# **System Description and Requirements**

***Turo*** is a platform where you list cars for rent in a location and people who go on vacation or trips can rent them to use during the trip. As such our main requirement are to be able to login and register either as a renter or a lister. Renters Must be able to search and rent cars in a location and by the start and end date of his trip. Lister on the other hand must be able to list his cars for renting while the system must be responsible for calculating the price per day of renting a given car.

When a renter requests to rent a car the lister should receive a notification, he can then decide to accept or decline the booking request. If the request is accepted the request days must be removed from the set of days, the car is available to renting, and those days must be returned if the booking is cancelled.

As such our most important constraints are:

- There must not be two lister with the same username or two renters with the same username.

- The price per day of a car must not be zero.

- The system must always properly indicate whether a user is logged in or not and what type of user is logged in.

- Listings have extras, those extras must have a cost higher than 0.

- Listings have dates, these days are made up for a day, a month and a year, the day must be between 1 and 30, the month must be between 1 and 12 and the year must be between larger than 0.

- When logging out you must first be logged in and after logging out the system must properly indicate you are logged out.

- When a lister attempts to confirm or decline a request for booking, that booking request must be active, meaning it has not been canceled and not been confirmed or declined yet.

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| Identifier | Requirement |
| R01 | Users must be able to login either as a renter or a lister |
| R02 | Users must be able to search for trips by location and time frame |
| R03 | Renters must be able to send booking request for a car listing |
| R04 | Listers must be able to list their cars for renting |
| R05 | Lister should receive notifications and requests when someone attempts to book their car |
| R06 | There must be a logout feature |
| R07 | The lister must be able to accept or decline booking requests |
| R08 | Renters must be able to cancel bookings if it is not too late |
| R09 | The system must calculate the price per day of renting a car |