Air-Ticket Reservation System

“SEARCH FLIGHT” Module

Functional Specification Document

1.0 DOCUMENT PURPOSE

This document illustrates the functional specification of the Air-Ticket Reservation System (ARS) application. ARS a system which is used to book ticket for flight.The following are the few important modules in the system

a) Customer Registration

b) Searching

c) Booking

d) Edit Profile

e) Cancellation

This document details out the requirements for SEARCH-ing flights. The details for the other modules will be given in the respective modules functional specification.

2.0 Search Profile use case

This use case will be used by the customers to search into the system for flights based on different parameters.

2.1.1 Search Profile use case details

Trigger: Customers triggers the functionality once he/she submits the details into the system

Pre-Conditions / Assumptions:

- In the Search screen all the location should be populated from the database.

Post Conditions:

- All matching profiles should be displayed in the search result page and the searched data should be fed into the Search_Temp_Master table.

Success End Condition: Display the search result in the **Search result Screen** Page.

Failed End Condition: The system should throw an error message if any one or more of the validations (refer to EOD[1]) fail. The error messages and error codes need to be identified during design. The validation and business rules are mentioned in the business rules section.

Steps & Actions:

1. System should display all the necessary fields in the screen.
2. System need to populate the locations field.
3. All the necessary validation should be done.
4. System needs to store search result in the search_temp_master.
5. Identify the FLIGHT_MASTER table storing the flight details, AIRLINES_MASTER table storing the airline details and LOCATION_MASTER table storing the locations.

Table: FLIGHT_MASTER

F_NO	A_ID	TOT_SEATS	SRC	DEST	DEPART_TIME	FARE
F1	A1	100	Kolkata	Delhi	07:30	7000
F2	A1	100	Delhi	Kolkata	06:30	7500
F3	A2	100	Chennai	Mumbai	16:30	8000
F4	A2	100	Mumbai	Chennai	08:30	7500
F5	A3	100	Kolkata	Mumbai	13:00	5000
F6	A3	100	Mumbai	Kolkata	14:00	6000
F7	A4	100	Chennai	Delhi	03:00	6500
F8	A4	100	Delhi	Chennai	09:00	8900
F9	A1	100	Kolkata	Chennai	10:00	9000
F10	A2	100	Mumbai	Delhi	11:00	7600
F11	A3	100	Delhi	Mumbai	19:30	4500
F12	A4	100	Mumbai	Delhi	20:00	8000

Table: AIRLINES_MASTER

A_ID	A_NAME	DOP
A1	Indigo	23.01.2000
A2	Kingfisher	24.02.2001
A3	Jet Airways	25.03.2002
A4	Spice Jet	26.04.2003

Table: LOCATION_MASTER

LOCATION_ID	LOCATION_NAME
1	Kolkata
2	Delhi
3	Chennai
4	Mumbai

Table: SEATS_AVAILABLE

F_NO	AVA_SEATS	DEPT_DATE
F1	91	01-Jan-2012
F2	92	10-Jan-2012
F3	93	30-Jan-2013
F4	40	4-Aug-2013

Business Rules & Validations:

- Leaving from and Going To location cannot be same.
- Departure date should be future date only.
- Departure Date cannot be more than one date.
- Departure Date should be in the format dd-mon-yy.
- Departure Time should be in the format HH:MM.
- Departure Time cannot be more than 24 hours.
- Departure Time should be in number.
- Seat to be booked should be in number.
- Seat to be booked cannot be more than 20.
- Available seats must be greater than equals to the seat to be booked for that departure date.
- After clicking on the "**Show flights**" button:
  - ➔ Load the search items in the system.
  - ➔ If the flight is not available then the system throws an exception.

3.0 Search Screen:

This should capture the following fields

- Leaving form –flight take off.
- Going to- flight arrival.
- Departure Date-flight departure date.
- Departure Time –flight departure time.
- Seat to book – Number of seat to book.
- Show Flights – Submit Button used to search the flight.

4.0 Search Result Screen:

The search result should be displayed in a tabular format like the below table:

Flight	Airlines Name	Departs From	Departure Time	Arrives	Arrival Time	Fare
F_191	Air India	Kolkata	6:50	Delhi	7:30	2030

[1] End of document