**iCoot System Problem description:**

Any customer can look for car models in the catalog, either by browsing the car model index or by searching. In the latter case, the customer specifies the categories, makes and engine sizes they are interested in. Either way, after each retrieval , the customer is shown the results as collection of matching car models, along with basic information such as car model name. The customer can then choose to view extra information about particular car models such as description and an advert. Customers who have become members can log on and gain access to extra services. The extra services are: making a reservation, canceling a reservation, checking membership details, viewing reservations and rentals, and logging off.

**Functional Requirements:**

***FR1: iCoot system***

*FR1.1: Browse Index*

The Customer browses the index. He selects an index heading. The Customer selects to view Car-Models for the selected index heading. To view the results ViewResults usecase is carried out.

*FR1.2: View Results*

The system presents the Customer with a summary of each retrieved CarModel, including model number with price. The customer views the cars. To view the car model details, ViewCarModelDetails use case is carried out.

*FR1.3: View CarModel Details*

The customer should be logged into iCoot system. The Customer selects one of the matching CarModels. The Customer requests details of the selected CarModel. The system displays details for the selected car model including makes, engine size, price, description, advert, poster. If Customer wants to make a reservation then MakeReservation use case is carried out.

*FR1.4: Search*

The customer selects the required categories and he selects the required Makes. The Customer also selects the required engine sizes and he initiates the search. If Customer specifies no categories, makes or engine sizes then the system ask the Customer to enter either required categories.

*FR1.5: LogOn*

Member has already obtained a password from their local Store. The Member enters the membership number. The Member enters the password. The Member elects to log on. The system displays the Member's Window. If the Member elects View Member Details then View\_MemberDetails usecase is carried out. The system again displays the Member's Window. If the Member elects View Rentals then ViewRentals usecase is visited. The system displays a message on Member's Window. If the member elects Log Off then LogOff use case is used.

*FR1.6: View Member Details*

The customer should be logged into the system. If the customer is not logged in then the system asks him to log in, LogOn usecase is carried out. For security reasons, the system must display only the last four digits of the Member’s CreditCard number. The system presents the Member with membership details including name, address, status, amount owing, CreditCard details. The system informs the Member to verify the details. If there are corrections in the details then system asks member to contact local Store. The system verifies the details entered by the member. The system shows the details.

*FR1.7: Make Reservations*

The member is logged on in advance. The Member elects to reserve the CarModel for the details on display. The Assistant asks the Member for confirmation. The system issues a warning that failure to collect a reserved CarModel will result in a fine. If Member declines Reservation conditions then the system again asks the Member for confirmation. The member confirms the Reservation. The system shows the member the Reservation number. The system indicates the Member that an Assistant will be in touch when the requested Car is available. When an Assistant logs on to iCoot then the system gives the Assistant a list of Reservations that require action. The Assistant takes necessary action to progress Reservations.

*FR1.8: View Rentals*

The Member elects to view the Rentals. The system presents the Member with summary of each Car the Member currently have out for rent including number plate ,due date. The system presents Member with summaries of Cars currently rented. If no information is shown then the system asks member to select a valid options.

*FR1.9: Change Password*

The member should be logged into iCoot system. The system asks him to enter the old password. Member enters the old password. The system asks member to enter a new password. The Member enters a new password. The Member enters the new password again. The Member initiates the change. The system asks the Member for confirmation. The member confirms it. The system validates the password. The system displays a warning to the Member “Please memorize your password”.

*FR1.10: View Reservations*

The member should be logged into iCoot system. If the customer is not logged in then the system asks him to log in, LogOn usecase is carried out. He should have a reservation to view the reservations. The system shows a list of reservation made by the member. The system displays the validated summaries of member’s reservations such as date, time, car models etc.

*FR1.11: Cancel Reservation*

The Member should be logged into iCoot system and should already have a Reservation. The Member selects to cancel the Reservation. The Assistant asks the Member for confirmation. Member confirms to cancel the Reservation. If Member doesn’t confirm a cancellation then that reservation is not cancelled by the system. The system marks the Reservation as Concluded. The system updates the Assistant’s terminals accordingly.

*FR1.12: Log Off*

The member should be logged into iCoot system. If the customer is not logged in then the system asks him to log in, LogOn usecase is carried out. The member selects to log off the iCoot system. The system ends the current session. The system makes the Member functions unavailable to Member. If the member does not interact with the system for ten minutes then the member is logged off automatically by the system. The system validates the member’s log off.

*FR1.13: Look for CarModels*

The system asks customer to look for the CarModels. The customer retrieves a subset of CarModels from the catalog. The system displays all the possible models on the options selected by the customer.

