# Hotel Management System Use Case Elaboration

| Use Case Name | Search Availability |
| --- | --- |
| Use Case ID | HMS\_01 |
| Scenario | Potential guest searches for rooms that are available to reserve for a given date range |
| Description | The potential guest must be able to select the date range they wish to stay, number of rooms needed, and how many guests will be staying. |
| Trigger Event | A potential guest wants to stay see if they can stay at this hotel |
| Actors | Potential guest |
| Assumption | A potential guest has wants to stay in this hotel |
| Frequency Of Use | Daily |
| Related Use Cases | Make Reservation |
| Stakeholders | Hotel Guest, Front Desk Clerk, Night Auditor, Hotel |
| Pre-conditions | 1. System up and running. 2. A potential guest has internet access. 3. A potential guest currently does not have a hotel room reserved for the date ranges they wish to stay. |
| Post-conditions | The potential guest is provided with a list of available rooms for the date range provided. |
| 😊 Path | 1. A potential guest goes to the hotel website and selects “Search for Rooms”. 2. System responds by bringing up a search for rooms page. 3. A potential guest selects the check-in date, check-out date, and enters the number of adults and children, and then selects Search. 4. System responds with a list of hotel rooms that are available to reserve along with prices. |
| ☹ Path 2 | 1. No rooms are available for the specified search criteria. 2. System provides a notification to the potential guest that there are no rooms available for the date range provided. |

| Use Case Name | Create Reservation |
| --- | --- |
| Use Case ID | HMS\_02 |
| Scenario | A potential guest found a room or multiple rooms to stay in at the hotel for their search criteria. |
| Description | A potential guest wants to reserve one or more rooms at the hotel on the dates for which they have found hotel rooms. |
| Trigger Event | A potential guest searched for available rooms on specified date and decides to make a reservation |
| Actors | A potential guest |
| Assumption | A potential guest has decided to stay at this hotel |
| Frequency Of Use | Daily |
| Related Use Cases | Check Availability, Update Reservation, Cancel Reservation, Join Rewards Club |
| Stakeholders | Hotel Guest, Front Desk Clerk, Hotel |
| Pre-conditions | System up and running.  potential guest currently does not currently have a hotel room reserved but has decided to stay at this hotel |
| Post-conditions | One or more rooms are reserved for the hotel guest, i.e., no one else can reserve those rooms for that the dates on the reservation |
| 😊 Path | 1. A user chooses the room they wish to reserve from a list of available rooms. 2. A user enters the payment information to reserve the room. 3. A user enters the guest’s Information.    1. If the user is a potential guest, they may also supply a Username and Password to join the rewards club.    2. If the user is the front desk clerk, they may click a button that adds the user to the rewards club. 4. A user selects the Reserve Room button. 5. System Responds with a confirmation message and emails a receipt to the email address for the customer.    1. If the user is a potential guest and they joined the rewards club, the system responds by sending another email with rewards club information.    2. If the user is a front desk clerk or a night auditor and the customer requested to join the rewards club, the system responds by sending an email to the guest letting them know they must login to the rewards club to complete the joining process. |
| ☹ Path 1 | 1. Website is down or system is unable to complete reservation. 2. Customer calls hotel and front desk clerk makes reservation. |

| Use Case Name | View Reservation |
| --- | --- |
| Use Case ID | HMS\_03 |
| Scenario | User wants to check on an existing reservation |
| Description | A user of the system would like to see the details of a reservation. |
| Trigger Event | 1. A customer would like to see the details of a reservation. 2. A front desk clerk is checking a customer in and wants to see what the customer has reserved. 3. A night clerk wants to see the reservation details to prepare invoices for customers checking out in the morning |
| Actors | Hotel Guest, Front Desk Clerk, Night Auditor |
| Assumption | Hotel guest’s reservations is in the system |
| Frequency Of Use | Daily |
| Related Use Cases | Prepare Invoices, Check-In Guest, Update Reservation |
| Stakeholders | Hotel Guest, Front Desk Clerk, Night Auditor, Hotel |
| Pre-conditions | Reservation exists in the system |
| Post-conditions | Details of the hotel reservation is displayed on the screen |
| 😊 Path | 1. User clicks “Search Reservation.” 2. System responds with a list of available search criteria. 3. User enters one or more search criteria. 4. System responds with reservations matching the criteria. |
| ☹ Path 1 | 1. User clicks “search reservation.” 2. System responds with a list of available search criteria. 3. User enters one or more search criteria. 4. System responds with no matching reservations. 5. User updates search criteria and searches again. |

| Use Case Name | Update Reservation |
| --- | --- |
| Use Case ID | HMS\_04 |
| Scenario | User wants to update an existing reservation |
| Description | User wants to change the criteria for a given reservation, including number of guests, date range, room type. |
| Trigger Event | 1. A guest needs to change the date range of their reservation. 2. A room is out of order and requires maintenance. 3. Customer did not show for their reservation. |
| Actors | Hotel Guest, Front Desk Clerk, Night Auditor |
| Assumption | Hotel guest reservations are in the system and need to be changed. |
| Frequency Of Use | Daily |
| Related Use Cases | Cancel Reservation, View Reservation |
| Stakeholders | Hotel Guest, Front Desk Clerk, Night Auditor, Hotel |
| Pre-conditions | Hotel reservation to be updated is displayed on the screen. |
| Post-conditions | The reservation has been updated with the necessary changes. |
| 😊 Path | 1. User clicks “Update Reservation.” 2. System responds with a list of updatable reservation elements. 3. User updates one or more updateable reservation elements. 4. User clicks “Save Updates.” 5. System responds by saving changes to the reservation. |
| ☹ Path 1 | 1. User clicks “Update Reservation.” 2. System responds with a list of updatable reservation elements. 3. User updates one or more updateable reservation elements. 4. User clicks “Save Updates.” 5. System notifies the user that changes cannot be made to the reservation. |

| Use Case Name | Cancel Reservation |
| --- | --- |
| Use Case ID | HMS\_05 |
| Scenario | User wants to cancel an existing reservation |
| Description | Customer wants to cancel their reservation |
| Trigger Event | Customer wants to cancel their reservation |
| Actors | Hotel Guest, Front Desk Clerk, Night Auditor |
| Assumption | Hotel guest’s reservations are in the system and need to be canceled. |
| Frequency Of Use | Daily |
| Related Use Cases | View Reservation |
| Stakeholders | Hotel Guest, Front Desk Clerk, Night Auditor, Hotel |
| Pre-conditions | Hotel reservations to be canceled is displayed on the screen |
| Post-conditions | Hotel reservations has been cancelled, the room availability has been updated and system sends email confirmation to customer who had reservation |
| 😊 Path | 1. If days before reservation is >= 1 2. User clicks “Cancel Reservation.” 3. System responds with “are you sure” confirmation action. 4. User clicks “Yes”. 5. System responds by canceling the reservation and sending an email to the customer and if prepaid, refunds the payment. |
| ☹ Path 1 | 1. If days before reservation < 1 2. User clicks “Cancel Reservation.” 3. System responds with “are you sure” confirmation action, notify the customer they cannot get a refund. 4. User clicks “Yes”. 5. System responds by canceling the reservation and sending an email to the customer and    1. If the room is prepaid, refunding room rate for number of days reserved (number of days reserved – 1).    2. If the room is not prepaid, charge the customer for 1 day. |

| Use Case Name | Check-In Guest |
| --- | --- |
| Use Case ID | HMS\_06 |
| Scenario | Check-In Guest |
| Description | A guest already has a reservation and arrives at the hotel to check-in |
| Trigger Event | Customer arrives at the hotel |
| Actors | Front Desk Clerk, Night Auditor, Hotel Guest |
| Assumption | Customer has arrived and wants to check-in to the hotel |
| Frequency Of Use | Daily |
| Related Use Cases | Assign Guest to Room, Issue Room Key |
| Stakeholders | Hotel Guest, Front Desk Clerk, Night Auditor, Hotel |
| Pre-conditions | Customer has a reservation in the system |
| Post-conditions | Customer has been registered with the hotel |
| 😊 Path | A customer arrives at the hotel with a reservation and requests to check-in.   1. User searches for reservation in the system by reservation number or customer name. 2. System responds with reservation information. 3. User verifies customer information with reservation information. 4. The system responds by acknowledging the user is registered with the hotel. |
| ☹ Path 1 | Customer arrives at hotel and requests a room without a reservation.   1. If there are rooms available    1. Gather customer information.    2. Obtain required information to figure out customer’s room preference.    3. Employee searches for a room based on the customer’s preferences.    4. System responds with a list of available rooms.    5. Employee discusses room options with the customer.    6. Employee makes reservation.    7. Employee Checks-In Guest 2. If rooms are not available    1. Employee searches for available rooms.    2. No rooms available for the customer    3. The employee notifies the customer there are no rooms available and apologizes to the guest. |

| Use Case Name | Assign Room |
| --- | --- |
| Use Case ID | HMS\_07 |
| Scenario | Assign a guest to a room with the given reservation information |
| Description | If a guest |
| Trigger Event | Customer is checked in to the hotel |
| Actors | Front Desk Clerk, Night Auditor, Hotel Guest |
| Assumption | The customer has just checked-in at the hotel |
| Frequency Of Use | Daily |
| Related Use Cases | Check-Customer In, Issue Room Key |
| Stakeholders | Front Desk Clerk, Night Auditor, Hotel Guest, Hotel |
| Pre-conditions | The front desk clerk has checked the customer into the hotel |
| Post-conditions | The hotel guest has been assigned a room and then the room is marked unavailable for the length of the reservation. |
| 😊 Path | 1. The front desk clerk searches for an available room 2. The system responds with a list of available rooms 3. The front desk clerk selects one of the available rooms and associates it with the reservation. 4. The system responds by marking the room as reserved (It is unavailable for other reservations during the reservation period) |
| ☹ Path 1 | Anticipated room has just been assigned by another front desk clerk   1. The front desk clerk searches for available rooms. 2. The system responds with a list of available rooms. 3. The front desk clerk selects one of the available rooms and associates it with the reservation. 4. System responds that the room is not available (possible cause, another employee assigned the room first). 5. Repeat search for available rooms. |

| Use Case Name | Issue Room Key |
| --- | --- |
| Use Case ID | HMS\_08 |
| Scenario | Issue Room Key |
| Description | Room key has been keyed for the customer’s assigned room(s) |
| Trigger Event | Customer has been assigned a room |
| Actors | Front Desk Clerk, Night Auditor, Hotel Guest |
| Assumption | Customer has been assigned a room |
| Frequency Of Use | Daily |
| Related Use Cases | Assign Room |
| Stakeholders | Front Desk Clerk, Night Auditor, Hotel Guest, Hotel |
| Pre-conditions | The front desk clerk has checked the customer into the hotel |
| Post-conditions | The hotel guest has been issued a room key that can unlock their door |
| 😊 Path | 1. The number of keys handed provided to the customer are entered into the system. 2. Card Key is keyed with the for the customer’s room. 3. System responds with keying confirmation and room association |
| ☹ Path 1 | ???? |

| Use Case Name | Prepare Invoice |
| --- | --- |
| Use Case ID | HMS\_11 |
| Scenario | Prepare Invoice |
| Description | Each night a list of customers who reservations end on the next date and an invoice is created for the customer with their daily charges and total amount due. |
| Trigger Event | Customers need to check out |
| Actors | Night Auditor, Customer |
| Assumption | The customer is checking out on the day specified on their reservation.  No additional charges need to be added to the customer’s invoice |
| Frequency Of Use | Daily |
| Related Use Cases | Check-out Guest |
| Stakeholders | Night Auditor, Customer, Hotel |
| Pre-conditions | Customer will be checking later today |
| Post-conditions | Customer invoice is created |
| 😊 Path | 1. Invoice is generated. 2. System responds by printing out an invoice. |
| ☹ Path 1 | Invoice is generated but additional charges need to be added   1. The Invoice was generated and printed. 2. Customer specifies at checkout they have additional fees (such as breakfast or room service) 3. The clerk modifies the invoice by adding additional charge lines 4. A new invoice is generated and printed |

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| Use Case Name | Check-Out Guest |
| Use Case ID | HMS\_10 |
| Scenario | Guest Check-out |
| Description | Customer stay has ended, and they need to pay for their stay and leave the hotel |
| Trigger Event | Final day of customer reservation has arrived, and the customer wishes to check-out of the hotel |
| Actors | Customer, Front Desk Clerk, Night Auditor |
| Assumption | Customer will use the current credit card on file to pay for their room |
| Frequency Of Use | Daily |
| Related Use Cases | Update Reservation, Prepare Invoice, Collect Payment |
| Stakeholders |  |
| Pre-conditions | Today is the same day as the customer check-out day on their reservation |
| Post-conditions | Room is available for a new reservation |
| 😊 Path | 1. The front desk clerk updates the room status from occupied to vacant. 2. System responds by sending a msg to the House Keeping system that the room is ready to be cleaned. 3. Room key is collected by the front desk clerk. 4. The front desk clerk clears the room key from being associated with the room. 5. System responds with null room association. 6. A room is available for new reservation. |
| ☹ Path 1 | Customer checks but room will not be available for reservation.   1. The front desk clerk updates the room status from occupied too vacant. 2. System responds by sending a msg to the House Keeping system that the room is ready to be cleaned. 3. Room key is collected by the front desk clerk. 4. The front desk clerk clears the room key from being associated with the room. 5. System responds with null room association. 6. The front desk clerk marks room as unavailable. 7. System responds with room not available. |

| Use Case Name | Pay Invoice |
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| Use Case ID | HMS\_12 |
| Scenario | Pay Invoice |
| Description | Customer pays their invoice |
| Trigger Event | Hotel Check-out Date has arrived |
| Actors | Customer, Hotel Front Desk |
| Assumption | Customer has a credit card on file |
| Frequency Of Use | Daily |
| Related Use Cases | Check-Out Guest, Collect Payment, Create Invoice |
| Stakeholders | Guest, Night Clerk, Front Desk Clerk, Hotel |
| Pre-conditions | Customer has checked out and a complete invoice is available |
| Post-conditions | Customer invoice balance is zero |
| 😊 Path |  |
| ☹ Path 1 |  |

| Use Case Name | Collect Payment |
| --- | --- |
| Use Case ID | HMS\_09 |
| Scenario | Collect Payment |
| Description | Hotel Receives Payment and zeros out the customer’s bill |
| Trigger Event | Customer Pays their invoice |
| Actors | Customer, Front Desk Clerk, Night Auditor |
| Assumption | Customer can pay their bill |
| Frequency Of Use | Daily |
| Related Use Cases | Pay Invoice |
| Stakeholders | Guest, Hotel |
| Pre-conditions | Customer invoice has been paid |
| Post-conditions | Invoice is zeroed out |
| 😊 Path |  |
| ☹ Path 1 |  |