Glossary

**User**: is a person who is registered in the database of the application. He has access to all the functions of the program that involves the requiring of a taxi, shared or not. He also has the possibility to save a list of preferred locations, that he can automatically choose when the System require from him an address as starting position or destination.

**Guest**: is a person who is using the application but is not registered in the database. He has access only to the registration functions.

**User Information**: all the information that concern a user; most of them have to be inserted during the registration (Name, Surname, tel. Number, e-mail, password), some of them can be inserted at any time after the registration (such as the personals locations) and others are assigned by the system (for example the number of blank-calls or the feedback).

**Feedback**: the feedback measures the reliability of a user. Is a simple relation between the total number of calls and the number of blank calls that a user have made (so a feedback equals to 1 means that he never missed a call).

**Basic User Information**: The information that a taxi driver visualizes when he receive a call. They are: Name, Surname, Feedback, Telephone Number of the user.

**Blank Call**: we define Blank-call a call for a taxi where the client is not at the starting location when the taxi arrives with a maximum late of X minutes, or a call that the user cancel before X minutes.

**Missed Call**: we define Missed-call a call for a taxi where the client is not at the starting location when the taxi arrives (X+1) or more minutes late.

**Partner**: someone who share a run with a user

**Pick-up place**: the Address where a user asks a taxi to come

**Taxi Driver**: a registered Taxi Driver

Goals

A user should be able to:

Sign up to the system (starting as a guest)

Log in to the system

Modify his personal information

Call for a taxi that should pick him up asap

Be informed by the system when a taxi driver accepts his call and of the estimated waiting time

Make a reservation for a taxi on specified date and time

Give his availability for sharing a run

Add, modify or delete a personal location

A taxi driver should be able to:

accept or decline a call

visualize the basic information about the user who is making a call

(visualize the price for a run)?

Signal a blank call

The system should provide a fair management of the calls and efficient and essential communication between drivers and users.

Domain properties

- A taxi can always reach a pick-up place and the users can only choose destinations reachable (and in the controlled zones?)

- A zone can't remain without at least one available taxi

- A taxi driver that accepts a call will take it.

- Gps information and maps are always updated.

Assumptions

-Two or more users can share a taxi only if their pick up place and destination are in the same zone.

- Registration of a person to the system

-the system has to provide a sign up functionality

- Modification of personal information

-The system has to provide a function that allows a user to modify his personal information, except for the number of calls and blank calls

- Call for a taxi

-the system has to provide a function to call for a taxi

-the user should be able to visualize the estimated arrival time and confirm or not his call

-the system has to manage the number of calls and blank calls of every user

- Make a reservation for a taxi to a specified date and time

-the system has to provide a function to allow a user to call for a taxi in a specified date and

time

-the system has to call for the taxi 10 minutes before the specified time

- Give is availability for sharing a run

-the system has to provide a function to allow a user to declare his availability for a taxi sharing

-the system has to search for other users in the same zone that want share a ride, and automatically inform the interested users and the taxi driver; then, if they accepts, has to calculate the cost of the ride.

- Create, modify delete personal location

-The system must provide a function to allow a user to create a new personal location

-The system has to provide a function to allow a user to modify a personal location

-The system has to provide a function to allow a user to delete a personal location.

-Visualization of ride information

-the system has to provide a function that allows a user to visualize the information about his actual ride (basically the cost calculated by the taximeter)

-Accept or decline a call

-The system has to forward the calls to the first taxi of the queue

-The system has to provide a function to allow a taxi driver to accept or decline a call when he receives it

-If a call is declined, the system has to move the taxi driver that declined it at the end of the queue and send the call to the new first in the queue

-Visualize the basic information about a user who is making a call

- the system has to provide a function to allow a taxi driver to visualize the basic information of a user that is making a call

-Signal a blank call

-the system has to provide a function to allow a taxi driver to signal a blank call

-the system has to put the taxi back in the queue and update the blank\_calls attribute of the user

Functional requirements

Guest : he can

sign up

User: he can

log in

log out

modify his personal information except for the number of calls and blank calls

Create a new personal location

modify an existing personal location

Delete an existing personal location

Do an immediate call for a taxi (shared or not)

Do a delayed call for a taxi

Visualize the ride information

Taxi driver : he can

receive notifications for the calls

Visualize the basic information of a user that is making a call

accept a call

decline a call

signal a blank call