

System Requirements

UC Name	UC01 Efficient Check-in
Summary	This use case involves the process of quickly and easily checking in guests.
Dependency	None.
Actors	Front desk staff, guests.
Preconditions	Guest has a reservation, front desk staff are available and logged into the system.
Description of the Main Sequence	<ul style="list-style-type: none">● 1. Front desk staff selects the check-in option in the system.● 2. System prompts staff to input guest reservation details or scan guest identification.● 3. System verifies guest information and displays available rooms.● 4. Front desk staff selects a room based on guest preferences and confirms check-in.● 5. System processes payment and issues room key.
Description of the Alternative Sequence	<ul style="list-style-type: none">● If guest information is incomplete or inaccurate, system prompts staff to manually verify details and may require additional input from the guest.
Non functional requirements	Response time for check-in process should be under 3 minutes. System should be user-friendly and require minimal training for staff.
Postconditions	Guest is checked in, room assignment is updated in the system, and payment is processed.

UC Name	UC02 Room Assignment
Summary	This use case involves assigning rooms to guests based on availability and preferences.
Dependency	Efficient Check-in.
Actors	Front desk staff, guests.
Preconditions	Guest has a reservation, available rooms are listed in the system.
Description of the Main Sequence	<ul style="list-style-type: none"> 1. Front desk staff selects the room assignment option in the system. 2. System displays available rooms based on guest preferences and reservation details. 3. Front desk staff selects a room and assigns it to the guest.
Description of the Alternative Sequence	<ul style="list-style-type: none"> If preferred room type is not available, system suggests alternative options or prompts staff to check with the guest for their preference.
Non functional requirements	Room assignment process should not exceed 1 minute per guest. System should prioritize room assignments based on guest preferences and special requests.
Postconditions	Room is assigned to the guest, and room availability is updated in the system.

UC Name	UC03 Notification Handling
Summary	This use case involves managing email notifications related to reservations and guest requests.
Dependency	None.
Actors	Front desk staff, email system
Preconditions	System is integrated with the hotel's email service, notifications are enabled.
Description of the Main Sequence	<ul style="list-style-type: none"> 1. System receives email notifications related to reservations and guest requests. 2. Front desk staff access the notification dashboard in the system. 3. Staff prioritize and manage notifications, taking appropriate actions as needed
Description of the Alternative Sequence	<ul style="list-style-type: none"> If email notifications fail to be received, staff manually check for updates or contact guests directly
Non functional requirements	Notification handling should be real-time, with emails received and processed within 30 seconds. System should provide a user-friendly interface for managing notifications.
Postconditions	Notifications are processed, and relevant actions are taken by front desk staff.

UC Name	UC04 Guest Complaint Management
Summary	This use case involves recording, tracking, and resolving guest complaints effectively.
Dependency	None.
Actors	Front desk staff, guests, management.
Preconditions	Guest complaint is received or identified, staff are logged into the complaint management system.
Description of the Main Sequence	<ul style="list-style-type: none"> ● 1. Front desk staff log the details of the guest complaint into the system. ● 2. System assigns a priority level to the complaint based on severity. ● 3. Staff take appropriate actions to address the complaint, such as offering compensation or resolving the issue. ● 4. System tracks the status of the complaint and sends alerts for unresolved issues.
Description of the Alternative Sequence	<ul style="list-style-type: none"> ● If a complaint cannot be resolved immediately, system escalates the issue to management for further assistance.
Non functional requirements	Complaint resolution process should be completed within 24 hours for nonurgent issues and immediately for urgent matters. System should provide reporting capabilities for analyzing trends in guest complaints.
Postconditions	Guest complaint is resolved to the satisfaction of the guest, and any necessary follow-up actions are taken

UC Name	UC05 Reporting
Summary	This use case enables management to access detailed reports on occupancy rates and revenue.
Dependency	This use case is dependent on the availability and accuracy of data within the system. It relies on the system's ability to collect, store, and update information related to occupancy rates and revenue. If the necessary data is not accessible or is outdated, the system will not be able to generate accurate reports. Therefore, ensuring data integrity and reliability is crucial for the successful execution of this use case. Additionally, the functionality of generating reports should be integrated into the overall system architecture to enable seamless access for the Hotel Management and other authorized stakeholders.
Actors	Primary Actor: Hotel Management Secondary Actor: Hotel Owners, Investors and Shareholders
Preconditions	<ol style="list-style-type: none"> 1. The user must be authenticated and authorized with appropriate permissions. 2. Data regarding occupancy rates and revenue must be available and up-to-date in the system.
Description of the Main Sequence	<ul style="list-style-type: none"> • The Hotel Management selects the reporting option from the system's main menu. • The system presents a list of available report types, including occupancy rates and revenue. • The Hotel Management selects the desired report type. • The system generates the selected report based on the current data stored in the system. • The report is displayed to the Hotel Management, providing detailed insights into the selected metrics.
Description of the Alternative Sequence	<ul style="list-style-type: none"> • If the selected report type is not available or cannot be generated due to missing data, the system notifies the Hotel Management and prompts them to try again later.
Non functional requirements	<ol style="list-style-type: none"> 1. Performance: Reports should be generated within no more than 1 minute per report, ensuring a smooth user experience.

	2. Security: Access to reporting functionalities should be restricted to authorized users only, maintaining the confidentiality and integrity of sensitive data.
Postconditions	The Hotel Management successfully accesses the desired report, gaining valuable insights into occupancy rates and revenue, depending on the selected report type.

C Name	UC06 Performance Metrics
Summary	This use case allows management to track staff performance and efficiency in managing reservations and guest interactions within the hotel management system.
Dependency	This use case relies on the availability of up-to-date data on staff activities, reservations, and guest interactions within the system. Data integrity is essential for accurate performance tracking. Additionally, the system must integrate performance measurement tools to capture relevant data efficiently.
Actors	Primary Actor: Hotel Management Secondary Actor: Employees (Front Desk, Housekeeping, Maintenance Workers, Chefs, etc.), Hotel Owners
Preconditions	<ol style="list-style-type: none"> 1. The user must be authenticated and authorized with appropriate permissions. 2. Data regarding occupancy rates, revenue, and other key metrics must be available and up-to-date in the system.
Description of the Main Sequence	<ul style="list-style-type: none"> • The Hotel Management selects the performance metrics option from the system's main menu. • The system presents a list of available metrics for tracking staff performance, such as reservation handling time, guest satisfaction ratings, and task completion rates. • The Hotel Management selects the desired performance metric to analyze. • The system retrieves relevant data from the system's database, including staff activities, reservation logs, and guest feedback. • The system analyzes the data and generates a performance report for the selected metric. • The performance report is displayed to the Hotel Management, providing insights into staff performance and efficiency in managing reservations and guest interactions.

Description of the Alternative Sequence	<ul style="list-style-type: none"> ● If the selected performance metric requires additional data that is not available or incomplete, the system notifies the Hotel Management and prompts them to review the data collection processes or try a different metric.
Non functional requirements	<p>1.Performance: The system should efficiently process and analyze large volumes of data . Staff performance reports should be generated within no more than 1 minute per report, ensuring a smooth user experience.</p> <p>2.Security: Access to performance metrics should be restricted to authorized users only, ensuring the confidentiality of staff and guest information.</p> <p>3.User Interface: The performance reporting interface should be user-friendly and intuitive, facilitating easy interpretation of performance metrics by the Hotel Management.</p>
Postconditions	<p>The Hotel Management successfully accesses the performance metrics, gaining insights into staff performance and efficiency in managing reservations and guest interactions. This information can be used to identify areas for improvement, provide targeted training, and optimize overall service quality.</p>

UC Name	UC07 Monitor Occupancy and Revenue
Summary	This use case enables management to access real-time insights into occupancy rates and revenue within the hotel management system.
Dependency	This use case relies on the availability and compatibility of APIs provided by selected marketing channels. Successful integration requires stable connections and compatibility between the hotel management system and external platforms. Collaboration with third-party service providers may be necessary for smooth implementation and troubleshooting.
Actors	Primary Actor: Hotel Management Secondary Actor: Hotel Owners, Investors and Shareholders
Preconditions	<ol style="list-style-type: none"> 1. The user must be authenticated and authorized with appropriate permissions. 2. Data regarding occupancy rates and revenue must be available and continuously updated in the system.
Description of the Main Sequence	<ol style="list-style-type: none"> 1. The Hotel Management selects the monitoring option for occupancy and revenue from the system's main menu. 2. The system retrieves real-time data on occupancy rates and revenue from the database. 3. The system presents the current occupancy rate and revenue figures to the Hotel Management in a user-friendly format. 4. The Hotel Management can further analyze the data through interactive graphs or charts provided by the system. 5. The system continuously updates the displayed information to reflect the most recent changes in occupancy and revenue.

Description of the Alternative Sequence	If the system encounters issues retrieving real-time data, such as connectivity problems or database errors, it notifies the Hotel Management and prompts them to retry accessing the information later.
Non functional requirements	<ol style="list-style-type: none"> 1. Performance: The system should efficiently retrieve and display real-time data on occupancy rates and revenue, ensuring minimal latency for the Hotel Management. 2. Security: Access to monitoring functionalities should be restricted to authorized users only, maintaining the confidentiality of occupancy and revenue data. 3. User Interface: The monitoring interface should be intuitive and visually appealing, facilitating easy interpretation of occupancy and revenue metrics.
Postconditions	The Hotel Management successfully accesses real-time insights into occupancy rates and revenue, enabling informed decision-making to optimize hotel operations and maximize revenue generation.

UC Name	UC08 Marketing Integration
Summary	This use case involves integrating the hotel management system with various marketing channels, including social media, online advertising platforms, and email.
Dependency	This use case depends on stable APIs provided by selected marketing channels. Successful integration requires smooth connections between the hotel management system and these external platforms, potentially involving collaboration with third-party service providers for seamless implementation.
Actors	Primary Actor: Hotel Management Secondary Actor: Marketing Platforms
Preconditions	<ol style="list-style-type: none"> 1. The user must be authenticated and authorized with appropriate permissions. 2. Integration interfaces with marketing platforms must be accessible within the system.
Description of the Main Sequence	<ol style="list-style-type: none"> 1. The Hotel Management selects the marketing integration option from the system's main menu. 2. The system lists available marketing channels, including social media, online advertising platforms, and email services. 3. The Hotel Management selects desired marketing channels for integration. 4. The system prompts authentication and authorization for the selected channels. 5. Upon successful authentication, the system establishes connections with the chosen marketing platforms through their APIs. 6. Relevant data such as promotions, room availability, and pricing is synchronized with integrated marketing channels. 7. Hotel Management monitors and manages marketing campaigns directly from the system.

Description of the Alternative Sequence	If errors occur during integration, such as authentication failures or API connection issues, the system notifies the Hotel Management and provides troubleshooting steps.
Non functional requirements	<ol style="list-style-type: none"> 1. Reliability: Integration interfaces should reliably handle data transactions. 2. Performance: Data synchronization should be efficient for timely updates. 3. Security: Integration must adhere to security protocols for data protection.
Postconditions	The hotel management system successfully integrates with various marketing channels, enhancing visibility and marketing effectiveness.

UC Name	UC09 Market Segmentation
Summary	This use case involves supporting guest segmentation based on preferences, booking history, and demographics within the hotel management system.
Dependency	This use case depends on the availability and accuracy of guest data within the hotel management system. Effective market segmentation relies on up-to-date information on guest preferences, booking history, and demographics. Integration of segmentation tools into the system and collaboration with relevant departments are necessary for successful implementation.
Actors	Primary Actor: Hotel Management
Preconditions	<ol style="list-style-type: none"> 1. The user must be authenticated and authorized with appropriate permissions. 2. Guest data, including preferences, booking history, and demographics, must be available and up-to-date in the system.

Description of the Main Sequence	<ol style="list-style-type: none"> 1. The Hotel Management selects the market segmentation option from the system's main menu. 2. The system provides guests segmenting tools for analyzing booking history, guest feedback, and demographic data based on various criteria, such as preferences, booking history, and demographics. 3. The Hotel Management selects the segmentation criteria and defines segments accordingly. 4. The system analyzes guest data based on the defined criteria and categorizes guests into different segments. 5. Hotel Management can view and manage segmented guest lists, enabling targeted marketing strategies and personalized guest experiences.
Description of the Alternative Sequence	If guest data is incomplete or outdated, the system notifies the Hotel Management and prompts them to ensure data accuracy for effective segmentation.
Non functional requirements	<ol style="list-style-type: none"> 1. Accuracy: The system should accurately analyze guest data for precise segmentation. 2. Performance: Segmenting guest data should be efficient to support timely marketing strategies. 3. Usability: The segmentation tools should be user-friendly for easy configuration and management by Hotel Management.
Postconditions	The hotel management system successfully supports guest segmentation based on preferences, booking history, and demographics, empowering Hotel Management to implement targeted marketing campaigns and enhance guest satisfaction.

UC Name	UC10 Admin User Management and Configuration
Summary	The Admin User Management and Configuration use case enables administrators to manage user accounts and customize system settings within the Hotel Management System (HMS).
Dependency	This optional section describes whether the UC depends on other UCs.
Actors	Administrator
Preconditions	<p>1-The administrator is logged into the HMS.</p> <p>2-Access privileges are granted to the administrator to perform user management and configuration tasks.</p>
Description of the Main Sequence	<ul style="list-style-type: none"> • The administrator accesses the User Management section of the HMS. • The administrator selects the option to add a new user account. • The administrator enters the necessary details for the new user, including username, password, and access level. • The HMS validates the entered information and adds the new user account to the system. • If editing or removing an existing user account, the administrator selects the respective option, makes the necessary changes, and confirms the action. • The administrator accesses the Statistics Dashboard to view graphical representations of occupancy trends and financial performance. • The HMS retrieves relevant data and presents it in graphical form for easy analysis. • The administrator navigates to the System Configuration section to customize settings. • Within the System Configuration, the administrator adjusts room rates, availability rules, and email templates as needed.

	<ul style="list-style-type: none"> • The HMS saves the configuration changes.
Description of the Alternative Sequence	<ul style="list-style-type: none"> • If the entered user details are incomplete or invalid during user addition, the HMS prompts the administrator to correct the errors before proceeding. • If the administrator encounters any issues with accessing or modifying system settings, they may contact technical support for assistance.
Non functional requirements	<p>The system should ensure secure user authentication and authorization mechanisms.</p> <p>The User Management and Configuration functionalities should be intuitive and easy to use.</p> <p>The Statistics Dashboard should provide real-time data updates and be visually appealing for better comprehension.</p>
Postconditions	<p>The administrator successfully adds, edits, or removes user accounts according to the specified access levels.</p> <p>The administrator views relevant statistics through the dashboard and customizes system settings as required.</p>

UC Name	UC11 System Configuration Management
Summary	The System Configuration Management use case enables authorized users to customize system settings, such as room rates, availability rules, and email templates, within the Hotel Management System (HMS).
Dependency	This optional section describes whether the UC depends on other UCs.
Actors	Admin
Preconditions	1-The Admin is logged into the HMS. 2-Access privileges are granted to the authorized user to modify system configuration settings.
Description of the Main Sequence	<ul style="list-style-type: none"> • The authorized user navigates to the System Configuration section within the HMS. • The HMS presents various configurable settings, such as room rates, availability rules, and email templates, for the user to modify. • The authorized user selects the specific setting they wish to adjust, such as updating room rates for different seasons or setting availability rules for specific room types. • The user enters the new configuration values or selects options from predefined lists. • The HMS validates the entered configuration data to ensure it meets the required format and constraints. • If the entered data is valid, the HMS applies the configuration changes to the system. • The authorized user confirms the successful application of the configuration changes and exits the System Configuration section.
Description of the Alternative Sequence	<ul style="list-style-type: none"> • If there are any issues with data validation or system performance during configuration changes, the authorized user may encounter error messages or delays. In such cases, technical support may be contacted for assistance.

Non functional requirements	<p>1-The System Configuration interface should be user-friendly and intuitive to facilitate easy navigation and configuration adjustments.</p> <p>2-Configuration changes should be applied promptly and accurately to ensure the smooth operation of the HMS.</p> <p>3-The system should maintain an audit trail of configuration changes for accountability and troubleshooting purposes.</p>
Postconditions	The authorized user successfully customizes system settings according to the hotel's requirements, ensuring optimal functionality and performance of the HMS.

UC Name	UC12 Statistics Dashboard Access
Summary	The Statistics Dashboard Access use case enables authorized users to access graphical representations of occupancy trends and financial performance within the HotelManagement System (HMS).
Dependency	This optional section describes whether the UC depends on other UCs.
Actors	Admin, Owner
Preconditions	1-The authorized user is logged into the HMS. 2-Access privileges are granted to the authorized user to view statistics through the dashboard.
Description of the Main Sequence	<ul style="list-style-type: none"> • The authorized user navigates to the Statistics Dashboard section within the HMS. • The HMS retrieves relevant statistical data, including occupancy rates and financial performance metrics. • The Statistics Dashboard presents graphical representations of the retrieved data, such as charts and graphs, for easy analysis. • The authorized user interacts with the dashboard to view specific metrics, trends, or time periods as needed.
Description of the Alternative Sequence	<ul style="list-style-type: none"> • If there are any issues with data retrieval or dashboard functionality, the authorized user may encounter error messages or be unable to access certain features. In such cases, technical support may be contacted for assistance.
Non functional requirements	1-The Statistics Dashboard should provide real-time updates and be responsive to user interactions for seamless navigation and analysis. 2-Graphical representations should be visually appealing and easy to interpret to facilitate data analysis.

	3-The system should ensure secure user authentication and authorization mechanisms to protect sensitive statistical data.
Postconditions	The authorized user successfully accesses and analyzes statistics through the dashboard, gaining insights into occupancy trends and financial performance within the hotel.

UC Name	UC13 Notify staff when rooms require cleaning
Dependency	None
Actors	Housekeeping staff, Front-Desk Staff
Preconditions	None
Description of the Main Sequence	<ol style="list-style-type: none"> 1. System receives notification of room vacancy 2. System updates room status to "Requires Cleaning" 3. System notifies housekeeping staff about the room requiring cleaning 4. Housekeeping staff confirm receipt of notification
Description of Alternative Sequence	None
Non-Functional Requirements	Real-time notification delivery
Postconditions	Room status updated to "Requires Cleaning"

UC Name	UC14 Promptly handle guests' cleaning or repair requests
Dependency	None
Actors	Housekeeping Staff, Front-Desk Staff
Preconditions	Preconditions
Description of the Main Sequence	<ol style="list-style-type: none"> 1. Guest submits a cleaning or repair request through the system 2. System notifies housekeeping about the request 3. Housekeeping staff acknowledge receipt of the request 4. Housekeeping staff update the request status upon completion
Description of Alternative Sequence	None
Non-Functional Requirements	Timely response to requests; Secure handling to guests information
Postconditions	Request status updated upon completion
UC Name	UC15 Communication between housekeeping and Front-Desk
Dependency	None
Actors	Housekeeping Staff, Front-Desk Staff
Preconditions	None
Description of the Main Sequence	<ol style="list-style-type: none"> 1. Housekeeping staff send room status updates to the front-desk staff 2. Front-desk staff receive and acknowledge receipt of updates 3. Front-desk may request additional information if needed 4. Housekeeping staff responds to any inquiries or requests raised by the front-desk staff
Description of Alternative Sequence	None
Non-Functional Requirements	Secure communication channels; Real-Time updates
Postconditions	Front -desk informed of status room updates

UC Name	UC 16 Room cleanup
Summary	Perform tidying and organization of individual rooms and update room status
Dependency	Availability of cleaning supplies
Actors	Housekeeper, Clients
Preconditions	Room must be accessible and occupants not present
Description of the Main Sequence	<ul style="list-style-type: none"> • 1. Housekeeper enters the room. • 2. Housekeeper picks up and puts away items in designated places. • 3. Housekeeper dusts surfaces and vacuums or sweeps floors. • 4. Housekeeper checks for any items needing repair or replacement • 5. Housekeeper change the room status as cleaned. • 6. System notifies the client about the room status
Description of the Alternative Sequence	<ul style="list-style-type: none"> • If occupants are present, housekeeper asks for permission to enter and clean the room and change the room status as pending.
Non functional requirements	The system should display the room status at real-time.
Postconditions	Room is clean and arranged according to predefined standards.

UC Name	UC17 Housekeeping
Summary	Perform routine cleaning tasks in a residence
Dependency	Availability of cleaning schedule
Actors	Housekeeper

Preconditions	Home must be accessible and homeowner's cleaning preferences must be provided
Description of the Main Sequence	<ul style="list-style-type: none"> • 1. Housekeeper reviews the cleaning schedule and tasks. • 2. Housekeeper gathers required cleaning supplies and equipment. • 3. Housekeeper enters the residence and begins cleaning, starting from designated areas (e.g., kitchen, living room). • 4. Housekeeper follows specific cleaning instructions provided by the homeowner, such as using eco-friendly products or avoiding certain areas.
Description of the Alternative Sequence	If homeowner's preferences are not available, housekeeper follows standard cleaning procedures.
Non functional requirements	Ensure cleaning supplies are eco-friendly and safe for pets and children. -Adhere to a specific cleaning time frame provided by the homeowner. - Maintain a professional demeanor and appearance.
Postconditions	Residence is thoroughly cleaned according to the homeowner's preferences and schedule.

UC Name	UC18 Client Account Creation
Summary	Involves the process of creating a client account in the hotel system, allowing clients to manage their reservation and credentials.
Dependency	None
Actors	Client
Preconditions	Client must agree to the terms and conditions.
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: Client enters sign up page. ● Step 2: Client selects "Create new account". ● Step 3: Client enters their personal details. ● Step 4: The system validates the entered information. ● Step 5: After information validation system proceeds to create client account. ● Step 6: The system sends to the client a confirmation email with their account details.
Description of the Alternative Sequence	<p>The entered email is associated with an existing account</p> <p>The system redirects the client to log in or reset the password</p>
Nonfunctional requirements	The system should prevent unauthorized access to accounts information, by encrypting their information.
Postconditions	The guest's account is successfully created, allowing the guests to log in and manage their reservations and information.

UC Name	UC19 Check Availability
Summary	Client checks the availability of rooms for specific dates in the hotel system.
Dependency	None.
Actors	Primary Actor: Client
Preconditions	None.
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: Client accesses the room availability check feature in the system ● Step 2: Client selects the desired dates for their stay. ● Step 3: The system checks the database for available rooms for the selected dates ● Step4: The system displays the available rooms to the client
Description of the Alternative Sequence	<p>There are no rooms available for the selected dates.</p> <p>The system notifies the client that no rooms are available and may provide alternative dates</p>
Nonfunctional requirements	The system must reflect real-time room viability to prevent overbooking.
Postconditions	The client views the viability of rooms.

UC Name	UC20 Reservation Access
Summary	Involves guests accessing their reservation detail, including check-in/check-out dates, rate and room type.
Dependency	Client Account Creation
Actors	Primary Actor: Client
Preconditions	<ul style="list-style-type: none"> • Client must have an active account in the system. • Client must be logged into their account.
Description of the Main Sequence	<ul style="list-style-type: none"> • Step 1: The client log in the system using their credentials. • Step 2: The client navigates to the reservation section of the account • Step 3: The system provides the guest with their reservation details.
Description of the Alternative Sequence	<p>The client has no existing reservation.</p> <p>System displays a message showing that there were no reservations found.</p>
Nonfunctional requirements	System should efficiently retrieve and display reservation details.
Postconditions	The client successfully accesses their reservation details.

UC Name	UC21 Modification of Reservation
Summary	Clients modify their existing reservation within the system.
Dependency	Reservation Access
Actors	Primary Actor: Client
Preconditions	The client must be logged into their account The client must have accessed their reservation details.
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: The client accesses their reservation details through their account. ● Step 2: The client selects the option to modify their reservation ● Step 3: The system provides modification options, like changing dates, room types etc. ● Step 4: The client selects the desired option. ● Step 5: The system checks for viability ● Step 6: The system updates the reservation. ● Step 7: The client receives a confirmation of the modified reservation.
Description of the Alternative Sequence	<p>The requested modification is not available.</p> <p>The system notifies the client and provides additional options.</p>
Nonfunctional requirements	The system should immediately update the reservation to prevent overbooking.
Postconditions	The client reservation is successfully modified and updated details are reflected in the system.

UC Name	UC22 Special Request Submission
Summary	The client submits special requests related to their reservation, such as room preferences or addition amenities.
Dependency	Reservation Access
Actors	Primary Actor: Client
Preconditions	The client must have logged in into their accounts
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: The client accesses their reservation details through their account. ● Step 2: The client selects the option to submit special requests. ● Step 3: The client enters the details of their special requests. ● Step 4: The system records the special requests associated with the reservation. ● Step 5: The system provides the client with a confirmation of submission
Description of the Alternative Sequence	The clients decide not to submit any requests.
Nonfunctional requirements	Special requests submitted by clients must be handled securely to maintain privacy
Postconditions	Special requests submitted by the client are successfully recorded.

UC Name	UC23 Feedback Submission
Summary	Client provides feedback on their stay.

Dependency	This optional section describes whether the UC depends on other UCs.
Actors	Primary Actor: Client
Preconditions	The client must have completed their stay and have an active reservation history in the system. The client must be logged in their account
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: The client accesses their reservation history through their account. ● Step 2: The client selects the reservation for which they want to provide feedback. ● Step 3: The client enters their feedback regarding their stay. ● Step 4: The system records the feedback provided by the client.
Description of the Alternative Sequence	The client decides not to provide feedback
Nonfunctional requirements	Analysis: The system should store feedback data for analysis.
Postconditions	Feedback provided by the guest is successfully recorded and stored in the system for analysis.

UC Name	UC24 Cancellation of Reservation
Summary	Involves client cancelling their existing reservation
Dependency	Reservation Access
Actors	Primary Actor: Client
Preconditions	The client must be logged into their account.
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: The client accesses their reservation details through their account. ● Step 2: The client selects the option to cancel the reservation. ● Step 3: The system checks the cancellation request if it is against the policy time constraints. ● Step 4: If the cancellation requests is within policy time constraints, the system cancels the reservation.
Description of the Alternative Sequence	<p>If the cancellation requests is outside the policy time constraints.</p> <p>The system notifies the client that the reservation cannot be canceled.</p>
Nonfunctional requirements	<p>The system must enforce policy time constraints.</p> <p>The system should notify clients of the outcome of their cancellation request.</p>
Postconditions	The client's reservation is successfully canceled within the policy time constraints, and the room becomes available for booking

UC Name	UC25 Update Reservation Calendar
Summary	Involves automatically updating the reservation calendar to reflect changes.
Dependency	None
Actors	Nonfunctional Client
Preconditions	The administrator and manager must have access to the system configuration settings. All data should be stored in a database
Description of the Main Sequence	<ul style="list-style-type: none"> ● Step 1: The administrator configures the system to automate reservation calendar updates. ● Step 2: When a reservation is made by the front desk, the system automatically updates the reservation calendar. ● Step 3: When a reservation is created/modified/cancelled, the system automatically reflects the changes in the database.
Description of the Alternative Sequence	If there is a failure in updating the reservation calendar, the system generates an error notification. The administrator should intervene to resolve the issue.
Nonfunctional requirements	Reliability: The system must reliably update the reservation calendar to ensure accurate representation of bookings and room statuses. Real-time Updates:
Postconditions	The reservation calendar is accurately updated to reflect new bookings, cancellations, modifications.

UC Name	UC26 Manage Billing and Invoicing
Summary	The Manage Billing and Invoicing use case enables authorized users to generate, manage, and process billing and invoicing transactions within the Hotel Management System (HMS).
Dependency	None
Actors	Accountant
Preconditions	<p>The authorized user is logged into the HMS.</p> <p>Access privileges are granted to the authorized user to manage billing and invoicing transactions.</p>
Description of the Main Sequence	<ul style="list-style-type: none"> ● The authorized user navigates to the Billing and Invoicing section within the HMS. ● The HMS presents various billing and invoicing options, such as generating invoices, updating billing details, and processing payments. ● The authorized user selects the specific billing or invoicing task they wish to perform. ● For invoice generation, the user selects the relevant booking or transaction data and specifies the billing details, such as payment methods and due dates. ● The HMS validates the entered billing data to ensure accuracy and compliance with billing policies. ● If the entered data is valid, the HMS generates the invoice and updates the billing records accordingly. ● For payment processing, the user selects the payment method, enters payment details, and confirms the payment transaction. ● The HMS verifies the payment information and updates the payment records to reflect the completed transaction. ● The authorized user confirms the successful completion of the billing or invoicing task and exits the Billing and Invoicing section.

Description of the Alternative Sequence	<ul style="list-style-type: none"> ● If there are any issues with data validation or payment processing during billing and invoicing tasks, the authorized user may encounter error messages or delays. In such cases, technical support may be contacted for assistance.
Non functional requirements	<p>-The Billing and Invoicing interface should be user-friendly and intuitive to facilitate easy navigation and transaction processing.</p> <p>-Billing and invoicing tasks should be completed accurately and efficiently to maintain financial integrity and customer satisfaction.</p> <p>-The system should maintain an audit trail of billing and invoicing transactions for accountability and reconciliation purposes..</p>
Postconditions	The authorized user successfully manages billing and invoicing transactions within the HMS, ensuring accurate invoicing, timely payments, and financial transparency.

UC Name	UC27 Schedule Maintenance
Summary	The Schedule Maintenance use case enables authorized users to schedule and manage maintenance tasks for hotel facilities and equipment within the Hotel Management System (HMS).
Dependency	None
Actors	Managers, Housekeepers, Facilitators
Preconditions	<p>1-The authorized user is logged into the HMS.</p> <p>2-Access privileges are granted to the authorized user to schedule and manage maintenance tasks.</p> <p>3-Maintenance staff members are available and notified of scheduled maintenance tasks.</p>
Description of the Main Sequence	<ul style="list-style-type: none"> • The authorized user navigates to the Maintenance Management section within the HMS. • The HMS presents options for scheduling and managing maintenance tasks, including creating new maintenance schedules and assigning tasks to maintenance staff. • The authorized user selects the option to schedule a new maintenance task. • The user enters the details of the maintenance task, including the type of maintenance required, location, equipment involved, and scheduled date and time. • The HMS validates the entered maintenance task details to ensure accuracy and feasibility. • If the entered data is valid, the HMS schedules the maintenance task and notifies maintenance staff members assigned to the task. • Maintenance staff members receive notifications of the scheduled task and acknowledge their availability to perform the maintenance. • On the scheduled date and time, maintenance staff members execute the maintenance task as per the instructions provided within the HMS.

	<ul style="list-style-type: none"> ● The HMS records the completion of the maintenance task and updates the maintenance records accordingly.
Description of the Alternative Sequence	<ul style="list-style-type: none"> ● If there are any issues with scheduling the maintenance task, such as conflicting schedules or unavailable maintenance staff, the authorized user may need to reschedule the task or assign it to different staff members. ● If maintenance staff encounter unexpected issues or delays during the execution of the maintenance task, they may need to communicate with the authorized user for further instructions or assistance.
Non functional requirements	<p>1-The Maintenance Management interface should be user-friendly and intuitive to facilitate easy scheduling and management of maintenance tasks.</p> <p>2-Maintenance tasks should be scheduled and executed efficiently to minimize downtime and disruptions to hotel operations.</p> <p>3-The system should provide real-time notifications and updates to authorized users and maintenance staff regarding scheduled maintenance tasks and their status.</p>
Postconditions	<p>The authorized user successfully schedules and manages maintenance tasks within the HMS, ensuring timely maintenance of hotel facilities and equipment, and maintaining the overall operational efficiency of the hotel.</p>