| UC Name | *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 If the necessary data is not accessible or is outdated, the system will not be able to generate accurate reports.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 | 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 | * *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 | * *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 | 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.*  *Top of Form* |

**----------USE CASE 2-----------**

| UC Name | *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 | 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 | * *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 | * *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 | *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.*  *2.Security: Access to performance metrics should be restricted to authorized users only, ensuring the confidentiality of staff and guest information.*  *3.User Interface: The performance reporting interface should be user-friendly and intuitive, facilitating easy interpretation of performance metrics by the Hotel Management.* |
| Postconditions | *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.Top of Form* |

**----------USE CASE 3-----------**

| UC Name | *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 | 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 | 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 | 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.* |

**----------USE CASE 4-----------**

| UC Name | *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.*  *Top of Form* |
| Actors | *Primary Actor: Hotel Management* |
| Preconditions | 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 | 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 | 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.* |