Use Case Specification

DMT/RM01/TMP

|  |  |
| --- | --- |
| Project Code | PRJ\_ARS\_007 |
| Project Name | FlyWithMe Airline Reservation System |

|  |  |  |
| --- | --- | --- |
| Prepared/Modified by | Role | Date of Preparation |
| Team 1 | Test Team | 02/01/2018 |
| Reviewed by | Role | Date of Review |
| Akshata | Test Engineer | 06/01/2018 |
| Approved by | Role | Date of Approval |
| Praveen M.P. | Test Engineer | 07/01/2018 |
| Circulation List |  | Version Number of the template:1.1 |
| Version Number |  |  |

<<Customer>> REVIEW HISTORY

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Version | 1.1 |  |  |  |  |  |
| Date | 02/01/2018 |  |  |  |  |  |
| Reviewed by | Team 1 |  |  |  |  |  |
| Reviewed UI Specification doc | Yes |  |  |  |  |  |
| All Open Queries/issues closed | Yes |  |  |  |  |  |
| Agreement on Assumptions | Agreed |  |  |  |  |  |
| Sign Off | <<Signature>> |  |  |  |  |  |

Disclaimer:

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

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1. Use Case Name: AirLine Customer

**Use Case ID:**  UC.ARS\_Customer\_03

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

1. Actor(s)

* Customer

1. Preconditions

* Customer is aware about the ARS URL.
* Customer has opened the ARS web application already.

1. Flow of Events

4.1 Basic Flow

**Name:** Successful Online Booking of Flight Ticket

1. Customer opens the Browser and goes to the application page by entering valid URL.
2. Customer clicks on Book Flight.
3. Book Flights page is displayed.
4. Customer enters From City.
5. Customer enters To City
6. Customer enters Departure Date
7. Customer clicks on Search Flights button
8. System displays the list of available flights
9. Customer selects the preferred flight option
10. Customer enters No. of Tickets
11. Customer selects the class: Economy or Business.
12. Customer clicks on the Book Ticket button.
13. Payment details page is displayed.
14. Customer makes successful payment.
15. Message is displayed: Reservation is made successfully.

1. Alternative Flows

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

1. Customer opens the Browser and goes to the application page by entering valid URL.
2. Customer clicks on View Flights.
3. Available flights page is displayed.
4. Customer clicks on Book button on corresponding flight.
5. Choice page is displayed.
6. Customer enters No. Of Passengers.
7. Customer selects class.
8. Customer clicks Submit button.
9. Payment page is displayed.
10. Customer makes successful payment.
11. Message is displayed: Reservation is made successfully.

1. Exception Flows

Exception Flow 1: Failed To Book Flight Ticket Due to Unavailability of the Flights

1. Customer enters From City.
2. Customer enters To City.
3. Customer enters Departure Date.
4. Customer enters No. of Tickets.
5. Customer selectes currency name.
6. Customer clicks on Search Flights button.
7. The system displays error message regarding non-availability of the flight for the specified source & the destination city.

Exception Flow 2: Failed To Book Flight Ticket Due to Available Flight Details Not Matching With The Customer Travel Preferences

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 displayes list of available flights.
8. Customer does not book the ticket due to flight details not matching with his travel preferences.

Exception Flow 3: Failed To Book Flight Ticket Due to Leaving Departure Date Empty

1. Customer enters From City.
2. Customer enters To City.
3. Customer leaves Departure Date field empty.
4. Customer enters No. of Tickets.
5. Customer selects currency name.
6. Customer clicks on Search Flights button.
7. System displayes an error message about leaving mandatory field Departure Date empty.

Exception Flow 4: Failed To Book Flight Ticket Due to Providing Invalid Input InTo No. Of Tickets field

1. Customer enters From City.
2. Customer enters To City.
3. Customer enters Departure Date.
4. Customer enters characters in No. of Tickets field.
5. Customer selects currency name.
6. Customer clicks on Search Flights button.
7. System displayes an error message about entering invalid input in the No. of Tickets field.

Exception Flow 5: Failed To Book Flight Ticket Due to Network Error

1. Customer enters From City.
2. Customer enters To City.
3. Customer enters Departure Date.
4. Customer enters No. of Tickets field.
5. Customer selects currency name.
6. Customer clicks on Search Flights button.
7. System displays an error message about Network Failure.

Exception Flow 6: Failed To Book Flight Ticket Due to Database Error

1. Customer enters From City.
2. Customer enters To City.
3. Customer enters Departure Date.
4. Customer enters No. of Tickets field.
5. Customer selects currency name.
6. Customer clicks on Search Flights button.
7. System displays an error message about database error.

Exception Flow 7: Failed To Book Flight Ticket Due to WebServer Error

1. Customer enters From City.
2. Customer enters To City.
3. Customer enters Departure Date.
4. Customer enters No. of Tickets field.
5. Customer selects currency name.
6. Customer clicks on Search Flights button.
7. System displays an error message about WebServer error.

1. 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. |

1. Special Requirements

Performance

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

Availability

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

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.

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.

1. Extension Points

1. Business Rules

| Business Rule Name | Business Rule Description | System action (if BR fails) |
| --- | --- | --- |
| *BR\_06* | *The customer can view the available flights* | *The system should display an error message to the user that page is not available.* |
| *BR\_07* | *The customer can request for flight ticket.* | *The system should display an error message to the user that page is not available.* |
| *BR\_08* | *The customer must be able to make payment online.* | *The system should display an error message to the user that payment page cannot be opened. Please try again later.* |
| *BR\_09* | *The customer can modify or cancel his ticket after making payment.* | *The system should display an error message to the user that page is not available.* |
| BR\_10 | The customer should enter Date in the dd/mm/yyyy format. | The system should display an error message to the user regarding incorrect date format. |
| BR\_11 | 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

Use Case Diagram



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

1. Issues

* What if the HTTP session not created.
* What if the user is able to access the page of the application by simply entering the URL of that page on the address bar of the browser.

1. UI Specifications

<http://ndafile:8081/AirlineReservationSystem/>

1. Inter System Dependencies

Module:

Use case name:

Impact:

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 |  |  |  |  |  |