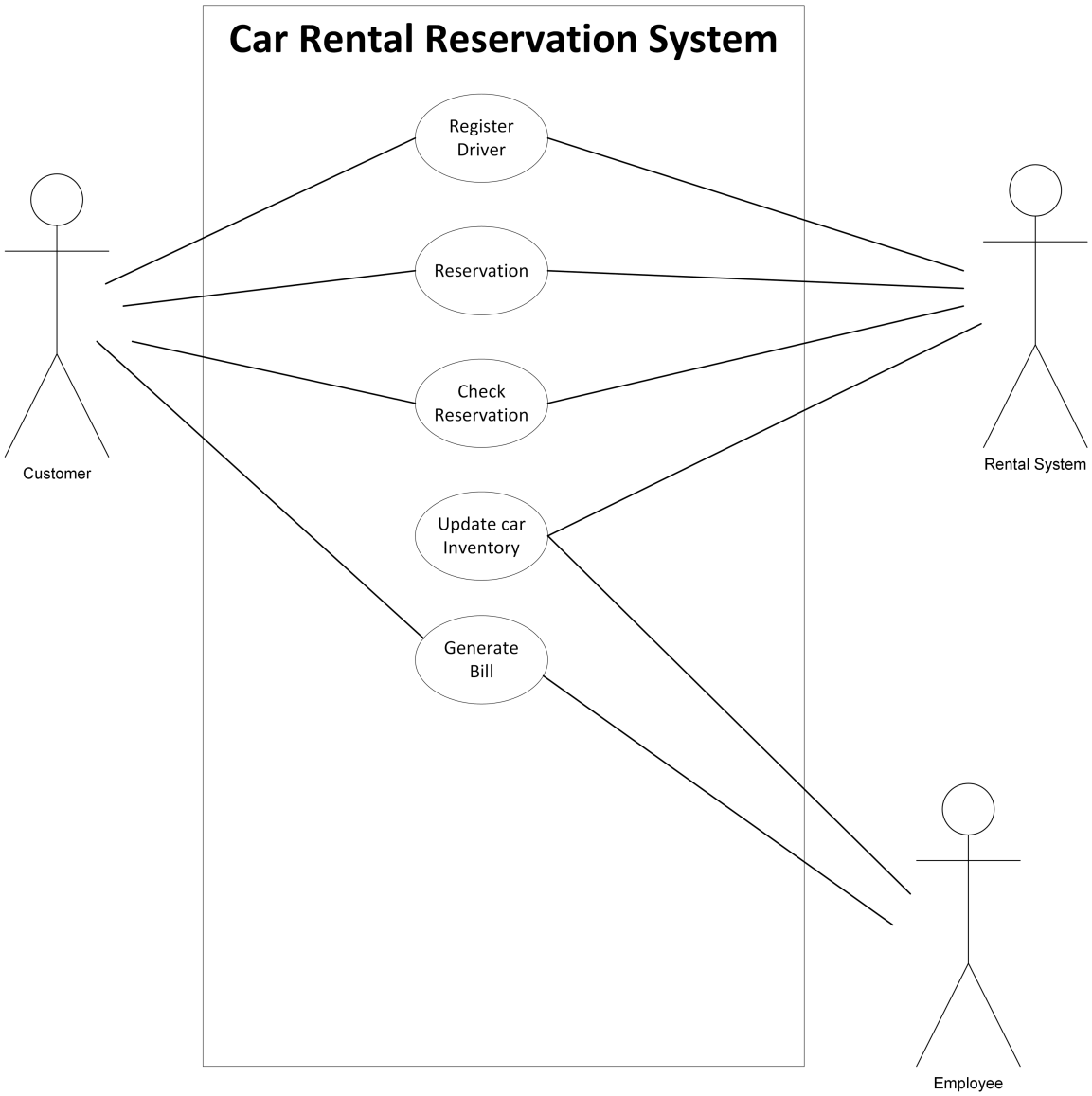
Use Case Model – Car Reservation System

This is a use case model that describes the behavior of a car rental reservation system. The model is composed of three actors and five use cases. As per the assignment instructions, I will be presenting two use case named "Register Driver"



Use Case – Register Driver

1. Basic Flow
   {Input Information}
   (1) The use case begins when the *Customer* enters personal information into Car Rental Reservation System.
   (2) *Customer* enters a username and password into Car Rental Reservation System.

{Read Information}
(3) The Car Rental Reservation System reads the *Customer's* information from Car Rental Reservation System.

{Register Information}
(4) The Car Rental Reservation System sends the customer's information to *Rental System*.
(5) The *Rental System* creates a unique identification number for the customer and stores the customer's information.
(6) The *Rental System* acknowledges the customer has been successfully registered.

{Display Registration Confirmation}
(7) The Car Rental Reservation System displays a message confirming the user has successfully been registered into the car rental system.

{Use Case Ends}
(8) The use case ends.

2. Alternative Flow

2.1 Handle same username
At {Register Customer's Information}, if the username has already been taken,

1. The Car Rental Reservation System prompts the *Customer* to enter another username.
2. The Car Rental Reservation System sends new username to *Rental System*.
3. *Rental System* validates new username.
4. Goes back to {Register Customer's Information}

2.2 Handle invalid password
At {Register Customer's Information}, if customer's password does not meet security requirements,

1. The Car Rental Reservation System prompts the *Customer* to enter another password.
2. The Car Rental Reservation System validates the Customer's new password.
3. Goes back to {Register Customer's Information}

2.3 Handle inaccessible database
At {Register Customer's Information}, if the database is inaccessible,

1. Display Rental Company's reservation contact number.
2. The use case ends.

Use Case – Check Reservation

1. Basic Flow

   {Input Reservation Information}

   (1) The use case begins when the *Customer* enters their reservation number, first name and last name on the Car Rental Reservation System.

   {Read Reservation Information}

   (2) The Car Rental Reservation System reads the *Customer's* reservation information.

   {Validate Reservation Information)

   (3) The Car Rental Reservation System sends the *Customer's* reservation information to the *Rental System* to confirm that the reservation number, first name and last name exist in the system.

   (4) The Car Rental Reservation System acknowledges *Customer's* reservation information is valid.

   (5) The Car Rental Reservation System returns *Customer's* reservation details.

   {Display Reservation Information}

   (6) The car rental system displays the *Customer's* reservation information.

   {Use Case Ends}

   (7) The use case ends.

2. Alternative Flows

2.1 Handle if *Customer* information cannot be found

At {Validate Reservation Information}, if the *Customer's* information was not found,

(1) The Car Rental Reservation System prompts the customer that their information has not been found.

(2) Return to {Input Reservation Information}.

2.2 Handle incorrect reservation number

At {Validate Reservation Information}, if the *Customer's* information was found but the reservation number did not match the *Customer's* reservation,

(1) The Car Rental Reservation System prompts the *Customer* to enter a new reservation number.

(2) The Car Rental Reservation System sends the reservation number to the *Rental System* to confirm reservation number.

(3) The *Rental System* acknowledges that the *Customer's* reservation number is valid.

(5) The *Rental System* returns *Customer's* reservation details.
(6) Return to {Display Reservation Information}.

2.3 Handle recently cancelled reservation

At {Display Reservation Information}, if the *Customer's* reservation was recently cancelled,

(1) The car rental system prompts the *Customer* if they would like to reclaim their reservation.
(2) If the *Customer* chooses to reclaim the reservation, return to {Display Reservation Information}.
(3) The use case ends.