Functional Requirements

*[G1] Allow customers to access the system’s taxi service in any moment, whether they are at home or anywhere else in the city.*

[R1] Customers should be able to access the service through both the web and the mobile application, even at the same time.

[R2] Customers must be able to register to the taxi service from the mobile or web homepage.

[R3] Only registered customers can access MyTaxiService’s services.

[R4] The system should allow the log out functionality.

*[G2] Allow customers to request a taxi ride from an arranged location.*

[R1] Only registered customers can request a taxi ride.

[R2] Customers must insert a valid origin location in order to request a ride.

[R3] The system will not allow more than a request if the previous one has not been accomplished yet.

*[G3] Allow customers to reserve a taxi ride at a specific time with a given origin and destination.*

[R1] The system should allow taxi reservations for a specific path communicated by the customer.

[R2] The system must not allow overlaps between reservations made by the same customer.

[R3] The system should allow to delete a taxi reservation made by the same customer.

[R4] The system allows reservations only 2 hours before time and date specified by the customer.

[R5] The system will assign a taxi driver for the reserved ride 10 minutes before the time and date specified by the customer.

*[G4] Allow taxi drivers to answer a ride request and take care of customers.*

[R1] Taxi drivers should be able to communicate their current availability state to the system.

[R2] If available, taxi drivers should be able to receive incoming requests.

[R3] After receiving an incoming request, the taxi driver should be able to either confirm or not his intention to take charge of the request.

[R4] Taxi drivers must be able to log in the mobile application with preassigned credential and be identified as drivers.

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

[R1] 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.

[R2] If no taxis are available in the zones specified in the previous requirement, the system should put the request on hold and periodically check again the taxi availability.

*[G6] Allow customers to be notified of any relevant update connected to their requests and reservations.*

[R1] The system should send updates through email and/or in-app notification, as specified by the customer.

[R2] Absence of taxis available, reservations overlaps, taxi average waiting time and taxi assigned to customers are events that must be notified to the customer.

*[G7] Customers and taxi drivers must be able to contact each other after the system has paired them.*

[R1] Customers must leave a valid phone number in order to complete the registration phase.

[R2] Taxi drivers must be able to access to the customer’s phone number when the system has paired them.

[R3] Customers must receive the taxi drivers’ contact number after the system has paired them.

[R4] Customers must receive the taxi code in order to be able to recognize its driver.

*[G8] Allow customers to cancel requests and reservations.*

[R1] Customers can cancel a request or reservation only if it has not been assigned to a taxi driver yet.

*[G9] Administrators must be able to assign an account to the taxi drivers hired by the company.*

[R1] Administrators must be able to create a taxi driver’s account.

[R2] Administrators must be able to modify and cancel a taxi driver’s account.