Air Ticket Reservation System

“TICKET BOOKING” Module

Functional Specification Document

1.0 DOCUMENT PURPOSE

This document illustrates the functional specification of the Airline Reservation System (AMS) application. AMS 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 booking. The details for the other modules will be given in the respective modules functional specification.

2.0 Booking use case

This use case will be used by the customer to booking ticket into the system for different flight.

2.1.1 Booking use case details

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

Pre-Conditions / Assumptions:

- There should be at least one search result depending on the search criteria.

Post Conditions:

- Booking details should be displayed in the invoice page and the booking data should be store into the system.

Success End Condition: If booking successful produces the invoice, display the invoice in the screen.

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. Registered user logs in to the system.
2. Search for flight with Source and destination location, departure time and date and required seats.
3. System need to render the flights depending on search criteria.
4. All the necessary validation should be done.
5. User will select one of the flights and proceed for booking.
6. Booking will generate a pro-forma invoice with all the booking information.
7. System needs to generate the booking id and store the booking details once confirm the pro-forma invoice.
8. Reduce the available seats for the booked flight for the departure date.

9. Identify the table for storing the booking details and generate the invoice of booking.
10. Clear all the data of SEARCH_TEMP_MASTER table.

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

Table: CUSTOMER_INFO

CName	Cid	Dob	Address	Phno	Email	Password	Ssn_type	Ssn_no
Biswa	1234	23-Nov-85	Kolkata	9830428452	g.visu@gmail.com	pass	PAN	PQC4578M89
Sajal	1235	26-Jan-85	Assam	9835678958	g.saja@in.com	pword	Driving Licence	K9565421
Sam	1236	26-Jan-87	Pune	9835678959	g.sam@in.com	prd	Passport	J890YUJK

Business Rules & Validations:

- Email id and password fields cannot be blank.
- Email Id must be contains @ and. symbol.
- Password must be containing alpha numeric values.
- 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.
- Number of passengers should be in number.
- Number of passengers cannot be more than 20.
- Available seats must be greater than equals to the seat to be booked for that departure date.
- After clicking the booking button :
  - ➔ Generate the booking id.
  - ➔ Load the booking id and booking details in the system.
  - ➔ Generate Invoice.

3.0 Home Screen:

On Home screen there should be search flight hyperlink. Refer to req# 2.

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	Action
F_191	Air India	Kolkata	6:50	Delhi	7:30	2030	Book(Click here to book)

5.0 Pro-forma Invoice Screen

- Customer Name– Represents the customer name.
- Airline Name - Represents the Airline Types provide by system.
- Leaving form - Represents the source location of flight tack up.
- Going To – Represents the designation location of flight landing.
- Number of passengers – Represents the No of person to journey in the flight.
- Date of journey – Represents the date of journey.
- Departure Time - Represents the departure time of flight.
- Booking Date – Represents the booking date.
- Total price - Represents the total price to be paid by customer.
- Confirm button.
- Cancel button. Cancel should take the user to search result screen.

6.0 Final invoice Screen

- Customer Name– Represents the customer name.
- Booking ID – For future reference
- Airline Name - Represents the Airline Types provide by system.
- Leaving form - Represents the source location of flight take up.
- Going To – Represents the designation location of flight landing.
- Number of passengers – Represents the No of person to journey in the flight.
- Date of journey – Represents the date of journey.
- Departure Time - Represents the departure time of flight.
- Booking Date – Represents the booking date.
- Total price - Represents the total price payment by customer.

[1] End of document