

# **Airline Reservation System**

## **Domain Analysis:**

The Airline Reservation System for Ootumlia Airlines will be responsible for managing reservations for sightseeing flights from Java Valley to various destinations. The system will keep track of passengers and their assigned seats on different flights, as well as crew members and their roles on each flight.

The system will also need to keep track of what each crew member is responsible for and who supervises them. Additionally, the system will need to be flexible to accommodate future expansion plans, including the addition of a frequent-flyer program.

## **The system will be responsible for the following functions:**

1. **Flight Management:** The system will be responsible for managing daily scheduled flights and keeping track of flight details such as departure and arrival times, flight duration, and available seats.
2. **Reservation Management:** The system will manage passenger reservations, including assigning seats and collecting payment.
3. **Crew Management:** The system will manage crew assignments and keep track of crew members' roles and responsibilities on each flight.
4. **Frequent Flyer Program:** The system will provide a frequent flyer program for customers that offers rewards and incentives for flying with Ootumlia Airlines.

## Functional Requirements:

Requirement ID	Statement
FR01	The system should allow users to view flight schedules and availability
FR02	The system should allow users to book flights for specific dates and times.
FR03	The system should keep track of available seats on each flight.
FR04	The system should allow users to cancel or modify their flight reservations.
FR05	The system should allow users to select their preferred seats.
FR06	The system should collect payment for flight reservations.
FR07	The system should generate and send confirmation emails to users who have made a reservation.
FR08	The system should allow the airline staff to assign crew members to specific flights.
FR09	The system should keep track of each crew member's role and responsibilities.
FR10	The system should provide information on each crew member's supervisor.
FR11	The system should allow users to enroll in the frequent flyer program.
FR11	The system should keep track of each user's flight history.
FR12	The system should provide rewards and incentives to frequent flyers.

## Non-Functional Requirements:

Requirement ID	Statement
Security	<ul style="list-style-type: none"><li>• The system should ensure that customer and staff data is secure and protected.</li><li>• The system should authenticate users to ensure that only authorized users can access sensitive information.</li></ul>
Scalability	<ul style="list-style-type: none"><li>• The system should be able to accommodate future growth and expansion of the airline's operations.</li><li>• The system should be able to handle an increasing number of flight reservations and users.</li></ul>
Reliability	<ul style="list-style-type: none"><li>• The system should be available at all times to ensure that customers can make reservations and access information.</li><li>• The system should be able to recover quickly from any system failures or crashes.</li></ul>
Usability	<ul style="list-style-type: none"><li>• The system should be easy to use and navigate for both customers and staff.</li><li>• The system should provide clear and concise information to users at all times.</li></ul>