myTaxiService

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Requirements Analysis and Specification Document

Davide Cremona, Simone Deola

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Chapter 1

Introduction

1.1 Purpose

This document is the R.A.S.D. (Requirement Analysis and Specification Document). The purpose of this document is the description of the "myTaxiService" system. At first, it will provide functional and non-functional requirements, a complete overview of the constraints of the system and its limits. Then it will explain in detail the dynamics of the system using real-life use cases. Finally this document will provide a base for the developers that concretely have to implement the system.

1.2 Actual System

The functionality that the new system will provide is now not supported. So the entire system must be developed without using or modifying existing system.

1.3 Scope

The objective of myTaxiService is to provide an interface between customers and taxi drivers to optimize their interaction and provide a fair management of taxi queues. The users, once registered through the mobile application or the web application, can request a taxi for their travel or reserve one, specifying the origin and the destination. The reservation can be done at least two hour before the ride; if the reservation can take place, the system will allocate a taxi 10 minutes before the meeting time. On the other side, taxi drivers can inform the system that they are waiting for a client and accept or decline a ride request. If the request has been accepted, a notification will be sent to the requesting customer with the identification number of the incoming taxi and the time he has to wait. Otherwise, if the request has been rejected it will be forwarded to the next taxi in the queue. The system has to optimize the management of customers requests giving the rides

to the taxi with the highest priority that has to be evaluated in function of avaiability and the nearness of the taxi driver.

1.4 Actors

- **Guest User:** guest users are unlogged or unregistered users. They can visit the login page or the registration forms.

- **Customer:** this kind of user is the end-user of the service. He can perform request for taxis or reserve a ride. In his personal page he can view his requests and the system responses.

- **Taxi Driver:** this kind of user is composed by the actual taxi drivers that can only see customers requests that has been forwarded by the system. He can accept or decline these requests. Also, he's considered a special kind of user because one can register as a "Taxi Driver" only if he provide a valid Taxi licence.

Chapter 2

Overall Description

2.1 Goals

  G1 Allow guest user to become a customer or a taxi driver.

  G2 Allow registered user to log in.

  G3 Allow customers to require a taxi.

  G4 Allow customer to reserve a ride.

  G5 Allow customers to delete a previous reservations.

  G6 Allow taxi drivers to accept or decline a ride request.

  G7 Allow taxi drivers signal a user if it made a bad use of the system.

  G8 Allow taxi drivers to notify their availability.

  G9 After login, the system will notify the customer that his request has been accepted.

  G10 After login, the system will notify the taxi driver about the incoming requests.