A close up of a logo

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**Senior Software Quality Control Engineer**

Flight Management System

## PURPOSE

The purpose of this document is to build an online system to manage flights and passengers to ease the flight management.

## PROJECT SCOPE

The purpose of the online flight management system is to ease flight management and to create a convenient and easy-to-use application for passengers, trying to buy airline tickets. The system is based on a relational database with its flight management and reservation functions. We will have a database server supporting hundreds of major cities around the world as well as thousands of flights by various airline companies. Above all, we hope to provide a comfortable user experience along with the best pricing available.

## PRODUCT PERSPECTIVE

A distributed airline database system stores the following information.

* **Flight details:**  
  It includes the originating flight terminal and destination terminal, along with stops in between, the number of seats booked/available seats between two destinations etc.
* **Customer description:**  
  It includes customer code, name, address and phone number. This information may be used for keeping the records of the customer for any emergency or for any other kind of information
* **Reservation description:**  
  It includes customer details, code number, flight number, date of booking, date of travel.

## USER CLASS and CHARACTERISTICS

Users of the system should be able to retrieve flight information between two given cities with the given date/time of travel from the database. A route from city A to city B is a sequence of connecting flights from A to B such that:

* there are at most two connecting stops, excluding the starting city and destination city of the trip,
* the connecting time is between one to two hours.

The system will support two types of user privileges, Customer, and Employee. Customers will have access to customer functions, and the employees will have access to both customer and flight management functions.

### Customer

The customer should be able to do the following functions:

* Make a new reservation
  + One-way
  + Round-Trip
  + Multi-city
  + Flexible Date/time
  + Confirmation
* Cancel an existing reservation
* View their itinerary

### Employee

The Employee should have following management functionalities:

* Customer Functions:
  + Get all customers who have seats reserved on a given flight.
  + Get all flights for a given airport.
  + View flight schedule.
  + Get all flights whose arrival and departure times are on time/delayed.
  + Calculate total sales for a given flight.
* Administrative
  + Add/Delete a flight
  + Add a new airport
  + Update fare for flights.
  + Add a new flight leg instance.
  + Update departure/arrival times for flight leg instances.

Each flight has a limited number of available seats. There are a number of flights which depart from or arrive at different cities on different dates and time.

# Quality Technical Assessment

**The above is a** *Requirement Specifications Document of a Flight Management System***, and you are kindly requested to perform the following Quality tasks:**

**T1:** Requirements Review

**T2:** Test Case Design & Traceability Matrix

**T3:** Sample Test Cases writing.