are available in the zones specified in R8, the system should put the request on hold and periodically check again the taxi availability.

[Others]

R11: the system should allow user registrations, providing a choice between costumers and taxi drivers.

R12: the system should allow log in and log out functionalities.

R13 the access to the service offered by myTaxiService users should be granted only to registered and logged users.

R14: customers should be able to delete a request if and only if the request is currently on hold.

R15: Guests/visitors should be allowed only to visit the homepage and to sign up.