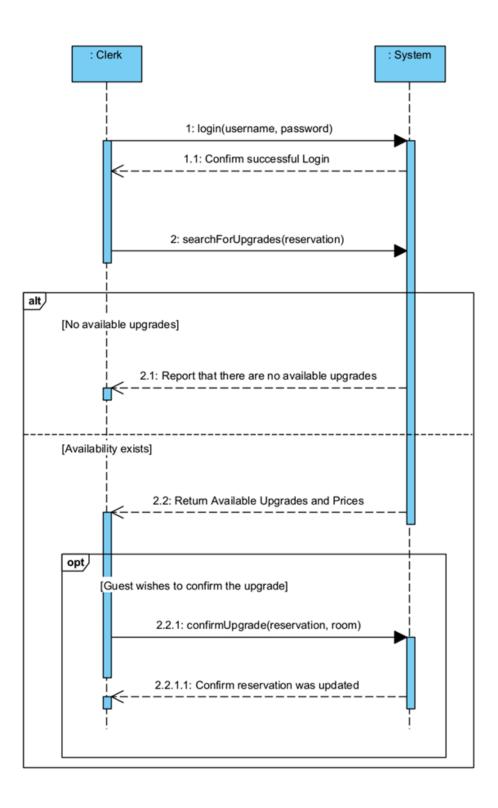
ID	UC – Guest Requesting and Purchasing Room Upgrade
Scope	Hotel Reservation System
Level	User Goal
Stakeholders and Interests	- Wants a more comfortable room during their stay Clerk - Needs to check if there are upgrade rooms available and assist the Guest with their upgrade process Admin - Assists the Clerk and Guest if needed.
Precondition	Guest has already made a reservation Clerk is available to assist the user
Postcondition	1. The Guest's room is successfully upgraded and their reservation is modified accordingly or the Guest remains in their original room and no upgrade was processed

Main Success Scenario

- 1. Guest contacts the clerk to request a room upgrade
- 2. Clerk logs into the system and views the available rooms that are upgrades
- 3. Clerk tells the guest which rooms are available and any other information they need about price changes
- 4. Guest confirms they would like to upgrade
- 5. Clerk edits the reservation in the system
- 6. Guest receives confirmation of the upgrade
- 7. If the Guest was already staying in a room they move to the upgraded room

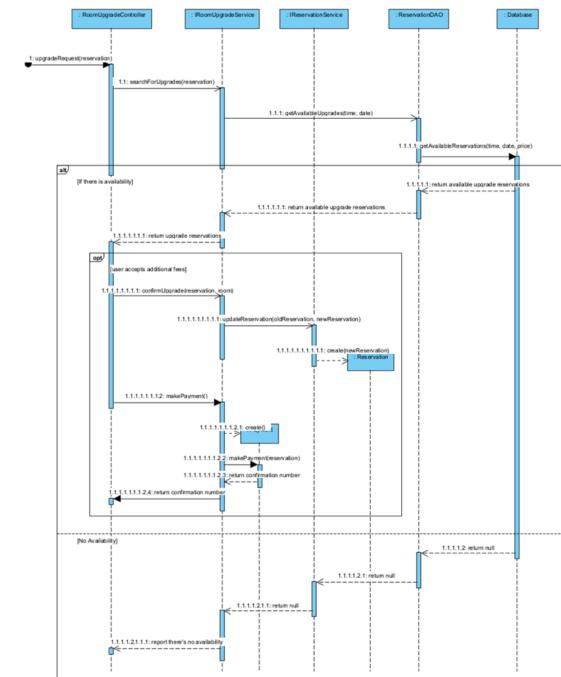
Alternate Paths

- *.a No Upgrade Availability
- 1. Clerk determines that there are no rooms available that meet the customer's upgrade needs
- 2. Clerk offers to keep the Guest informed on if upgrades become available
- *.b System runs into an error
- 1. Clerk asks Admin for technical support
- *.c Guest declines the upgrade
- 1. Clerk is able to find a potential upgrade for the Guest
- 2. Guest declines the upgrade because of room location, cost, etc.
- 3. Guest keeps their original room and no changes are made in the system
- *.d Payment declines
- 1. System informs Guest that their credit card information was declined during the process.
- 2. Guest provides a different payment method, and the payment is reattempted
- 3. If successful, the late checkout is confirmed. If unsuccessful, the system requests another payment method.



SD 3:





Operations Contract 3:

Contract CO1: login

Operation	Login(String: username, String: password)
Cross References	Use Cases:
Pre-conditions	User is in the process of requesting a room upgrade
Post-conditions	Current session is associated with the user's account in the database

Contract CO2: searchForUpgrades

Operation	searchForUpgrades(Room: room)
Cross References	Use Cases:
Pre-conditions	Current session is associated with an upgrade request Function call is made by a clerk instance, not a guest instance
Post-conditions	Database has been searched for rooms that are available and are also upgrades compared to the current room A summary has been instantiated and returned to the clerk

Contract CO3: confirmUpgrade

Operation	confirmUpgrade()
Cross References	

Pre-conditions	Current session is associated with an upgrade request Current guest instance is already associated with a reservation in the system An available upgrade from the summary instance has been selected
Post-conditions	Upgrade confirmation message is displayed to the Clerk Boolean attribute canUpgrade has been set to true

Contract CO4: updateReservation()

Operation	updateReservation(Reservation: reservation)
Cross References	
Pre-conditions	Current session is associated with an upgrade request Current upgrade's attribute canUpgrade equals true
Post-conditions	Reservation's room attribute has been modified to the user's new requested room Reservation's balance attribute has been increased by the appropriate amount