1. The system will be used only by employees of the car rental company.
2. Each user signs in with an assigned user id and password. Each user can inquire own personal details as well as change own password.
3. A user with ADMIN Privilege will be initialized in the database and the access given to the system owner. Only users assigned ADMIN Privilege (Role) can create, modify users, grant and revoke user Privileges (Roles). A user can be assigned zero (no access), one, or more Privileges.
4. Each business operation requires specific Privileges. Only users granted those Privileges can perform the business operation.
5. Creation and deletion of Privileges, as well as association of Privileges to specific business operations is an application program maintenance task (DBA). Association of Privileges to specific users is however a business operation that requires ADMIN Privilege.
6. Access to record deletion is granted only to user with ADMIN or MANAGER Privilege. User deletion is only allowed for ADMIN
7. Business Operations by Privileges:
   1. ALL: for all users.
      1. Log-in
      2. View non-sensitive own personal details.
      3. Change own password.
   2. ADMIN: for administrators
      1. Create, modify, suspend users. Suspended users are barred from log-in. (enabled *true/false*)
      2. Grant/Revoke Privileges to users (Changing the roles/privileges).
   3. MANAGER:
      1. Create Car into NEW status.
      2. Maintain daily flat rate for Cars (price).
      3. Delete RETIRED Car.
   4. FRONT: for front desk who serve customers
      1. Create, Modify customers.
      2. Search for available cars base on customer specifications. Because there is no forward booking, candidate cars are always retrieved from current READY status cars (search or display only available cars).

Customer will decide when to return the car. Hire fee will be generated upon car return.

In all cases, the hire records will be created/updated and an invoice generated on web page. As a result, one Invoice may be associated with one or more Hiring records (multiple cars).

A Car must be returned to the EMPLOYEE/MECHANIC for status change from HIRED to DEPOT/AVAILABLE, before FRONT can process the car return.

* + 1. Each hiring record must register the date time and staff id who serves the customer.

1. Cars:
   1. There should be feature for upload of multiple pictures for each car. Pictures can be added and deleted and reordered. Pictures can be shown to aid choosing.
   2. Besides basic Car details, Car Activities History (Hire History) is maintained to keep track of the begin-end time of each status change. It can therefore generate the start-end date/time of rental, start-end date/time of a DEPOT, start-end date/time of READY (or IDLE), start-end date/time of REPAIR, and start-end date/time of RETIRE (no end time). It will be used to compute the fleet utilization efficiency.
2. Creation and deletion of car Statuses, as well as association of car Status to business operations is an application program maintenance task (DBA). Association of car Statuses to specific Car is however a business operation that requires relevant Privileges (MANAGER).
3. Testability and the use of system clock:
   1. The application should refer to the clock whenever necessary, and especially for starting and ending time for each hiring.
   2. To make test more efficient, the application should be able to run in test mode, where a user maintained offset (in positive or negative number of days and hours) is applied to the clock before returning to the application. This allows the clock to be manipulated manually by the tester in a manner to fast track the time.
   3. Due to the nature of the business, the user should be allowed to adjust the start time and return time up to <zz> minutes ahead or behind the clock.
4. Keep these future enhancements in view.
5. New fee schedules.
6. Customer self-service, registration and car booking.

Fee Schedule:

Hiring Fee computation:

1. Each car is assigned a flat daily and flat hourly rate by MANAGER.
2. Phase 1: cars are hired on a daily basis similar to hotels:
3. Cars can be hired “daily”