Software Requirements Specification for Airline Reservation System

### Overnight Developers Squad -ODS

### IEEE Std. 830-1998

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# Introduction

## Purpose

The purpose of this document is to outline the requirements for the Airline Reservation System (ARS). The objective is to provide a robust and flexible system capable of handling a variety of necessary functions for flight reservations.

## Scope

The ARS will facilitate the booking of flights, payment processing, ticket management, and additional services for passengers. It will support multiple payment methods, manage baggage options, and provide users with ticket history and seasonal offers.

## Definitions, Acronyms, and Abbreviations

* + - **ARS**: Airline Reservation System
    - **SRS**: Software Requirements Specification

## References

IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications.

## Overview

This SRS document includes the functional and non-functional requirements for the ARS, detailing the main functionalities and additional features to ensure a comprehensive booking experience for users.

# Overall Description

## Product Perspective

The ARS is a standalone system designed to be integrated with existing airline management software to provide seamless booking and management services for both the airline staff and passengers.

## Product Functions

The main functions of the ARS include:

* + - Flight booking
    - Payment processing
    - Ticket management
    - Baggage handling
    - Seasonal offers
    - User account management

## User Characteristics

The users of the ARS include passengers, airline staff, and system administrators with varying levels of access and functionality based on their roles.

# Functional Requirements

## Main Requirements

F1. The system must primarily have a departure and an arrival date and ask for the number of people that are traveling for making the booking.

F2. The system must include different methods of payment such as Credit or Debit Card, PayPal, etc.

F3. The system must have the option of sending the ticket to the user’s per- sonal email and allowing them to view their ticket history.

F4. The system must allow the user to add more baggage at will, such as carry-on baggage or checked baggage.

F5. The system must contemplate the offers that may appear during certain seasons.

F6. The system must let users with a high-class ticket make changes of date.

F7. The system must have extra functionalities such as the status of the e- ticket, the ticket’s origin, and its destination. The system must have an extra Q&A section for new users.

F8. The system must have two ticket classes (for the moment): tourist and business.

F9. The system must let the user know which airline they are traveling with (random assignment for now).

# Non-Functional Requirements

## Performance Requirements

The system must handle a large number of concurrent users and transactions without significant performance degradation.

## Safety Requirements

The system must ensure the security of user data, including personal information and payment details.

## Security Requirements

The system must comply with industry standards for data protection and payment processing.

## Software Quality Attributes

The system must be reliable, maintainable, and scalable to accommodate future enhancements and increased user load.