*REQUISITO 1 : If a car is not picked up within one hour from the reservation. The system tags the car as available again, and the reservation expires, the user pays a fee of 1 EUR.*

* *USE CASE : Reservation Expiration.*

*PARTECIPATING ACTORS :* ***Registered User***

*ENTRY CONDITION : “UC\_BOOKING A CAR” and the* ***Registered User*** *didn’t unlock the car in the available 1-hour time slot after the reservation.*

*FLOW OF EVENTS :*

The 1 hour reservation countdown expires without the ***Registered User***  having unlocked the car.

The Central Systemcancels the reservation of the ***Registered User*** on that car, making it available again so that other Users can reserve it;

TheCentral Systemadds a fee of 1 EURO to the ***Registered User’***s payment bill.

*TERMINATION CONDITION :*

The Central Systemcommunicates to the Banking System the amount of money the ***Registered User***’s payment bill should be charged.

The Central System now allows the ***Registered User*** to perform another reservation.

*REQUISITO 2 : A user that reaches a reserved car must be able to tell the system he’s nearby, so the system unlocks the car and the user may enter.*

* *USE CASE : Unlock Car.*

*PARTECIPATING ACTORS :* ***Registered User***

*ENTRY CONDITION : The* ***Registered User***  *has previously booked a car and activates the function “Unlock Car” on the Web Site/Application of the System.*

*FLOW OF EVENTS :*

The ***Registered User*** sends the GPS coordinates regarding his position to the Central System;

The Central Systemchecks if the GPS coordinates of the specific ***Registered User*** ’s booked car and the GPS coordinates of the ***Registered User*** itself are in a specified distance range.

*EXCEPTION :* If one hour has passed since the reservation has been done and the ***Registered User*** didn’t unlock the car, the reservation expires and it’s not possible to unlock the car unless with another reservation.

*TERMINATION CONDITION :*

* The Central System verifies that ***Registered User***  is nearby the car and unlocks the doors.

(We take as an assumption that after the doors of the cars are unlocked the **User** always enters it.)

*REQUISITO 3 : As soon as the engine ignites, the system starts charging the user for a given amount of money per minute; the user is notified of the charges through a screen on the car.*

* *USE CASE : Ride starts.*

PARTECIPATING ACTORS : ***Registered User***

ENTRY CONDITION : UC 1 & UC 2 ***Registered User*** starts the engine of the car**.**

FLOW OF EVENTS :

The Central Systemstarts the ride timer.

The Central System calculates the current amount of money charged to the ***Registered User*** (calculated as a given amount of money per minute multiplied by the minutes of the ride) while showing it on the on-board screen.

*TERMINATION CONDITION :*

The ***Registered User*** ends the ride and gets charged for the final amount of money.

*REQUISITO 4 : If a car is left at special parking areas where they can be recharged and the user takes care of plugging the car into the power grid, the system applies a discount of 30% on the last ride.*

*USE CASE : Apply discount on the ride.*

*PARTECIPATING ACTORS :* ***Registered******User***

*ENTRY CONDITION : UC 3* The***Registered User*** parks in special parking areas designated by the Central System and plugs the car into the power grid within a specified (short) time period after the end of the ride.

FLOW OF EVENTS :

TheCentral Systemapplies a discount of 30% on the last ***Registered User*** ’s ride.

*TERMINATION CONDITION :*

The ***Registered User*** gets charged for the ride with the specified discounted amount.

*REQUISITO 5 : If a car is left at more than 3 KM from the nearest power grid station or with more than 80% of the battery empty, the system charges 30% more on the last ride to compensate for the cost required to re-charge the car on-site*

*USE CASE : Apply over-tax on the ride.*

*PARTECIPATING ACTORS :* ***Registered******User***

*ENTRY CONDITION :* The ***Registered******User*** ends the ride and the Central System verified that he left the car at more than 3 KM from the nearest power grid station or with more than 80% of the battery empty.

FLOW OF EVENTS :

The Central Systemapplies an over-tax of 30% on the last ***Registered User*** ’s ride.

*TERMINATION CONDITION :*