

## CSCI\_SE\_Project 1

### 1. Identify the various actors of the hotel reservation system (HRS).

#### ➤ Actors:

- 1) Registered potential guests
- 2) New potential guests
- 3) Receptionist
- 4) Hotel manager
- 5) Credit card payment system

### 2. Describe the various functional and non-functional requirements of HRS.

#### ➤ Functional requirements:

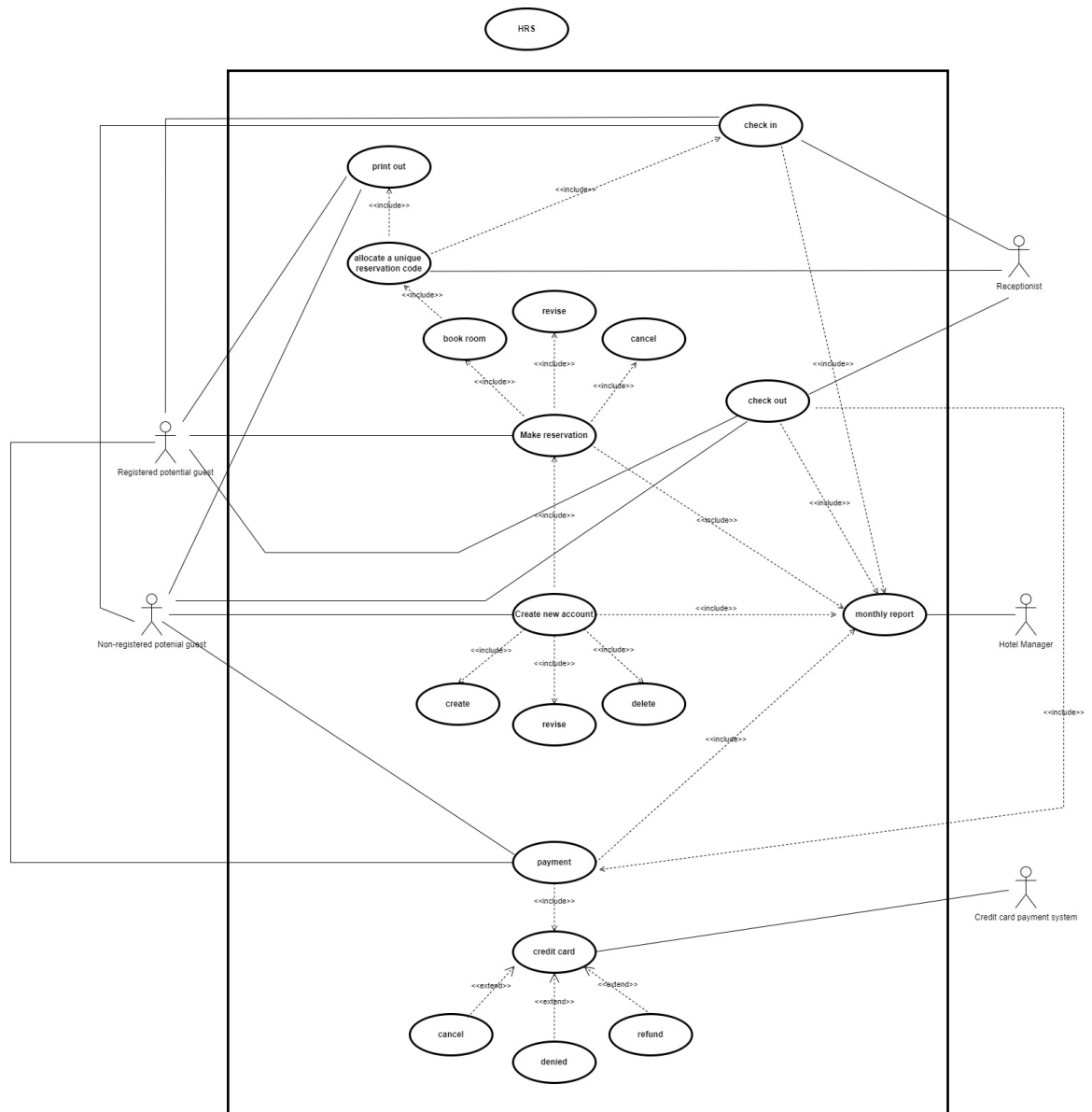
- 1) Registered potential guests – to make a room reservation; to specify the type of room such as single, double, and so on; to specify the dates of booking; to retrieve the registered information to speed up the booking process; to have a unique reservation number; to edit or cancel the reservation before the date of booking; to printout their reservation
- 2) Non-registered potential guests – to create a new account; to make a room reservation; to specify the type of room such as single, double, and so on; to specify the dates of booking;
- 3) Receptionist – to find the reservation based on the reservation number; to check the guests in; to check the guests out
- 4) Payment system – to pay room fee by credit card; to give the invoice to the guests
- 5) Hotel manager – to request monthly report from system

#### ➤ Non-functional requirements:

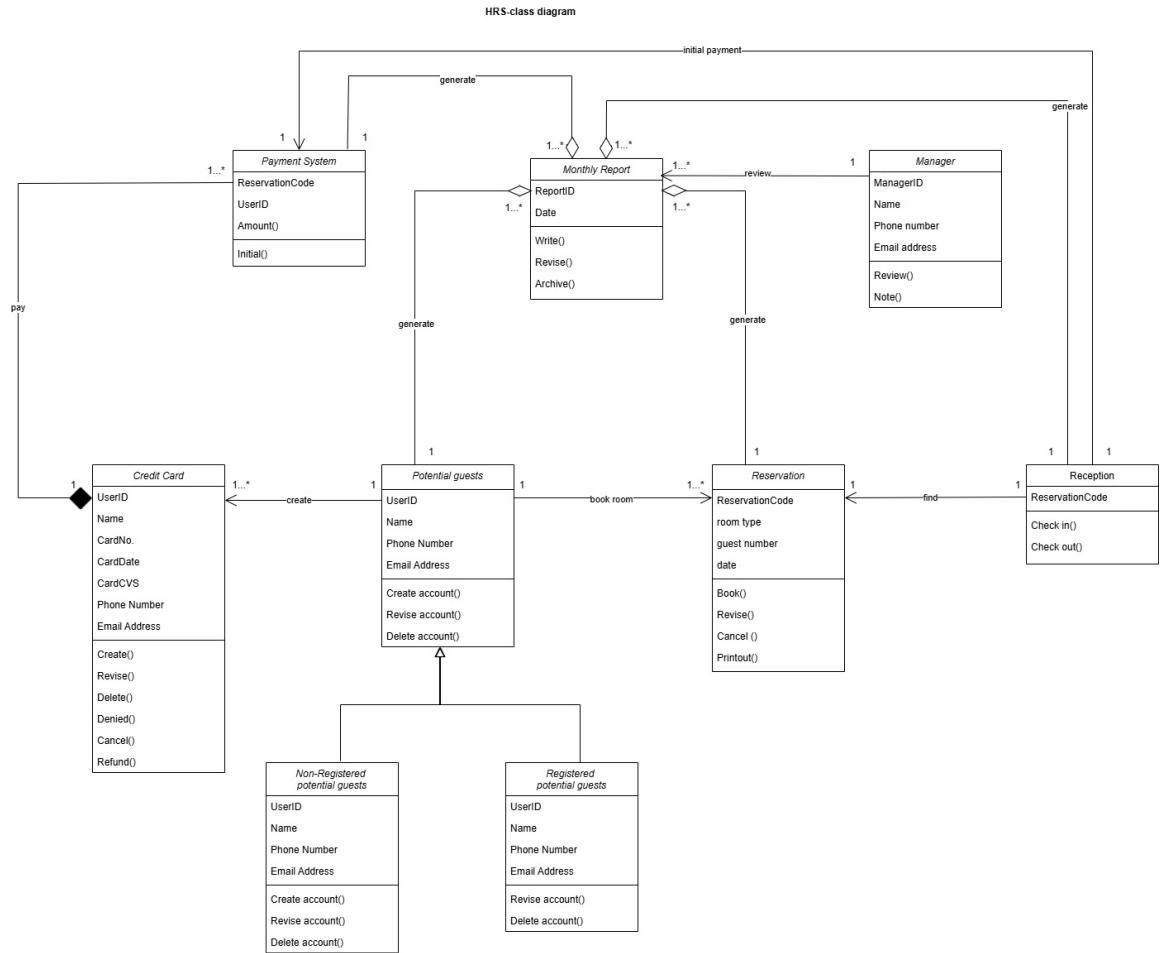
- 1) Usability – everyone could browse hotel's websites; everyone could create the new account
- 2) Reliability – the website is trustworthy and stable
- 3) Performance – the website should let end-users feel comfortable to browse

- 4) Supportability – there are IT department to support the website's maintenance
- 5) Implementation – could have other related information from hotel
- 6) Operation – could have advertisement related to hospitality industry
- 7) Legal – the content on the website is legal and the advertisement on the website is authorized by the hotel

3. Model an UML use case diagram for HRS.

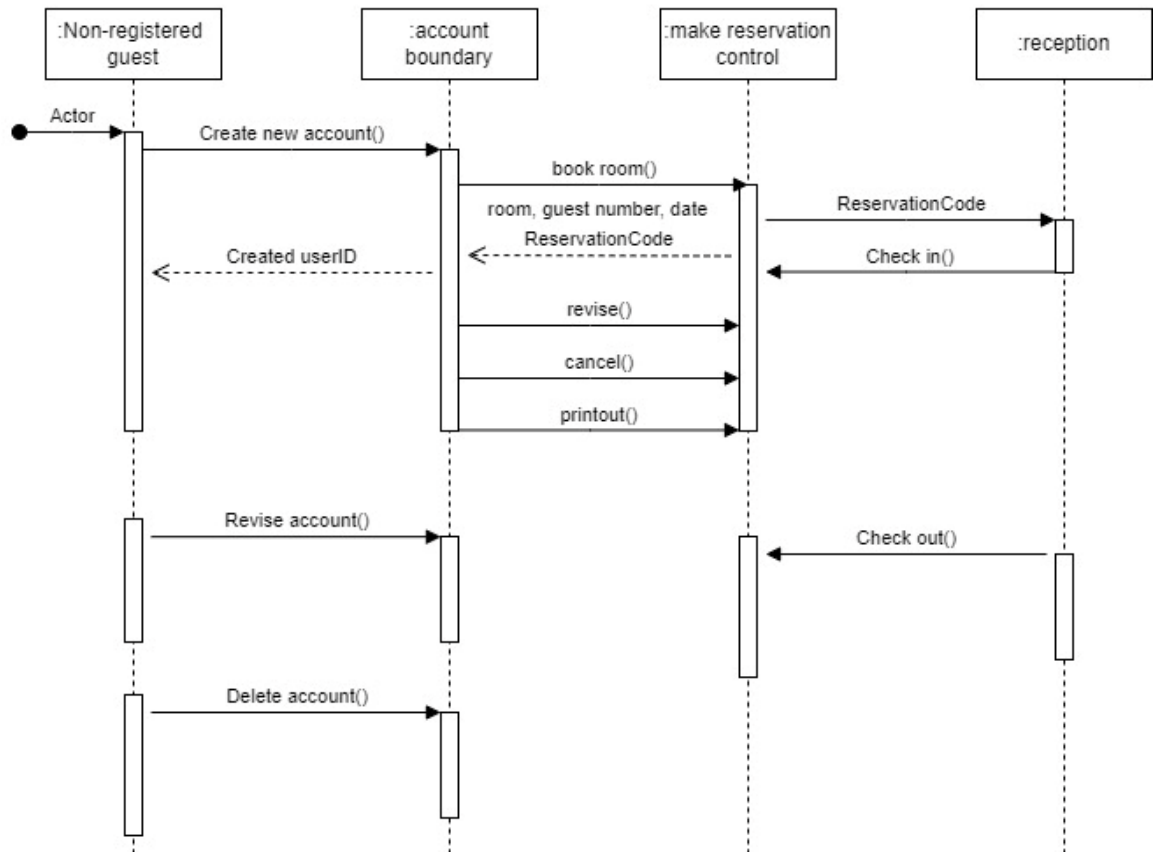


4. Draw an UML class diagram to describe the various use cases from the previous step.

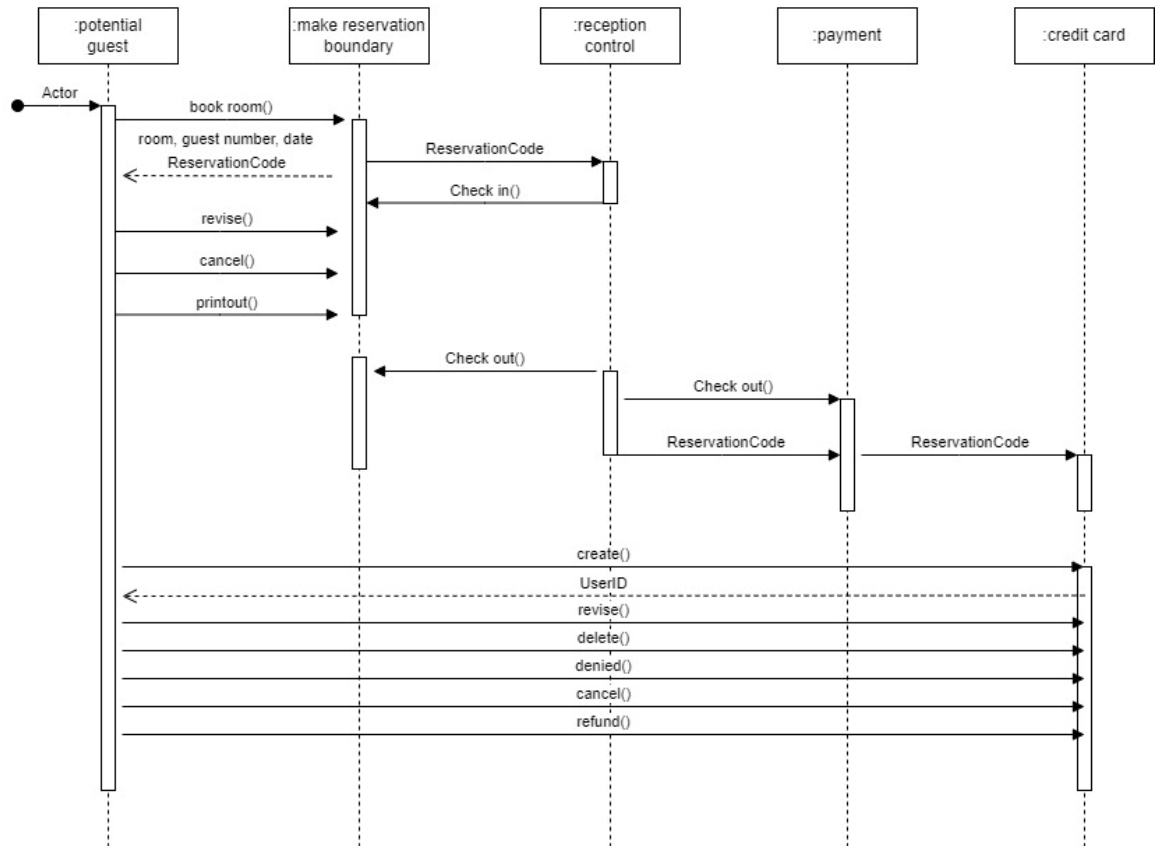


5. Draw UML sequence diagrams for THREE different scenarios of HRS.

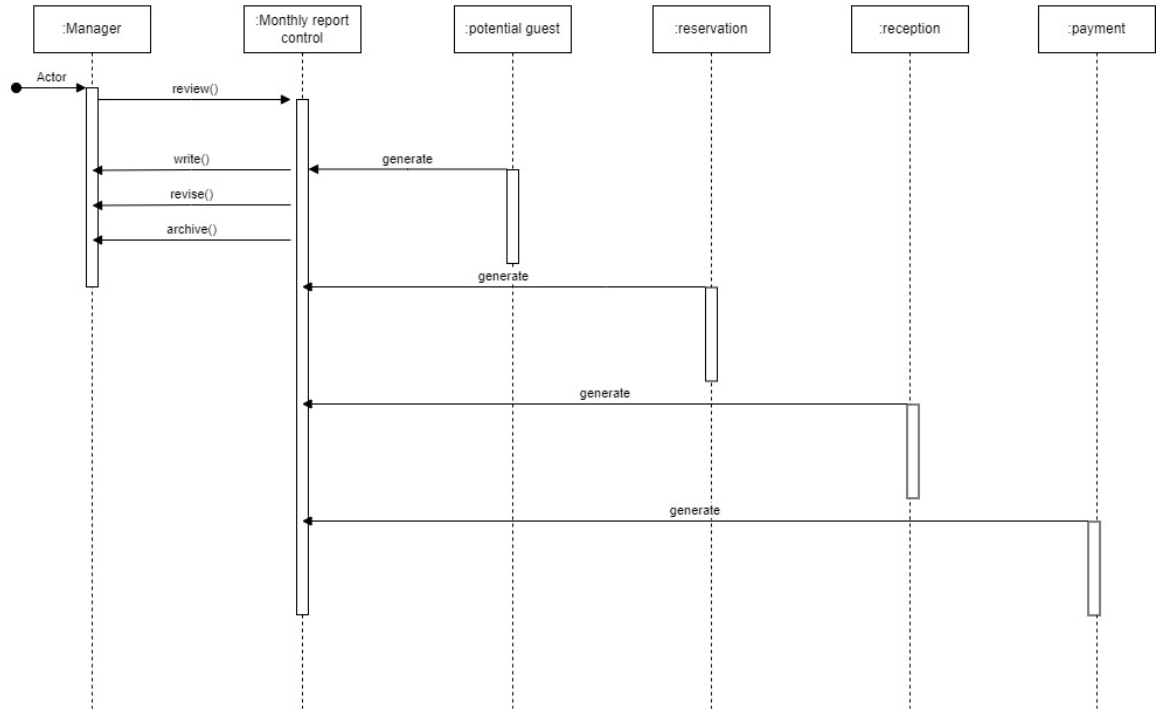
Sequence Diagram -- non-registered guest



Sequence Diagram -- guest payment

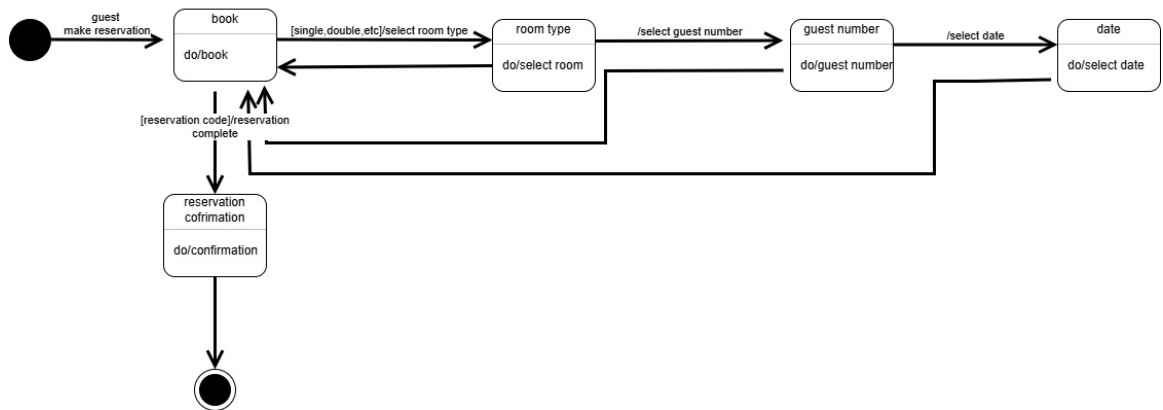


Sequence Diagram -- monthly report



6. Draw an UML state chart diagram for HRS.

State Chart-- reservation



7. Draw an UML activity diagram for HRS.

## Activity Chart - - Reservation

