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
Preconditions	<ul> <li>The manager must be authenticated and logged into the system.</li> <li>The system must be operational and accessible.</li> <li>User accounts must already exist within the system.</li> <li>The manager must have the necessary permissions to manage user accounts and permissions.</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: The manager accesses the user account management interface within the system.</li> <li>Step 2: The system displays a list of existing user accounts, along with their associated permissions.</li> <li>Step 3: The manager selects a specific user account they wish to modify.</li> <li>Step 4: The system presents options to edit the permissions or details of the selected user account.</li> <li>Step 5: The manager makes the necessary changes to the user</li> </ul>

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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.

UC Name	UC - 602 Generate Unique Code
Summary	This use case involves the generation of a unique code for confirming modifications requested by operators and passengers 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: Operators and Passengers
Preconditions	<ul> <li>The manager must be authenticated and logged into the system.</li> <li>A modification request from an operator or passenger must have been received.</li> <li>The system must be operational and accessible.</li> <li>The requested modification must require manager confirmation, as specified in the system settings.</li> </ul>

## Description of the Main Sequence

- *Step 1:* The system receives a modification request from an operator or passenger, 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 invalid or the modification request is unauthorized, the system rejects the modification and notifies the operator/passenger of the denial.
- *Step 7:* The use case concludes, providing feedback to the operator/passenger based on the outcome of the confirmation process.

- **Step 1:** The system receives a modification request from an operator or passenger, 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.
- *Step 5:* If the code is valid, the system prompts the manager to review the requested modification.
- *Step 6:* The manager reviews the modification request and decides whether to approve or reject it.
- *Step 7:* If the modification request is approved, the system updates the relevant records accordingly and notifies the operator/passenger of the approval.
- *Step 8:* If the modification request is rejected, the system notifies the operator/passenger of the denial.
- *Step 9:* The use case concludes, providing feedback to the operator/passenger 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 and maintain audit trails for accountability and regulatory compliance.

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.

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
Preconditions	<ul> <li>The manager must be authenticated and logged into the system.</li> <li>The system must be operational and accessible.</li> <li>System performance monitoring and usage statistics must be available and generated within the system.</li> <li>The manager must have the necessary permissions to access system performance and usage statistics.</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: The manager navigates to the system performance and usage monitoring section within the system.</li> <li>Step 2: The system presents a dashboard or interface displaying overall system performance metrics and usage statistics.</li> </ul>

- *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:** Based on the insights gained, the manager may take appropriate actions such as allocating additional resources, optimizing system configurations, or implementing performance enhancements.
- *Step 7:* The use case concludes, returning the manager to the main interface or allowing them to continue monitoring system performance and usage statistics as needed.

- *Step 1:* If the manager encounters authentication issues, the system prompts for re authentication before proceeding.
- *Step 2:* 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 3:* If the presented performance metrics or usage statistics appear inconsistent or inaccurate, the manager requests a system check or data validation from admins.
- *Step 4:* 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 5:* Should the manager require additional assistance in interpreting or understanding the displayed information, the

	<ul> <li>system offers contextual help or support resources.</li> <li>Step 6: In case the manager identifies potential issues or areas for improvement during the analysis, the system allows them to initiate corrective actions.</li> <li>Step 7: The use case concludes, returning the manager to the main interface or allowing them to continue monitoring system performance and usage statistics as needed.</li> </ul>
Non functional requirements	<ul> <li><i>Performance:</i> Ensure system performance and usage statistics load fast and scale effectively to handle increased user loads.</li> <li><i>Security:</i> Restrict access to authorized personnel, encrypt data, and maintain audit trails for accountability.</li> <li><i>Reliability:</i> Maintain high availability and perform regular backups for data recovery.</li> <li><i>Compliance:</i> Adhere to data privacy regulations and retention policies to ensure legal compliance.</li> </ul>
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.

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: Operators
Preconditions	<ul> <li>The annual performance review period must have commenced.</li> <li>Performance goals and evaluation criteria for staff must be established.</li> <li>Managers must be authenticated and authorized to conduct performance reviews.</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: Manager initiates the annual performance review process for staff by accessing the performance management module.</li> <li>Step 2: Manager retrieves performance data and metrics for each operator from the system.</li> <li>Step 3: Manager sets performance goals and establishes evaluation criteria based on the collected data and organizational objectives.</li> <li>Step 4: Manager conducts performance evaluations for each operator according to the established criteria.</li> <li>Step 5: Manager provides constructive feedback to operators regarding their performance, highlighting strengths and areas for improvement.</li> <li>Step 6: Manager identifies specific areas for improvement and</li> </ul>

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.

- *Step 1:* If the manager encounters difficulties accessing the performance management module, they contact technical support for assistance.
- *Step 2:* In case performance data and metrics are unavailable or incomplete, the manager requests additional data sources or reschedules the review process.
- *Step 3:* If the manager faces challenges in setting performance goals or evaluation criteria, they consult with admins.
- *Step 4:* Should there be disagreements between the manager and operators regarding performance evaluations, a mediation process may be initiated.
- *Step 5:* If staff members express concerns or seek clarification during feedback sessions, the manager addresses their queries and provides further explanation.
- *Step 6:* In the event of significant performance issues requiring immediate action, the manager may involve higher-level management or admins for further intervention.
- *Step 7:* The alternative performance review process concludes, with a review of lessons learned and potential process improvements for future reviews.

Non functional requirements	<ul> <li>Performance: Ensure prompt response and scalability of the performance management system.</li> <li>Security: Restrict access to authorized personnel and maintain robust user authentication mechanisms.</li> <li>Usability: Provide a user-friendly interface and clear guidance for efficient navigation.</li> <li>Reliability: Ensure high availability and data integrity through regular backups.</li> <li>Compliance: Adhere to data privacy regulations and organizational policies for performance management processes and documentation.</li> </ul>
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.

UC Name	UC - 605 Report and Analytics Access
Summary	This use case allows managers to access detailed reports and analytics within the system, facilitating informed decision-making processes.
Dependency	

Actors	Primary Actor: Manager
Preconditions	<ul> <li>The manager must be authenticated and logged into the system.</li> <li>The system must be operational and accessible.</li> <li>Detailed reports and analytics must be generated and available within the system.</li> <li>The manager must have the necessary permissions to access reports and analytics.</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: The manager navigates to the reports and analytics section within the system.</li> <li>Step 2: The system presents a list of available reports and analytics options.</li> <li>Step 3: The manager selects the desired report or analytics to view.</li> <li>Step 4: The system generates and displays the selected report or analytics data.</li> <li>Step 5: The manager analyzes the presented information to gain insights and make informed decisions.</li> <li>Step 6: If necessary, the manager may download or save the report or analytics data for further reference.</li> <li>Step 7: The use case concludes, returning the manager to the main interface or allowing them to continue accessing additional reports or analytics as needed.</li> </ul>
Description of the Alternative Sequence	• <i>Step 1:</i> If the manager encounters authentication issues, the system prompts for re authentication before proceeding.

- *Step 2:* In case of system errors or unavailability, the manager receives a notification and is prompted to retry accessing reports and analytics later.
- *Step 3:* If the selected report or 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 4:* If the manager encounters difficulties in understanding or interpreting the displayed information, the system provides additional explanations or guidance.
- *Step 5:* Should there be discrepancies or inconsistencies in the report or analytics data, the manager can request clarification or investigation from system administrators.
- *Step 6:* In case the manager needs to share the report or 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 reports and analytics.

# Non functional requirements

- *Performance:* Ensure reports and analytics load within 5 seconds 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.
- *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 reports and analytics, enabling them to make informed decisions based on the presented information.

UC Name	UC - 606 Incorporate Client Reviews
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: Manager
Preconditions	<ul> <li>Feedback Mechanism: The system must have a mechanism in place for clients to submit reviews or feedback about their experience.</li> <li>Client Interaction: Clients must have interacted with the system or its services to provide meaningful reviews or feedback.</li> <li>Access Permissions: Users involved in the incorporation of client reviews must have appropriate permissions to access and analyze the feedback data.</li> <li>Feedback Collection Infrastructure: The system should have infrastructure in place to collect, store, and manage client reviews</li> </ul>

	efficiently.
Description of the Main Sequence	<ul> <li>Step 1: Clients submit reviews or feedback through the designated feedback mechanism provided by the system.</li> <li>Step 2: Managers review and analyze the received feedback to identify common themes, trends, or areas for improvement.</li> <li>Step 3: Based on the analysis, prioritization, and decision-making process, relevant changes or enhancements are identified for incorporation into the system.</li> </ul>
Description of the Alternative Sequence	<ul> <li>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.</li> <li>Step 2: Managers manually gather feedback received through alternative channels and document them for analysis.</li> <li>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.</li> <li>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.</li> </ul>
Non functional requirements	<ul> <li>Scalability: System should handle multiple users without performance degradation.</li> <li>Availability: Maintain uptime, with minimal scheduled maintenance during off-peak hours.</li> </ul>

	• <i>Reliability</i> : 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.

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
Preconditions	<ul> <li>Availability of Flight Frequency Data: Flight frequency data must be accessible.</li> <li>Access Permissions: Users initiating the use case must have necessary permissions to access and integrate data.</li> <li>Data Compatibility: The system must be compatible with the format and structure of the flight frequency data.</li> <li>System Stability: The system must be stable and operational.</li> <li>Technical Resources: Adequate technical resources must be available for data integration.</li> </ul>

	Documentation and Requirements Clarification: Clear
	documentation and understanding of requirements are necessary.
Description of the Main Sequence	<ul> <li>Step 1: Access flight frequency data.</li> <li>Step 2: Validate compatibility of the data format and structure with the system.</li> <li>Step 3: Configure necessary permissions and settings for data integration.</li> <li>Step 4: Implement data integration procedures into the system.</li> <li>Step 5: Conduct testing to ensure accuracy and functionality of integrated data.</li> <li>Step 6: Provide documentation as needed for users accessing flight frequency data within the system.</li> <li>Step 7: Monitor ongoing data updates and system performance to maintain data accuracy and reliability.</li> </ul>
Description of the Alternative Sequence	<ul> <li>Step 1: If flight frequency data is unavailable, initiate communication with alternative data providers(e.g.operator).</li> <li>Step 2: Negotiate data access agreements and obtain necessary permissions.</li> <li>Step 3: Adapt data integration procedures to accommodate different data formats or structures from alternative sources.</li> <li>Step 4: Implement fallback mechanisms or error handling procedures in case of data inconsistencies or integration challenges.</li> <li>Step 5: Validate the quality and reliability of data obtained from alternative sources through thorough testing and validation processes.</li> </ul>

	<ul> <li>Step 6: Update documentation and inform relevant stakeholders about the use of alternative data sources.</li> <li>Step 7: Monitor the performance and accuracy of data obtained from alternative sources to ensure ongoing reliability and effectiveness.</li> </ul>
Non functional requirements  Postconditions	<ul> <li><i>Performance</i>: Ensure fast data processing and display.</li> <li><i>Scalability</i>: System should handle multiple users without performance degradation.</li> <li><i>Availability</i>: Maintain uptime, with minimal scheduled maintenance during off-peak hours.</li> <li><i>Reliability</i>: Ensure accurate data retrieval and display with built-in redundancy and failover mechanisms.</li> <li><i>Security</i>: Adhere to industry-standard security practices, including encryption, access controls, and regular audits.</li> <li>The system successfully integrates accurate and accessible flight frequency data, ensuring stability, updated documentation, user training if necessary, and ongoing monitoring for reliability.</li> </ul>

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
Preconditions	<ul> <li>The system is operational and accessible to the Manager.</li> <li>Sufficient data related to the flight booking process, including client reviews and flight frequency data, is available for analysis.</li> <li>The Manager has access to the statistical reports and intends to utilize the data, including flight frequency information, for analysis and decision-making purposes</li> <li>There are no ongoing system maintenance activities or technical issues that hinder report generation.</li> <li>The designated time period for generating monthly statistical reports has commenced (e.g., beginning of a new month).</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: The Manager accesses the system and selects the option to generate a monthly statistical report.</li> <li>Step 2: The system collects data on the flight booking process, including client reviews and flight frequency.</li> <li>Step 3: Using the collected data, the system generates a comprehensive report.</li> <li>Step 4: The Manager reviews and finalizes the report.</li> <li>Step 5: The system compiles and presents the report in a suitable format.</li> </ul>
Description of the Alternative Sequence	Step 1: The Manager accesses the system and navigates to the statistical reporting module.

	<ul> <li>Step 2: The Manager selects the option to generate a monthly statistical report.</li> <li>Step 3: The system encounters an error while collecting data on the flight booking process.</li> <li>Step 4: The system prompts the Manager with an error message indicating the issue.</li> <li>Step 5: The Manager attempts to troubleshoot the error by reinitiating the data collection process.</li> <li>Step 6: The system successfully collects the necessary data and proceeds with generating the report.</li> <li>Step 7: The Manager reviews and finalizes the report as usual.</li> <li>Step 8: The system compiles and presents the report in a suitable format.</li> </ul>
Non functional requirements	<ul> <li><i>Performance:</i> Fast response time, scalable for growth.</li> <li><i>Reliability:</i> High uptime, quick recovery from failures.</li> <li><i>Security:</i> Secure authentication, encrypted data.</li> <li><i>Maintainability:</i> Modular design, comprehensive documentation.</li> </ul>
Postconditions	The monthly statistical report for the flight booking process has been generated and is available for review by the Manager.

UC Name	UC - 609 Financial Reports and Performance Metrics
Summary	This use case involves managers accessing financial reports and

	performance metrics.
Dependency	
Actors	Primary actor: Manager Secondary actor: System
Preconditions	Managers are authenticated and have permissions to access the financial reports.
Description of the Main Sequence	<ul> <li>Step 1: Managers login into the system with the right credentials.</li> <li>Step 2: Managers are directed to the financial reports section.</li> <li>Step 3: They request the needed financial report or performance metric.</li> <li>Step 4: The system retrieves the requested financial data and generates the report or metric.</li> <li>Step 5: The system presents the report or metric in a user-friendly format (table, graphic,charts).</li> <li>Step 6: Managers analyze the presented data to gain insights in financial health and performance level.</li> </ul>
Description of the Alternative Sequence	If the system encounters an error and is unable to retrieve the required data, it displays an error message and managers attempt a troubleshooting or contact support(administrator) for solving the issue.
Non functional requirements	<ul> <li>Security: Access to financial reports and performance metrics should be restricted to authorized shareholders to maintain data confidentiality.</li> <li>Usability: The system interface for accessing financial reports should be intuitive and easy to navigate for shareholders.</li> </ul>

Postconditions	Managers have successfully accessed financial reports and performance
	metrics.

UC Name	UC - 610 Integrated Financial System
Summary	This use case involves the integration of an integrated financial system, which enables the management and tracking of financial transactions, budget allocations, expenditure monitoring, and financial reporting within the organization. The manager does this.
Dependency	
Actors	Primary Actor: Manager
Preconditions	<ul> <li>The integrated financial system must be installed and operational.</li> <li>The manager must be authenticated and logged into the system.</li> <li>Financial data and relevant information must be up-to-date and accessible within the system.</li> <li>The manager must have appropriate permissions and access rights to perform financial management tasks.</li> </ul>
Description of the Main Sequence	<ul> <li>Step 1: The manager initiates the use case by logging into the integrated financial system using their credentials.</li> <li>Step 2: Upon successful login, the manager navigates to the financial management module within the system.</li> </ul>

- *Step 3:* The manager selects the specific financial task they intend to perform, such as entering transactions, allocating budgets, or generating financial reports.
- **Step 4:** The manager enters the required financial data or parameters for the selected task.
- *Step 5:* The manager reviews and verifies the entered information for accuracy.
- *Step 6:* If applicable, the manager may need to obtain approvals or authorizations for certain financial actions.
- *Step 7:* Once all necessary data is entered and verified, the manager saves or submits the task within the system.
- *Step 8:* The system processes the submitted task and updates relevant financial records accordingly.
- *Step 9:* The manager receives a confirmation message indicating the successful completion of the task.
- *Step 10:* The manager may choose to perform additional financial tasks or logout from the system.

- *Step 1:* If the manager encounters difficulties logging into the integrated financial system, they contact technical support for assistance.
- *Step 2:* In case the financial management module is inaccessible or experiencing issues, the manager attempts to access it again later or notifies system administrators of the problem.
- *Step 3:* If the manager identifies errors or discrepancies in the financial data while performing tasks, they verify the accuracy of the data with relevant departments or personnel.
- Step 4: Should the manager require additional approvals or

authorizations for certain financial actions, they escalate the request to higher-level management or stakeholders. **Step 5:** If the system encounters technical issues while processing submitted tasks, such as data processing errors or system downtime, the manager reports the issue to system administrators for resolution. **Step 6:** In case the manager is unable to save or submit the task within the system due to unexpected errors or system limitations, they document the details of the task externally and notify system administrators for further assistance. **Step 7:** The alternative sequence concludes, with the manager adapting their approach based on the specific circumstances encountered and taking appropriate actions to ensure the completion of financial tasks. Non functional **Performance:** Ensure prompt system response and efficient task requirements processing to support user productivity. Security: Implement robust user authentication and data encryption mechanisms to safeguard financial data. Usability: Provide an intuitive user interface and clear error messages for easy navigation and problem resolution. **Reliability:** Maintain high system availability and implement backup mechanisms for data integrity and continuity. Compliance: Adhere to financial regulations, maintain audit trails, and ensure accurate reporting for legal compliance. **Postconditions** At the end of the use case, all financial tasks requested by the manager have been successfully completed and recorded in the integrated

financial system, ensuring accurate financial data and compliance with
organizational standards and procedures.