Use Case Specification

DMT/RM01/TMP

|  |  |
| --- | --- |
| Project Code | PRJ\_FlyWithMeAirline\_102 |
| Project Name | FlyWithMe Airline System |

|  |  |  |
| --- | --- | --- |
| Prepared/Modified by | Role | Date of Preparation |
| Amit Pandit | Test Engineer | 20th December, 2017 |
| Reviewed by | Role | Date of Review |
| Smita Sharma | Test Lead | 22nd December, 2017 |
| Approved by | Role | Date of Approval |
| Shubhangi Bharti | Test Manager | 24th December, 2017 |
| Circulation List |  | Version Number of the template:1.1 |
| Version Number | 1.1 |  |

<<Customer>> REVIEW HISTORY

<<Customer comments on the Use case along with the signed off is tracked here>>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Version | <<Version number>> |  |  |  |  |  |
| Date | <<Date of Review>> |  |  |  |  |  |
| Reviewed by | << Reviewer Name>> |  |  |  |  |  |
| Reviewed UI Specification doc | << Whether UI Specification doc is reviewed >> |  |  |  |  |  |
| All Open Queries/issues closed | << Whether all the open queries and issues resolved>> |  |  |  |  |  |
| Agreement on Assumptions | <<Whether all the assumptions have been agreed upon by the customer>> |  |  |  |  |  |
| Sign Off | <<Signature>> |  |  |  |  |  |

Disclaimer:

The scope of the project ‘FlyWithMe Airline System’ is restricted to the contents of this signed off use case.

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1. Use Case Name: Online Airline Flight Ticket Booking

**Use Case ID:**  FWMAS.CUSTOMER.BOOKTICKET.UC276

**Brief Description:** This Use Case describes the process by which a customer can book a flight ticket

online.

1. Actor(s)

Customer

1. Preconditions
2. Customer is already registered with the airline’s wbsite.
3. Customer has valid user credentials.
4. Customer has already logged into the airline’s website.
5. Flow of Events

4.1 Basic Flow

Name: Successful Online Booking of Flight Ticket

1. Customer enters From City
2. Customer enters To City
3. Customer enters Departure Date
4. Customer enters No. of Tickets
5. Customer selects currency name
6. Customer clicks on Search Flights button
7. System displays the list of available flights
8. Customer selects the preferred flight option
9. Customer clicks on the Book Ticket button
10. Customer provides payment details
    1. Alternative Flows

4.2.1 Alternate Flow 1: Successful Online booking Of Flight Ticket For Round Trip

1. Customer enters From City
2. Customer enters To City
3. Customer enters Departure Date
4. Customer enters Return Date
5. Customer enters No. of Tickets
6. Customer selectes currency name
7. Customer clicks on Search Flights button
8. System displays the list of available flights
9. Customer selects the preferred flight options
10. Customer clicks on the Book Ticket button
11. Customer provides payment details

4.2.2 Alternate Flow 2: Successful Online booking Of Flight Ticket For Round Trip With Family & Friends Option Selected

1. Customer enters From City
2. Customer enters To City
3. Customer enters Departure Date
4. Customer enters Return Date
5. Customer enters No. of Tickets
6. Customer selectes currency name
7. Customer selectes Family and Friends option
8. Customer clicks on Search Flights button
9. System displays the list of available flights
10. Customer selects the preferred flight options
11. Customer clicks on the Book Ticket button
12. Customer provides payment details

4.2.3 Alternate Flow 3: Successful Online booking Of Flight Ticket ound Trip Without Providing Optional Currency Details

1. Customer enters From City
2. Customer enters To City
3. Customer enters Departure Date
4. Customer enters Return Date
5. Customer enters No. of Tickets
6. Customer selectes Family and Friends option
7. Customer clicks on Search Flights button
8. System displays the list of available flights
9. Customer selects the preferred flight options
10. Customer clicks on the Book Ticket button
11. Customer provides payment details
    1. Exception Flows
       1. Exception Flow 1: Failed To Book Flight Ticket Due to Unavailability of the Flights
12. Customer enters From City.
13. Customer enters To City.
14. Customer enters Departure Date.
15. Customer enters No. of Tickets.
16. Customer selectes currency name.
17. Customer clicks on Search Flights button.
18. The system displays error message regarding non-availability of the flight for the specified source & the destination city.
    * 1. Exception Flow 2: Failed To Book Flight Ticket Due to Available Flight Details Not Matching With The Customer Travel Preferences
19. Customer enters From City.
20. Customer enters To City.
21. Customer enters Departure Date.
22. Customer enters No. of Tickets.
23. Customer selects currency name.
24. Customer clicks on Search Flights button.
25. System displayes list of available flights.
26. Customer does not book the ticket due to flight details not matching with his travel preferences.
    * 1. Exception Flow 3: Failed To Book Flight Ticket Due to Leaving Departure Date Empty
27. Customer enters From City.
28. Customer enters To City.
29. Customer leaves Departure Date field empty.
30. Customer enters No. of Tickets.
31. Customer selects currency name.
32. Customer clicks on Search Flights button.
33. System displayes an error message about leaving mandatory field Departure Date empty.
    * 1. Exception Flow 4: Failed To Book Flight Ticket Due to Providing Invalid Input InTo No. Of Tickets field
34. Customer enters From City.
35. Customer enters To City.
36. Customer enters Departure Date.
37. Customer enters characters in No. of Tickets field.
38. Customer selects currency name.
39. Customer clicks on Search Flights button.
40. System displayes an error message about entering invalid input in the No. of Tickets field.
    * 1. Exception Flow 5: Failed To Book Flight Ticket Due to Network Error
41. Customer enters From City.
42. Customer enters To City.
43. Customer enters Departure Date.
44. Customer enters No. of Tickets field.
45. Customer selects currency name.
46. Customer clicks on Search Flights button.
47. System displays an error message about Network Failure.
    * 1. Exception Flow 6: Failed To Book Flight Ticket Due to Database Error
48. Customer enters From City.
49. Customer enters To City.
50. Customer enters Departure Date.
51. Customer enters No. of Tickets field.
52. Customer selects currency name.
53. Customer clicks on Search Flights button.
54. System displays an error message about database error.
    * 1. Exception Flow 7: Failed To Book Flight Ticket Due to WebServer Error
55. Customer enters From City.
56. Customer enters To City.
57. Customer enters Departure Date.
58. Customer enters No. of Tickets field.
59. Customer selects currency name.
60. Customer clicks on Search Flights button.
61. System displays an error message about WebServer error.
62. Post Conditions

| Flow Name | Post Condition |
| --- | --- |
| Successful online booking of flight ticket | The customer is able to successfully book the flight ticket online. |
| Successful online booking of flight ticket for round trip | The customer is able to successfully book the flight ticket online for round trip. |
| Successful online booking of flight ticket for round trip with family & friends option selected | The customer is able to successfully book the flight ticket online for round trip along with the family and friends option. |
| Successful online booking of flight ticket without providing optional currency details | The customer is able to successfully book the flight ticket online without entering optional currency details. |
| Failed to book flight ticket due to unavailability of the flights | The system should display an error message regarding unavailability of the flights as per the search criterion. |
| Failed to book flight ticket due to available flight details not matching with the customer travel preferences | The customer is not able to book the flight ticket online due to available flight details not matching with the customer preference. |
| Failed to book flight ticket due to leaving departure date empty | The system should display an error message regarding mandatory field left empty. |
| Failed to book flight ticket due to providing invalid input into no. Of tickets field | The system should display an error message regarding invalid data input in the No of Tickets field. |
| Failed to book flight ticket due to network error | The system should display an error message regarding network error. |
| Failed to book flight ticket due to database error | The system should display an error message regarding database error. |
| Failed to book flight ticket due to WebServer error | The system should display an error message regarding WebServer error. |

1. Special Requirements

Performance

1. The system should display the list of available flights within 5 seconds from the time he has clicked on Search Flights button.

Availability

* 1. The customer should be able to do online booking of the flight tickets 24\*7 and on all days.

User Interface

* 1. The letters on Menus shall be bold
  2. The active links should be displayed in red color
  3. The visited links should be displayed in purple color
  4. The unvisited links should be displayed in blue
  5. The logout and back button should be available on every page of the application
  6. Look and feel and color of application should be proper.
  7. In case of Field level validation error messages should be displayed in red color.

Security

1. The system shall display the letters of PIN numbers in a masked format when they are entered by the customer.
2. Customer login should not have admin rights
3. After clicking on back on browser it should take you back to the previous page in the list
4. After clicking on Forword on browser it should take you forword to the next page in the list.
5. User Session should get expire if user is inactive for 10 mins.
6. Extension Points

<<Mention the Extension points of the use case.>>

* + 1. <Name of extension point>

<<Use extension points to specify the point of an extended use case where an extending use case's behaviour should be inserted>>

1. Business Rules

| Business Rule Name | Business Rule Description | System action (if BR fails) |
| --- | --- | --- |
| BR01 | The customer should enter Departure Date in the dd/mm/yyyy format. | The system should display an error message to the user regarding incorrect date format. |
| BR02 | The customer should enter Return Date in the dd/mm/yyyy format. | The system should display an error message to the user regarding incorrect date format. |
| BR03 | The customer should enter Return Date if Round Trip option is selected by the customer while booking the flight ticket. | The system should display an error message to the user if Return Date is not entered for Round Trip option of booking flight ticket. |

1. Diagrams
   * 1. Use Case Diagram
     2. Activity Diagram

<< Activity Diagram gives the high level interaction between the user, system and sub systems. Ideally only one activity diagram should be made per use case. >>

1. Scenarios

Success Scenarios

* Basic Flow

1. Successful online booking of flight ticket

* Alternate Flow

1. Successful online booking of flight ticket for round trip with family & friends option selected
2. Successful online booking of flight ticket without providing optional currency details

Failure Scenarios

* Exception Flow

1. Failed to book flight ticket due to unavailability of the flights
2. Failed to book flight ticket due to available flight details not matching with the customer travel preferences
3. Failed to book flight ticket due to providing invalid input into no. Of tickets field
4. Failed to book flight ticket due to database error
5. Failed to book flight ticket due to WebServer error
6. Issues
7. UI Specifications

<< Provide a link to the UI specification document of the Use case. Please don’t embed the document here>>

1. Inter System Dependencies

<<Mention the related functionality within the application that is impacted because of this use case. E.g variable or value settings in this use-case which will have a direct impact on the functionality of another use-case. Or vice-versa.>>

**Module:** <<Specify the Module, which will get impacted because of this use case>>

Use case name: <<Use case Name>>

**Impact**: <<Mention the impact on the above mentioned Use case because of this use case>>

1. Integration with an already existing System of the <<Customer>>

<< This is especially applicable if the project at hand is an enhancement to an existing system.>>

**Module:** <<Specify the Module, which will get impacted because of this use case>>

**Entity:** <<List down the entities, which can be impacted because of this use case>>

**Information: <<**Mention the Impact in brief. >>

1. Assumptions
2. FlyWithMe Airline application is up & running.
3. Customer should have latest version of browser for best view of site
4. There should be a stable internet connectivity for smooth execution of process

REVISION HISTORY OF THE WORK PRODUCT

<to be maintained by projects>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Date | Version # | Section Changed | Details of changes made | Approved By |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |