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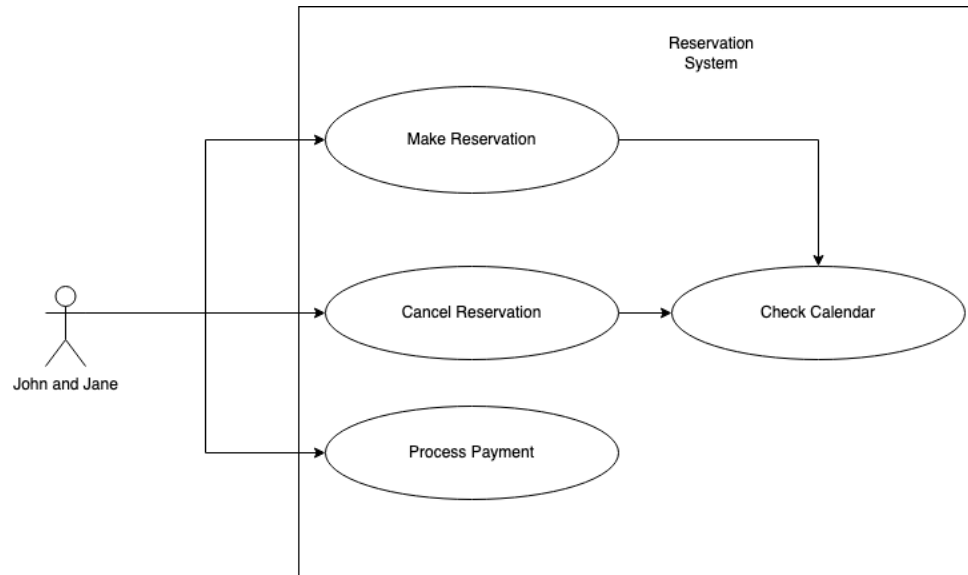
Week: 2 - Create an Analysis Model for a Small Bed & Breakfast Reservation System

1)

Rubric Criteria:

Create UML use case diagram of 3-7 use cases 10%

Your Response:



2)

Rubric Criteria:

Write use case sequence of events for each use case in the use case diagram 20%

Your Response:

Make Reservation:

- Actors: John and Jane
- Steps:
 1. Get a call from a customer
 2. They check the calendar for availability
 3. If there is availability, take name, phone number, date of reservation, choice of room, credit card number, room number, and address

Process Payment:

- Actors: John and Jane
- Steps:
 1. Get reservation details
 2. Enter credit card number and process payment
 3. Print receipt

Check Calendar:

- Actors: John and Jane
- Steps:
 1. Get reservation date from customer
 2. Open calendar and look for date
 3. Determine if room is available

Cancel Reservation:

- Actors: John and Jane
- Steps:
 1. Reservation is not guaranteed with payment or customer cancels booking
 2. Open computer and remove customer from system
 3. Mark room as available

3)

Rubric Criteria:

Explain approach, steps, and rationale of the use case model 25%

Your Response:

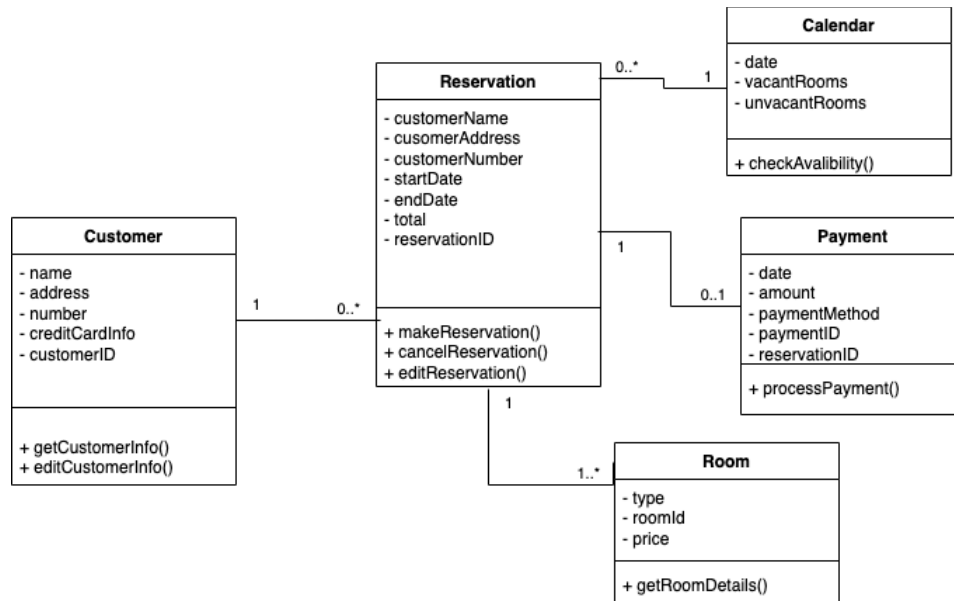
I took the information provided by John and Jane to give me ideas for what use cases their system would require. Based on their criteria, I determined that making a reservation, processing payments, checking the calendar, and canceling reservations were viable use cases for their system. I then thought of what individual steps the actor (John and Jane) would take in executing each case. For example, when a reservation is needed to be canceled, it must be either not guaranteed by a 1-day payment or the customer requested a cancellation. Then the actors will open the computer and remove the customer from the system, then make the room available again.

4)

Rubric Criteria:

Create UML class diagram 10%

Your Response:



5)

Rubric Criteria:

Explain approach, steps, and rationale of the class diagram model 25%

Your Response:

With each of the use cases and sequences I was able to brainstorm possible outlines for classes along with methods to execute the use cases. After determining my classes (Reservation, Calendar, Payment, Customer, Room) I then went through each deciding what variables would be necessary and how they would interact with each other. Following the determination of my variables I then wrote methods for each class that would aid in the execution of each use case. Once I had my classes completed, I had to figure out how they relate to one another.

6)

Rubric Criteria:

Reflect on the learning experience and lessons learned 10%

Your Response:

This project was a useful way to understand UML use case and class diagramming and the processes that go into each. The most difficult aspect for me was determining the relationships between each class and how they interact each other. I feel more confident in using UML and the benefits to it.