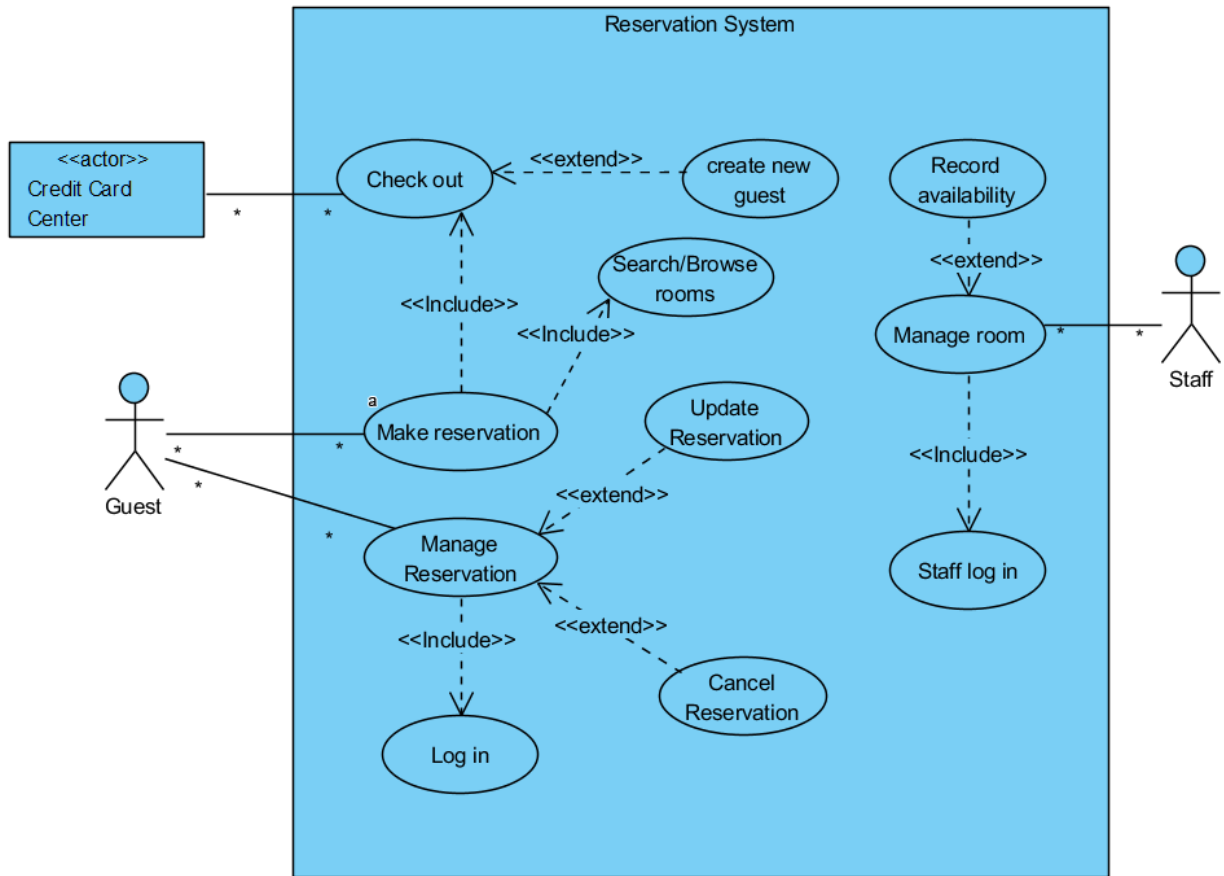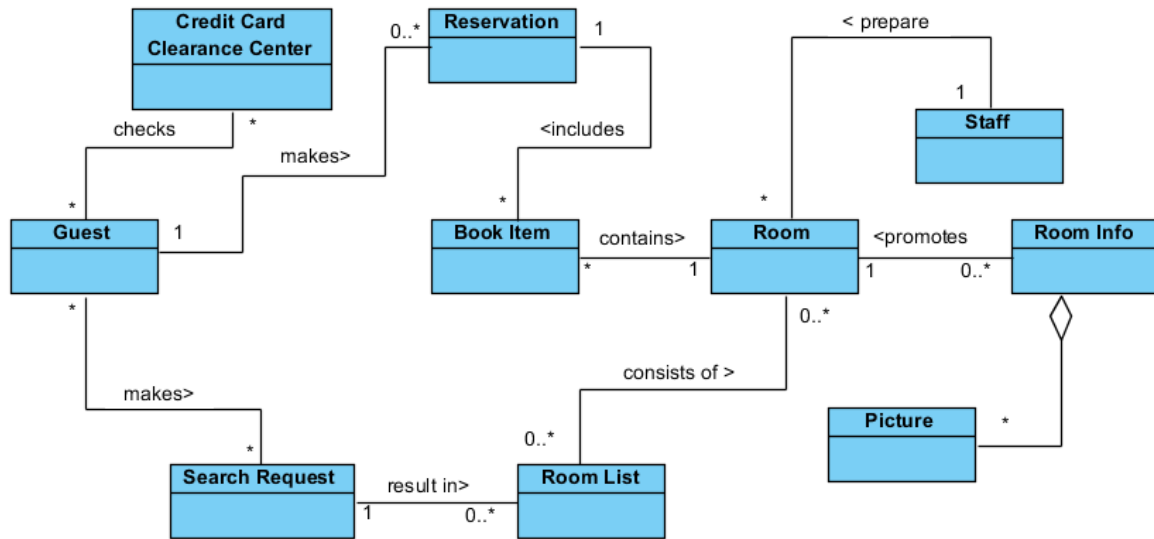Che' Cobb CEN4021 Assignment 3 Use Case Packet

Use Case Diagram

Class Diagram

Use Case Description

Use-Case Name - Make reservation	ID - 01	Importance Level - High
Primary Actor - Guest	Use-Case Type - Detail, Essential	

Stakeholders and Interest
- Guest - Wants to search and reserve room
- rooms manager- wants to maximize guest's satisfaction

Brief Description

The use-case describes guest searching rooms and then making a reservation.

Trigger - Guest comes to the website to reserve a room

Type - External

Relationships
- Association - Guest
- Include - Search/Browse rooms, check out
- Extend - create new guest
- Generalization

Normal Flow of Events

1. Guest search website for available rooms
2. System provides guest a list of recommended rooms
3. Guest iterates over 1-2 till he/she likes one room

    -If guest does not like any room- execute 3a
4. Guest search for marketing information on room
5. System provides room information(images) to guest
6. Guest iterate over 4-5 till he/she decides which room to book

    -If guest does not like rooms- execute 6a
7. Guest checks out order

    -If a new guest- execute 7a
8. Guest leaves the website

Sub Flows

Alternate / Exceptional Flows

3a. Guest leaves the website

6a. Guest leaves the website

7a. Execute create new guest use case

7b. The guest aborts the order

Use-Case Name - Create new guest	ID – 02	Importance Level – High
Primary Actor – Guest	Use-Case Type – Detail, Essential	
Stakeholders and Interest • Guest - Wants to be able to reserve the room • room manager- wants to increase the guest database		
Brief Description The use-case describes how guest is added to a database		
Trigger - A new guest attempt to check out Type – External		
Relationships • Association • Include • Extend • Generalization		
Normal Flow of Events 1. System prompt user to register a new account 2. User type into his/her information 3. System validate user input data 4. Iterate 2-3 till data is valid 5. A new guest record has been created 6. Guest leaves the website		
Sub Flows		
Alternate / Exceptional Flows 2a. User aborts creating new account		

Use-Case Name - Check out	ID – 03	Importance Level – High
Primary Actor – Guest	Use-Case Type – Detail, Essential	
Stakeholders and Interest • Guest - Wants to be able to reserve the room • sale manager- wants to increase the booking		
Brief Description The use-case describes how guest check out		

Trigger - A new guest attempt to check out Type – External	

Relationships
- Association - credit card center
- Include
- Extend
- Generalization

Normal Flow of Events
1. System prompt user to enter a credit card information
2. User type into his/her information
3. System send the information to credit card center for authorization
   –If credit card center does not authorize the card, execute 3a
4. System send confirmation email to user

Sub Flows

Alternate / Exceptional Flows
3a. User changes his/her card and execute 2
3b. User aborts order

Use-Case Name - Search / Browse rooms	**ID** – 04	**Importance Level** – High
Primary Actor – Guest	**Use-Case Type** – Detail, Essential	

Stakeholders and Interest
- Guest - Wants to be able to reserve the room
- sale manager- Wants to satisfy the guest

Brief Description

The use-case describes how guest search and browse rooms

Trigger - A new guest opens the website to book rooms
Type – External

Relationships
- Association - Guest
- Include
- Extend
- Generalization

Normal Flow of Events

1. Guest search website for available rooms
2. System provides guest a list of recommended rooms
3. Execute Make reservation use case

Sub Flows

Alternate / Exceptional Flows

2a. Guest leaves the website

Use-Case Name - Manage reservation	ID – 05	Importance Level – High
Primary Actor – Guest	Use-Case Type – Detail, Essential	

Stakeholders and Interest

- Guest - Wants to be able to manage the reservation

Brief Description

The use-case describes guest manage the reservation

Trigger - A new guest opens the website to find his/her reservation

Type – External

Relationships

- Association - Guest
- Include - Log in
- Extend - Update reservation, Cancel reservation
- Generalization

Normal Flow of Events

1. Execute the log in use case
2. System provides guest reservation information
3. Guest chooses on of the management options
   –If guest wants to change the reservation - guest executes subflow 3a
   –If guest wants to cancel the reservation - guest executes subflow 3b
4. Guest leaves the website

Sub Flows

3a. Execute change reservation use case

3b. Execute cancel reservation use case

Alternate / Exceptional Flows

3c. Guest view the reservation details

Use-Case Name - Log in	**ID** – 06	**Importance Level** – High
Primary Actor – Guest	**Use-Case Type** – Detail, Essential	

Stakeholders and Interest
- Guest - Wants to log in

Brief Description

The use-case describes guest log in

Trigger - A new guest opens the website to log in

Type – External

Relationships
- Association - Guest
- Include - Log in
- Extend
- Generalization

Normal Flow of Events

1. Guest types in user name and password
2. System validates the form

   –If form data does not match record in the database, executes flow 1
3. Guest choose chose one of the following options

   –If guest wants to make a new reservation, guest executes subflow 3a

   –If guest wants to manage current reservation, guest executes subflow 3b

Sub Flows

3a. Execute search/browse rooms use case

3b. Execute manage reservation use case

Alternate / Exceptional Flows
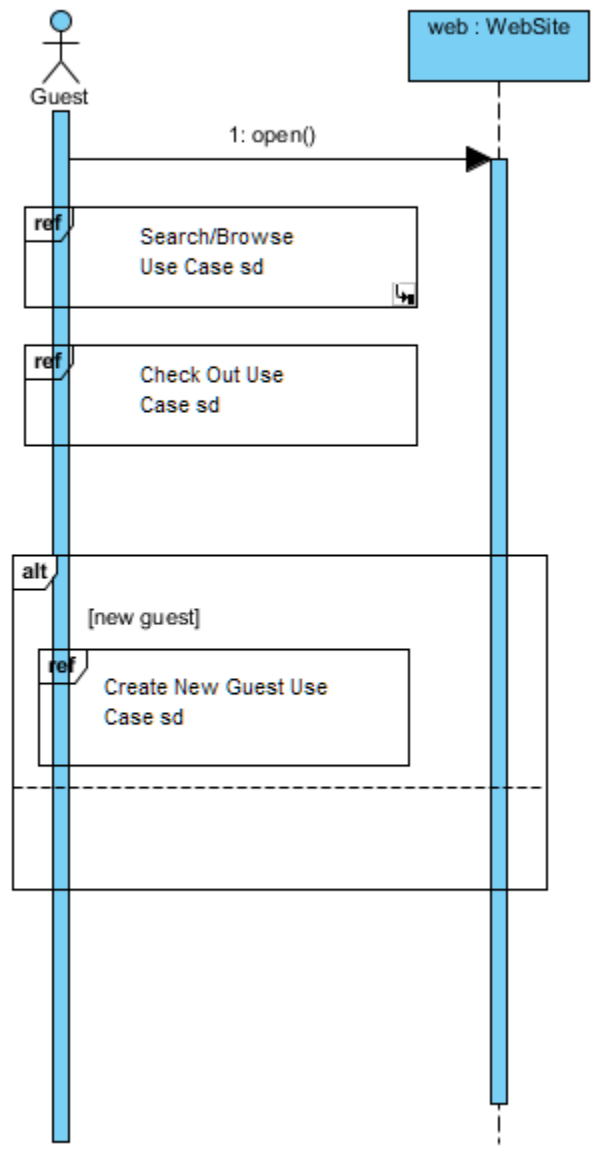
3c. Guest leaves the website

Use-Case Name - Manage room	**ID** – 07	**Importance Level** – High
Primary Actor – Staff	**Use-Case Type** – Detail, Essential	

Stakeholders and Interest

- Staff- wants to manage the rooms to keep room information up to date

Brief Description

The use-case describes staff manages the room information

Trigger - A staff goes to the system to update room information

Type – External

Relationships

- Association - Staff
- Include
- Extend – Record availability
- Generalization

Normal Flow of Events

1. If staff does not log in, executes use case Staff log in
2. Staff choses one of the following options

    –If staff wants to add a room, executes subflow 2a

    –If staff wants to update room, executes subflow 2b

    –If staff wants to delete room, executes subflow 2c

3. Staff leaves the system

Sub Flows

2a. Staff adds a new room

2b. Staff executes Record availability use case

2c. Staff deletes a room

Alternate / Exceptional Flows

Use Case Sequence Diagram

01:Make Reservation Use Case Sequence Diagram

sd Make reservation

Guest

web : WebSite

1: open()

ref
Search/Browse
Use Case sd

ref
Check Out Use
Case sd

alt

[new guest]

ref
Create New Guest Use
Case sd

02: Create new guest Use Case Sequence Diagram

sd Create New Guest
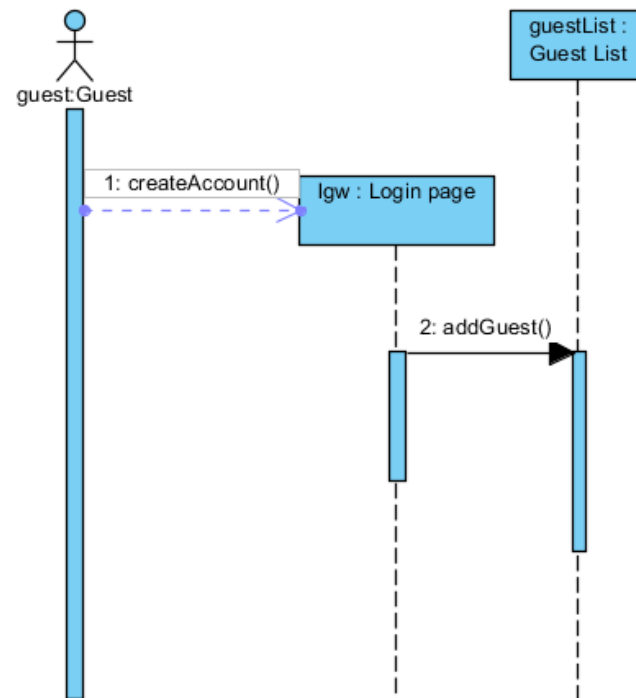
03: Check Out Use Case Sequence Diagram

sd Check Out Use Case
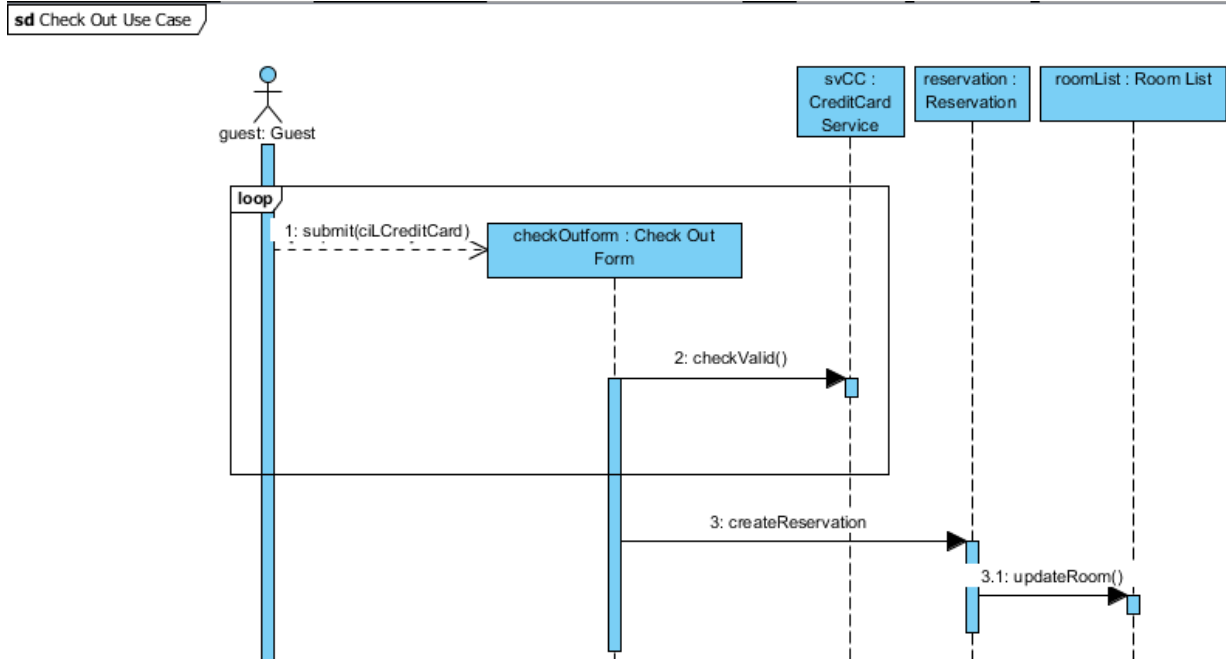
04: Borrow Rooms Use Case Sequence Diagram

sd Search/browse rooms Use Case

05: Manage Reservation Use Case Sequence Diagram

sd Manage Reservation Use Case

Guest

page : BookSystem

reservationList :
Reservation List

ref
Log in Use Case
Sequence sd

1: getReservation()

1.1: queryReservation

alt

[If reservation active]

2: updateReservatoin

2.1: updateReservation

alt

3: cancelRervation()

3.1: deleteReservation
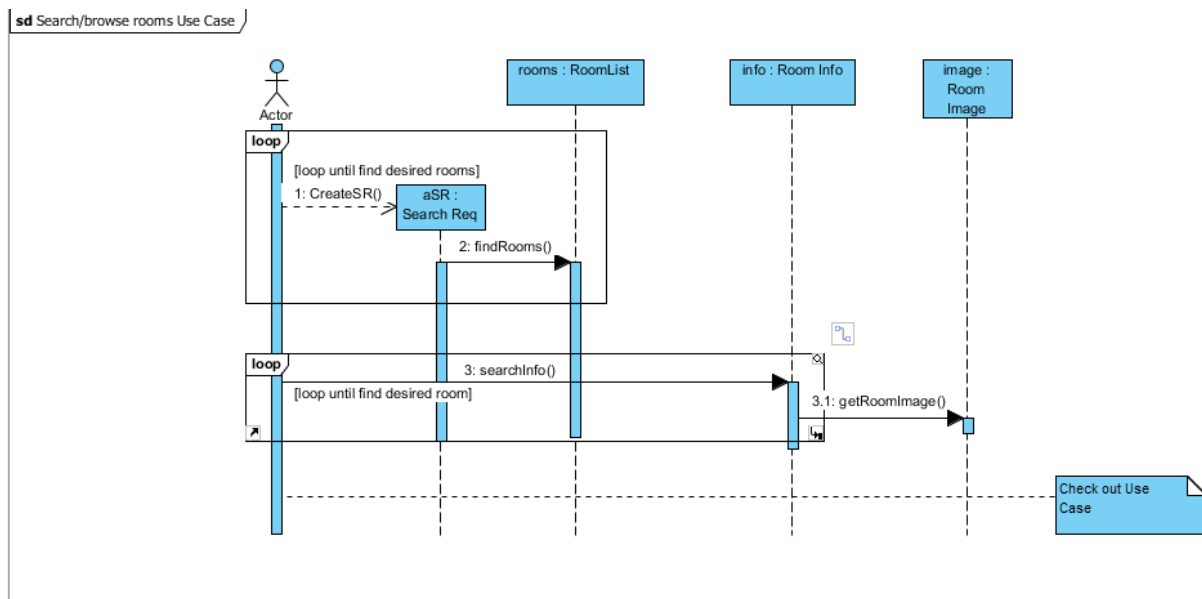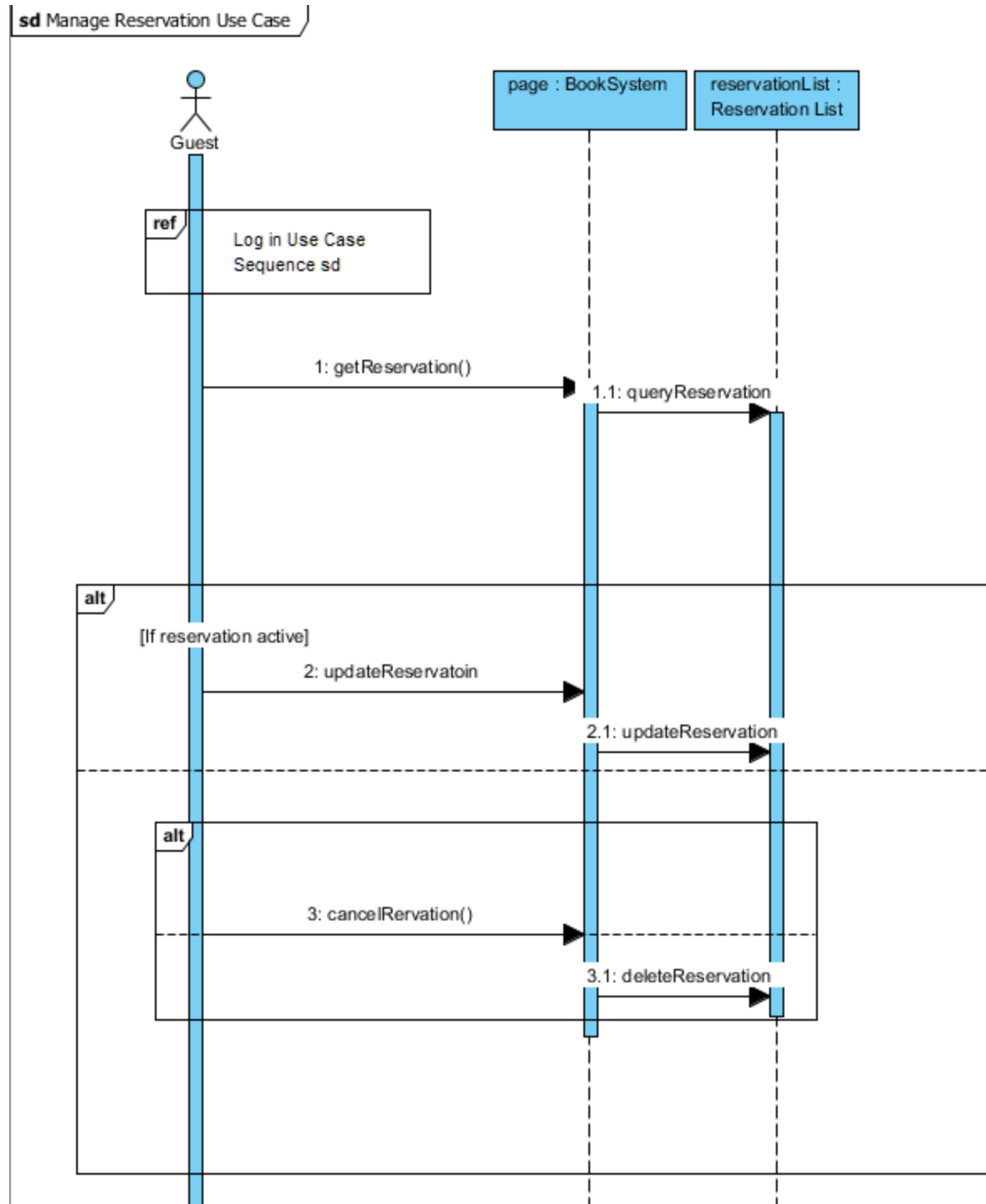
06: Log in Use Case Sequence Diagram

sd Log in Use Case

```
                    ○
                   /|\          logWin : LogIn Window      guestList : Guest List
                   / \
              guest: Guest
```

loop   1: requestLogIn()

[Loop until match]

1.1: checkExists()
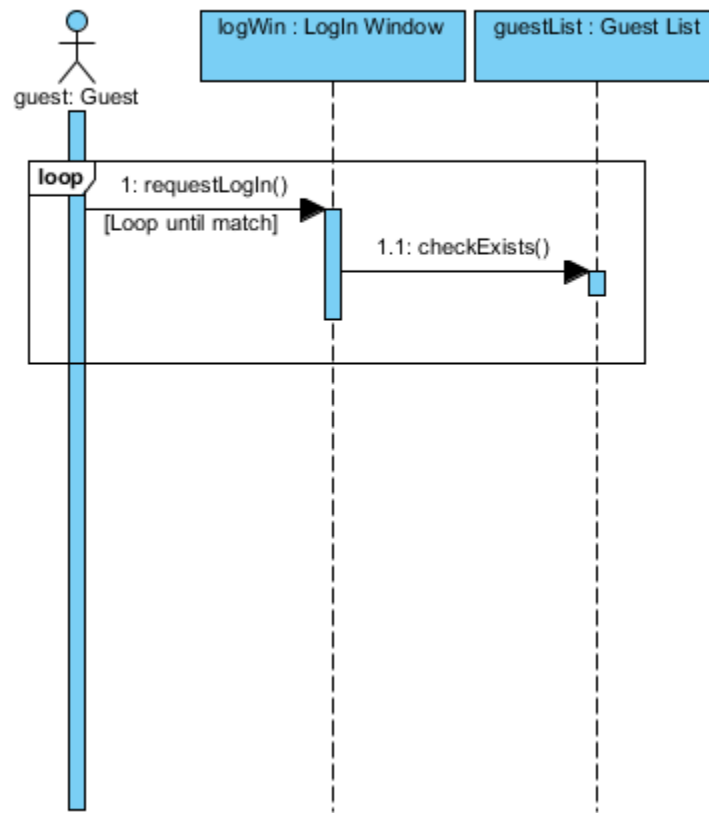
07: Manage Room Use Case Sequence Diagram
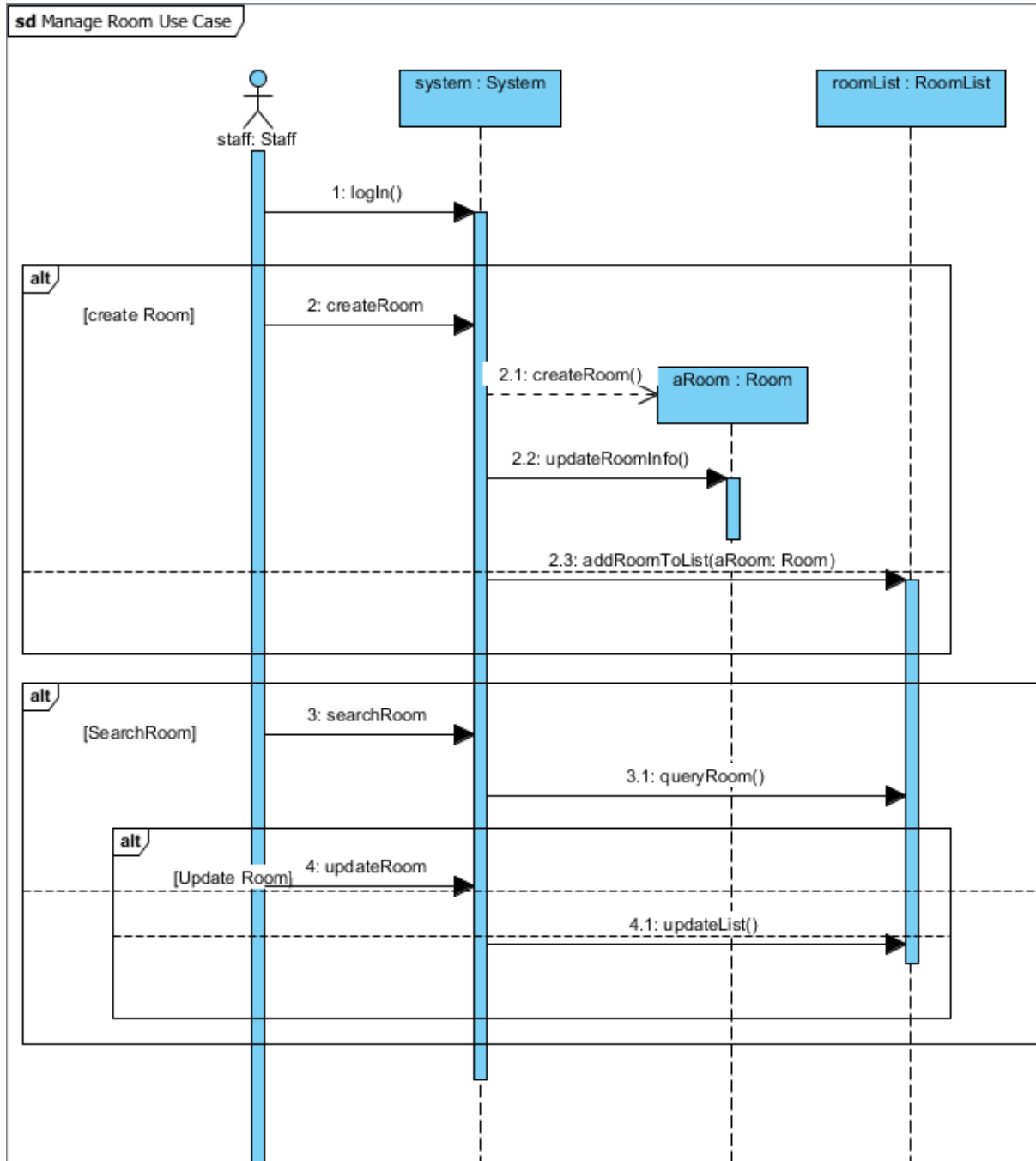
Use Case Extended Class Diagram

Use Case Register Guests and Make Reservation

Guest
-name
-email
-username
-password
-creditCardNum
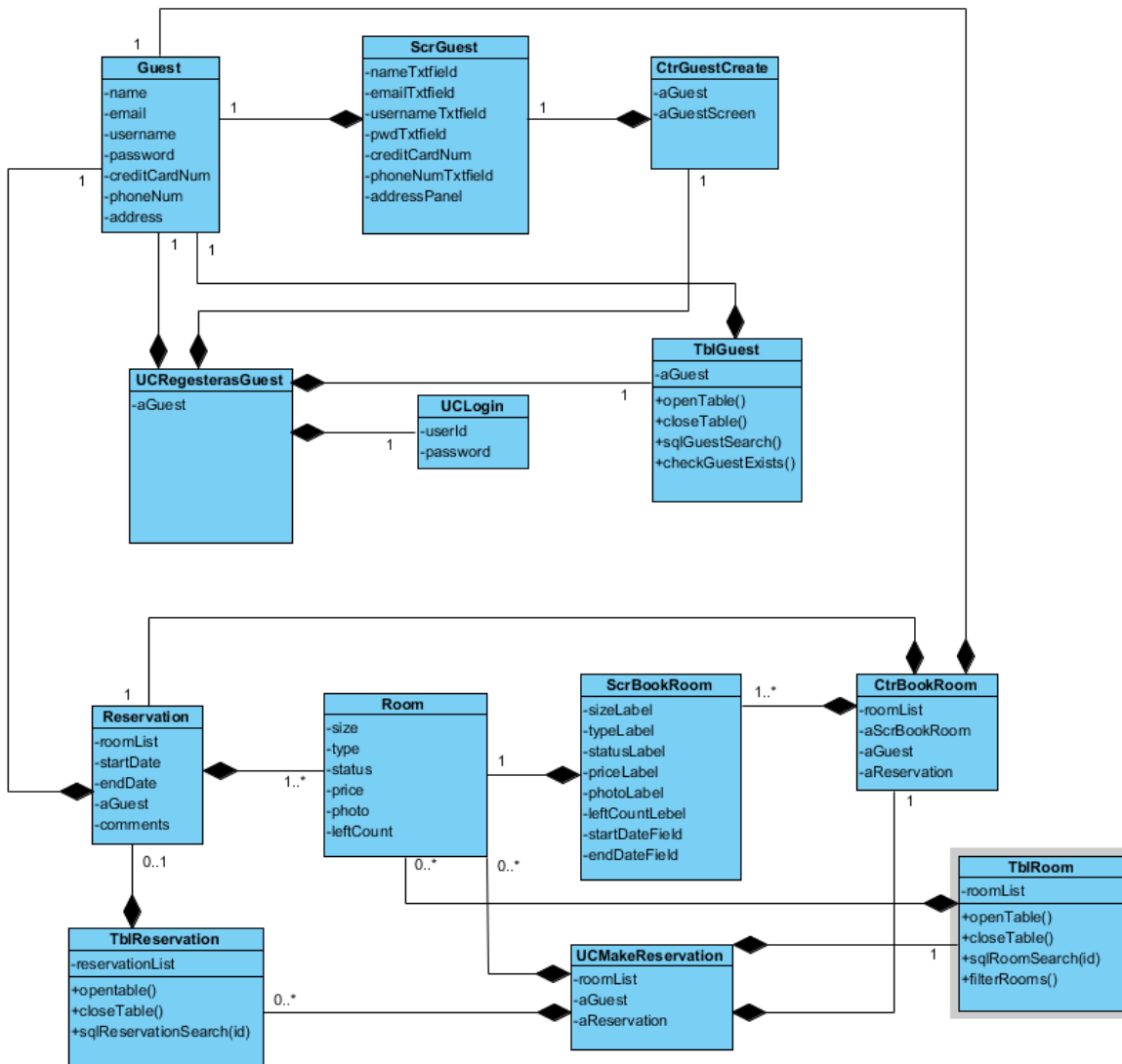-phoneNum
-address

ScrGuest
-nameTxtfield
-emailTxtfield
-usernameTxtfield
-pwdTxtfield
-creditCardNum
-phoneNumTxtfield
-addressPanel

CtrGuestCreate
-aGuest
-aGuestScreen

TblGuest
-aGuest
+openTable()
+closeTable()
+sqlGuestSearch()
+checkGuestExists()

UCRegesterasGuest
-aGuest

UCLogin
-userId
-password

Reservation
-roomList
-startDate
-endDate
-aGuest
-comments

Room
-size
-type
-status
-price
-photo
-leftCount

ScrBookRoom
-sizeLabel
-typeLabel
-statusLabel
-priceLabel
-photoLabel
-leftCountLebel
-startDateField
-endDateField

CtrBookRoom
-roomList
-aScrBookRoom
-aGuest
-aReservation

TblRoom
-roomList
+openTable()
+closeTable()
+sqlRoomSearch(id)
+filterRooms()

TblReservation
-reservationList
+opentable()
+closeTable()
+sqlReservationSearch(id)

UCMakeReservation
-roomList
-aGuest
-aReservation

Use Case Manage Reservation Extended Class Diagram
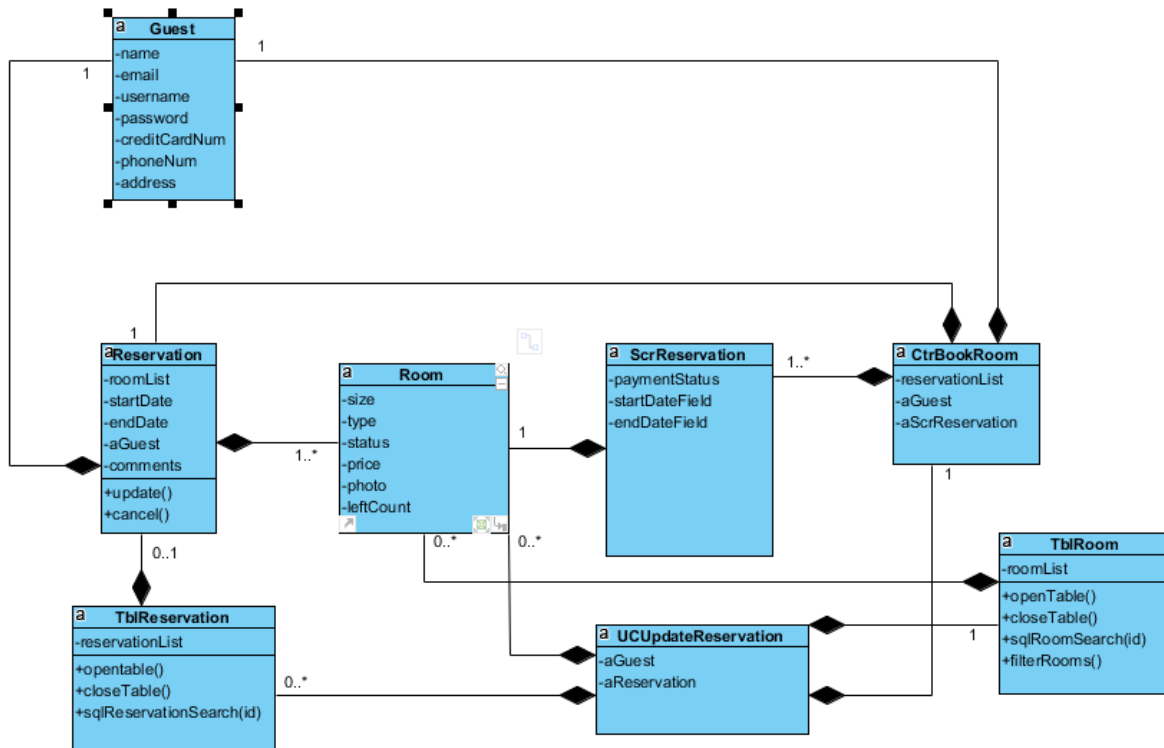
Use Case Staff Manage Room Extended Class Diagram