The system shall allow managers to monitor user accounts and permissions, excluding admins, ensuring effective security measures and resource allocation.

UC Name	***UC - 601 User Account and Permission Management (Excluding Admins)***
Summary	This use case allows managers to oversee user accounts and permissions within the system, with the exception of admin accounts. Managers have the authority to control user access and privileges for those under their supervision, which helps to maintain security procedures and manage resources effectively.
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system. • User accounts must already exist within the system. • The manager must have the necessary permissions to manage user accounts and permissions.
Description of the Main Sequence	• ***Step 1:*** The manager accesses the user account management interface within the system. • ***Step 2:*** The system displays a list of existing user accounts, along with their associated permissions. • ***Step 3***: The manager selects a specific user account they wish to

	modify. • ***Step 4:*** The system presents options to edit the permissions or details of the selected user account. • ***Step 5:*** The manager makes the necessary changes to the user account, such as adjusting permissions or updating user information. • ***Step 6:*** The manager confirms the changes made. • ***Step 7:*** The system updates the user account according to the modifications made by the manager. • ***Step 8:*** The use case concludes, returning the manager to the user account management interface.
Description of the Alternative Sequence	• ***Step 1:*** If the selected user account is not found in the system, the manager receives a notification indicating the account does not exist. • ***Step 2:*** If the manager attempts to modify permissions beyond their authorization level, the system displays an error message indicating insufficient privileges. • ***Step 3:*** The use case concludes, returning the manager to the user account management interface.
Non functional requirements	• ***Performance:*** Achieve quick response times and support concurrent operations efficiently. • ***Security:*** Ensure all operations are over secure. • ***Scalability:*** The system should be capable of handling a large number of accounts. • ***Reliability:*** Ensure high availability, minimal downtime, and regular data backups for system integrity.

Postconditions	The system correctly implements and reflects the changes the manager makes to the user account, ensuring that any changes to permissions or user details are accurately updated.

The system shall generate a unique code for operator-requested modifications, requiring manager confirmation for validation and authorization.

UC Name	***UC - 602 Generate Unique Code***
Summary	This use case involves the generation of a unique code for confirming modifications requested by operators in the system. Before proceeding with the modification, the system requires confirmation from the manager, who inputs their unique code to validate and authorize the requested changes.
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actors:*** System, Operators
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system. • A modification request from an operator or passenger must have been received. • The requested modification must require manager confirmation,

	as specified in the system settings.
Description of the Main Sequence	• ***Step 1:*** The system receives a modification request from an operator, indicating the need for a manager's confirmation. • ***Step 2:*** The system prompts the manager to input their unique code, verifying their authorization to confirm the requested modification. • ***Step 3:*** The manager enters their unique code, initiating the confirmation process. • ***Step 4:*** The system validates the manager's code and the requested modification to ensure compliance with established policies. • ***Step 5:*** If the code is valid and the modification request is authorized, the system proceeds with the requested modification, updating the relevant records accordingly. • ***Step 6:*** If the code is valid, the system prompts the manager to review the requested modification. • ***Step 7:*** The manager reviews the modification request and decides whether to approve or reject it. • ***Step 8:*** If the modification request is approved, the system updates the relevant records accordingly and notifies the operator of the approval. • ***Step 9:*** The use case concludes, providing feedback to the operator based on the outcome of the confirmation process.
Description of the Alternative Sequence	• ***Step 1:*** If the code is invalid or the modification request is unauthorized, the system rejects the modification and notifies the operator of the denial.

	• ***Step 2:*** The use case concludes, providing feedback to the operator based on the outcome of the confirmation process.
Non functional requirements	• ***Performance:*** Ensure prompt system response and acceptable processing times for modification requests. • ***Security:*** Implement robust user authentication and encryption protocols to safeguard user accounts and passenger data. • ***Usability:*** Provide an intuitive interface and clear error messages to facilitate easy navigation and user guidance. • ***Reliability:*** Maintain high system availability and implement backup mechanisms for data integrity and continuity. • ***Compliance:*** Adhere to data protection regulations.
Postconditions	The modification request has been successfully confirmed and implemented, ensuring that any changes made to passenger data are valid and authorized by the manager.

The system shall enable managers to monitor overall system performance and usage statistics, providing valuable insights for informed decision-making and resource allocation.

UC Name	***UC - 603 System Performance and Usage Monitoring***
Summary	This use case enables managers to monitor overall system performance and usage statistics, providing valuable insights for informed decision-making and resource allocation.

Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system. • System performance monitoring and usage statistics must be available and generated within the system. • The manager must have the necessary permissions to access system performance and usage statistics.
Description of the Main Sequence	• ***Step 1:*** The manager navigates to the system performance and usage monitoring section within the system. • ***Step 2:*** The system presents an interface (dashboard) displaying overall system performance metrics and usage statistics. • ***Step 3:*** The manager reviews the presented information, including metrics such as, network traffic, user activity etc. • ***Step 4:*** The manager analyzes the collected data to identify any trends, anomalies, or areas requiring attention. • ***Step 5:*** If necessary, the manager may drill down into specific performance metrics or usage statistics for more detailed analysis. • ***Step 6:*** If the manager needs to compare current performance metrics or usage statistics with historical data, the system provides options to access and analyze historical records. • ***Step 7:*** In case the manager identifies potential issues or areas for

	improvement during the analysis, the system allows them to initiate corrective actions. • ***Step 8:*** The use case concludes, returning the manager to the main interface or allowing them to continue monitoring system performance and usage statistics as needed.
Description of the Alternative Sequence	• ***Step 1:*** In case of system errors or unavailability, the manager receives a notification and is prompted to retry accessing system performance and usage statistics later. • ***Step 2:*** If the presented performance metrics or usage statistics appear inconsistent or inaccurate, the manager requests a system check or data validation from admins. • ***Step 3:*** The use case concludes, returning the manager to the main interface or allowing them to continue monitoring system performance and usage statistics as needed.
Non functional requirements	• ***Performance:*** Ensure system performance and usage statistics load fast and scale effectively to handle increased user loads. • ***Security:*** Restrict access to authorized personnel, encrypt data, and maintain audit trails for accountability. • ***Reliability:*** Maintain high availability and perform regular backups for data recovery. • ***Compliance:*** Adhere to data privacy regulations and retention policies to ensure legal compliance.
Postconditions	The manager has successfully accessed and utilized the system performance and usage statistics, enabling them to make informed

	decisions and take appropriate actions based on the insights gained.

The system shall facilitate annual performance management for operators.

UC Name	***UC - 604 Staff (Operators) Performance Management***
Summary	This use case involves the annual review and management of staff (operators) performance within the system. It includes activities such as setting performance goals, monitoring performance metrics, providing feedback, and initiating corrective actions as necessary to ensure optimal staff performance and productivity.
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System, Operators
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system. • Managers must be authenticated and authorized to conduct performance reviews. • The annual performance review period must have commenced. • Performance goals and evaluation criteria for staff must be established.
Description of the Main Sequence	• ***Step 1:*** Manager initiates the annual performance review process for staff by accessing the performance management interface.

	• ***Step 2:*** Manager retrieves performance data and metrics for each operator from the system. • ***Step 3:*** Manager sets performance goals and establishes evaluation criteria based on the collected data and organizational objectives. • ***Step 4:*** Manager conducts performance evaluations for each operator according to the established criteria. • ***Step 5:*** Manager provides constructive feedback to operators regarding their performance, highlighting strengths and areas for improvement. • ***Step 6:*** Manager identifies specific areas for improvement and formulates corrective action plans if necessary. • ***Step 7:*** Manager documents the outcomes of the performance review process, including performance ratings and any agreed-upon action plans. • ***Step 8:*** The annual performance review process concludes, with staff members informed of their performance assessments and any necessary next steps.
Description of the Alternative Sequence	• ***Step 1:*** In case performance data and metrics are unavailable or incomplete, the manager requests additional data sources or reschedules the review process. • ***Step 2:*** If the manager faces challenges in setting performance goals or evaluation criteria, they consult with admins.
Non functional requirements	• ***Performance:*** Ensure prompt response and scalability of the performance management system.

	• ***Security***: Restrict access to authorized personnel and maintain robust user authentication mechanisms. • ***Usability:*** Provide a user-friendly interface and clear guidance for efficient navigation. • ***Reliability:*** Ensure high availability and data integrity through regular backups. • ***Compliance:*** Adhere to data privacy regulations and organizational policies for performance management processes and documentation.
Postconditions	The performance review process has been successfully conducted, documented, and concluded, with staff members informed of their performance assessments and any necessary action plans for improvement.

The system shall grant managers access to comprehensive analytics, aiding informed decision-making.

UC Name	***UC - 605 Analytics Access***
Summary	This use case allows managers to access detailed analytics within the system, facilitating informed decision-making processes.
Dependency	
Actors	***Primary Actor:*** Manager

	Secondary Actor: System
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system. • Detailed analytics must be generated and available within the system. • The manager must have the necessary permissions to access analytics.
Description of the Main Sequence	• ***Step 1:*** The manager navigates to the analytics section within the system. • ***Step 2:*** The system presents a list of available analytics options. • ***Step 3:*** The manager selects the desired analytics to view. • ***Step 4:*** The system generates and displays the selected analytics data. • ***Step 5:*** The manager analyzes the presented information to gain insights and make informed decisions. • ***Step 6:*** If necessary, the manager may download or save the analytics data for further reference. • ***Step 7:*** The use case concludes, returning the manager to the main interface or allowing them to continue accessing additional analytics as needed.
Description of the Alternative Sequence	• ***Step 1:*** In case of system errors or unavailability, the manager receives a notification and is prompted to retry accessing analytics later. • ***Step 2:*** If the selected analytics data is not available or cannot be

	generated, the system displays an error message and prompts the manager to choose an alternative option. • ***Step 3:*** Should there be discrepancies or inconsistencies in the analytics data, the system provides additional explanations or guidance. • ***Step 6:*** In case the manager needs to share the analytics data with others, the system provides options for collaboration or sharing functionalities. • ***Step 7:*** The use case concludes, either returning the manager to the main interface or allowing them to continue accessing and analytics.
Non functional requirements	• ***Performance:*** Ensure prompt response and scalability of the performance management system. • ***Security:*** Restrict access to authorized personnel, encrypt data, and maintain audit trails for accountability. • ***Reliability:*** Maintain high availability and perform regular backups for data recovery. • ***Usability:*** Provide an intuitive interface and allow customization options to enhance user experience. • ***Compliance:*** Adhere to data privacy regulations and retention policies to ensure legal compliance.
Postconditions	The manager has successfully accessed and utilized the desired analytics, enabling them to make informed decisions based on the presented information.

The system shall incorporate client feedback for evaluating flight booking process performance.

UC Name	***UC - 606 Incorporate Client Feedback***
Summary	This requirement ensures that client feedback is considered in evaluating the performance of the flight booking process.
Dependency	
Actors	***Primary Actor:*** Passengers ***Secondary Actor:*** System, Managers
Preconditions	• The system must be operational and accessible. • The system must have a mechanism in place for clients to submit reviews or feedback about their experience. • Clients must have interacted with the system or its services to provide meaningful reviews or feedback. • The manager must be authenticated and logged into the system. • Managers must have appropriate permissions to access and analyze the feedback data. • The system should have infrastructure in place to collect, store, and manage client reviews efficiently.
Description of the Main Sequence	• ***Step 1:*** Clients submit reviews or feedback through the designated feedback mechanism provided by the system. • ***Step 2:*** Managers review and analyze the received feedback to

	identify common themes, trends, or areas for improvement. • ***Step 3:*** Based on the analysis, prioritization, and decision-making process, relevant changes or enhancements are identified for incorporation into the system.
Description of the Alternative Sequence	• ***Step 1:*** In case the feedback mechanism provided by the system is not accessible or malfunctioning, clients may resort to alternative communication channels such as email, phone calls, or in-person meetings to provide their feedback. • ***Step 2:*** Managers manually gather feedback received through alternative channels and document them for analysis. • ***Step 3:*** The analysis of feedback gathered through alternative channels may differ in process or priority compared to feedback received through the system's designated mechanism. • ***Step 4:*** Based on the analysis, relevant changes or enhancements are identified for incorporation into the system, considering both feedback received through the system and alternative channels.
Non functional requirements	• ***Scalability****:* System should handle multiple users without performance degradation. • ***Availability****:* Maintain uptime, with minimal scheduled maintenance during off-peak hours. • ***Reliability****:* Ensure accurate data retrieval and display with built-in redundancy and failover mechanisms.
Postconditions	The successful retrieval, selection, and utilization of client feedback to enact system improvements.

The system shall analyze flight frequency data in reports to enhance booking pattern understanding over time.

UC Name	***UC - 607 Include Flight Frequency Data***
Summary	This requirement ensures that the reports offer comprehensive analysis by considering the frequency of flight occurrences, allowing for a deeper understanding of booking patterns and trends over time.
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System
Preconditions	• The system must be operational and accessible. • Flight frequency data must be accessible. • The manager must be authenticated and logged into the system. • Managers must have necessary permissions to access and integrate data. • The system must be compatible with the format and structure of the flight frequency data. • Adequate technical resources must be available for data integration. • Clear documentation and understanding of requirements are necessary.

Description of the Main Sequence	• ***Step 1:*** Manager accesses flight frequency data. • ***Step 2:*** Validate compatibility of the data format and structure with the system. • ***Step 3:*** Configure necessary permissions and settings for data integration. • ***Step 4:*** Implement data integration procedures into the system. • ***Step 5:*** Conduct testing to ensure accuracy and functionality of integrated data. • ***Step 6:*** Provide documentation as needed for users accessing flight frequency data within the system. • ***Step 7:*** Monitor ongoing data updates and system performance to maintain data accuracy and reliability.
Description of the Alternative Sequence	• ***Step 1:*** If flight frequency data is unavailable, initiate communication with alternative data providers (e.g.operator). • ***Step 2:*** Adapt data integration procedures to accommodate different data formats or structures from alternative sources. • ***Step 3:*** Validate the quality and reliability of data obtained from alternative sources through thorough testing and validation processes.
Non functional requirements	• ***Performance****:* Ensure fast data processing and display. • ***Scalability****:* System should handle multiple users without performance degradation. • ***Availability****:* Maintain uptime, with minimal scheduled maintenance during off-peak hours. • ***Reliability****:* Ensure accurate data retrieval and display with built-in redundancy and failover mechanisms.

	• ***Security****:* Adhere to industry-standard security practices, including encryption, access controls, and regular audits.
Postconditions	The system successfully integrates accurate and accessible flight frequency data, ensuring stability, updated documentation, user training if necessary, and ongoing monitoring for reliability.

The system shall produce monthly statistical reports covering the entire flight booking process, incorporating insights from client reviews and flight frequency data.

UC Name	***UC - 608 Generate Monthly Statistical Reports***
Summary	This use case entails the system's ability to produce monthly statistical reports regarding the maintenance of the flight booking process. These reports encompass the entire booking process, from initiation to completion, and provide valuable insights derived from client reviews and flight frequency data.
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System
Preconditions	• The system is operational and accessible. • The manager must be authenticated and logged into the system. • Sufficient data related to the flight booking process, including client reviews and flight frequency data, is available for analysis. • The Manager has access to the statistical reports and intends to

	utilize the data, including flight frequency information, for analysis and decision-making purposes • There are no ongoing system maintenance activities or technical issues that hinder report generation. • The designated time period for generating monthly statistical reports has commenced (e.g., beginning of a new month).
Description of the Main Sequence	• ***Step 1:*** The Manager accesses the system and selects the option to generate a monthly statistical report. • ***Step 2:*** The system collects data on the flight booking process, including client reviews and flight frequency. • ***Step 3:*** Using the collected data, the system generates a comprehensive report. • ***Step 4:*** The Manager reviews and finalizes the report. • ***Step 5:*** The system compiles and presents the report in a suitable format.
Description of the Alternative Sequence	• ***Step 1:*** The Manager selects the option to generate a monthly statistical report. • ***Step 2:*** The system encounters an error while collecting data on the flight booking process. • ***Step 3:*** The system prompts the Manager with an error message indicating the issue. • ***Step 4:*** The Manager attempts to troubleshoot the error by reinitiating the data collection process. • ***Step 5:*** The system successfully collects the necessary data and proceeds with generating the report. • ***Step 6:*** The Manager reviews and finalizes the report as usual.

	• **Step 7:** The system compiles and presents the report in a suitable format.
Non functional requirements	• ***Performance:*** Fast response time, scalable for growth. • ***Reliability:*** High uptime, quick recovery from failures. • ***Security:*** Secure authentication, encrypted data. • ***Maintainability:*** Modular design, comprehensive documentation.
Postconditions	The monthly statistical report for the flight booking process has been generated and is available for review by the Manager.

The system shall allow managers to access financial reports.

UC Name	***UC - 609 Financial Reports***
Summary	This use case involves managers accessing financial reports
Dependency	
Actors	***Primary Actor:*** Manager ***Secondary Actor:*** System
Preconditions	• The system must be operational and accessible. • The manager must be authenticated and logged into the system.
Description of the Main Sequence	• ***Step 1:*** Managers are directed to the financial reports interface.

	• ***Step 2:*** They request the needed financial data • ***Step 3:*** The system retrieves the requested financial data and generates the report. • ***Step 4:*** The system presents the report in a user-friendly format (table, graphic,charts). • ***Step 5:*** Managers analyze the presented data to gain insights in financial health.
Description of the Alternative Sequence	• ***Step 1:*** If the system encounters an error and is unable to retrieve the required data, it displays an error message and managers notify of the issue.
Non functional requirements	• ***Security:*** Access to financial reports should be restricted to authorized shareholders to maintain data confidentiality. • ***Usability:*** The system interface for accessing financial reports should be intuitive and easy to navigate for shareholders.
Postconditions	Managers have successfully accessed financial reports