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| Test Case | Features | Description | Test Steps | Expected Result | Test Results [PASSED/FAILED] | Remarks |
| 1.1.1 | (+) Search with valid dates | Verify that the search form accepts valid departure and return dates within the next two years and displays available flights. | 1. Select a departure date within the next two years (July or December). 2. Select a return date within six months of the departure date. 3. Click the search button. | The system should display available flights with the message “Seats available! Call 0800 MARSAIR to book!” if seats are available. |  |  |
| 1.1.2 | (+) Search with valid dates when no seats available | Verify that the system correctly handles situations where there are no seats available on selected flights. | 1. Select a departure date within the next two years (July or December). 2. Select a return date within six months of the departure date. 3. Click the search button. | The system should display “Sorry, there are no more seats available.” |  |  |
| 1.2.1 | (-)Search with departure and return dates outside the next two years | Verify that the system rejects searches for flights scheduled beyond the next two years. | 1. Select a departure date more than two years from the current date. 2. Select a return date more than two years from the departure date. 3. Click the search button. | The system should display an error message like “Flights for this date range are unavailable.” |  |  |
| 1.3.1 | (-) Search with exactly 6 months between departure and return | Verify that the system allows searches with a return date exactly 6 months from the departure date. | 1. Select a departure date within the next two years (July or December). 2. Select a return date exactly 6 months from the departure date. 3. Click the search button. | The system should show available flights if seats are available. |  |  |
| 2.2.1 | (+) Enter a valid promotional code | Verify that a valid promotional code correctly applies the discount and shows the success message. | 1. Enter a valid promotional code like "AF3-FJK-418". 2. Perform the search. | The system should display the message “Promotional code AF3-FJK-418 used: 30% discount!” |  |  |
| 2.2.2 | (-)Enter a promotional code with incorrect check digit | Verify that a promotional code with an incorrect check digit is considered invalid. | 1. Enter a promotional code like "JJ5-OPQ-320". 2. Perform the search. | The system should show an error message “Sorry, code JJ5-OPQ-320 is not valid.” |  |  |
| 2.3.1 | (-)Enter a promotional code with maximum length | 1. Verify that the system can handle the maximum allowable length for a promotional code. | 1. Enter a promotional code of maximum length like "AF3-FJK-9999".  2. Perform the search. | The system should process the code correctly and apply the appropriate discount. |  |  |
| 3.1.1 | (+)Click on "Book a ticket to the red planet now!" link | Verify that clicking the "Book a ticket to the red planet now!" link navigates to the home page. | Click on the "Book a ticket to the red planet now!" link. | The user is directed to the home page. |  |  |
| 3.1.2 | (+) Click on the MarsAir logo | Verify that clicking the MarsAir logo navigates to the home page. | Click on the MarsAir logo in the top left corner. | The user is directed to the home page. |  |  |
| 3.2.1 | (-)Verify incorrect URL navigation | Verify that if an incorrect URL is typed, the user is not redirected to the home page. | 1. Manually enter an invalid URL. 2. Attempt to navigate back to the home page using the links. | The system should display a "Page not found" error. |  |  |
| 4.1.1 | (+) Select valid return date | Verify that when the return date is more than 1 year from the departure, the system accepts it. | 1. Select a departure date. 2. Select a return date that is more than 1 year from the departure. 3. Click the search button. | The search should proceed without errors. |  |  |
| 4.2.1 | (-) Select return date less than 1 year from departure | Verify that the system prevents searching for trips with return dates less than 1 year from the departure. | 1. Select a departure date. 2. Select a return date less than 1 year from the departure date. 3. Click the search button. | The system should display the error message “Unfortunately, this schedule is not possible. Please try again.” |  |  |
| 4.3.1 | (-) Select return date exactly 1 year from the departure | Verify that the system allows searches with return dates exactly 1 year from the departure. | 1. Select a departure date. 2. Select a return date exactly 1 year from the departure. 3. Click the search button. | The system should allow the search and show available flights. |  |  |

**Bug**

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| Bug | Category | Priority | Issue Description | Steps to Reproduce | Actual Result | Expected Result | Root Cause Analysis |
| 1 | Critical Bugs - Invalid Date Validation | High | The application accepts and shows "Sorry, there are no more seats available" for invalid date combinations instead of proper validation message | 1. Select departure date: "July" 2. Select return date: "December" (less than 1 year) 3. Click Search | Shows "Sorry, there are no more seats available" | Should show "Unfortunately, this schedule is not possible. Please try again" |  |
| 2 | Critical Bugs -Promotional Code Validation | High | Invalid promotional codes are not properly validated | 1. Select valid dates (July to July next year) 2. Enter invalid code "AF3-FJK-40X" 3. Click Search | Shows "Sorry, there are no more seats available" | Should show "Sorry, code AF3-FJK-40X is not valid" |  |
| 3 | Critical Bugs -Booking Window Validation | High | System fails to validate bookings beyond the 2-year window | 1. Select departure: "July (two years from now)" 2. Select return: "December (two years from now)" 3. Click Search | Shows "Sorry, there are no more seats available" | Should show message about dates being unavailable |  |
| 4 | UI/UX - Unclear Date Selection | Medium | Date dropdown options are not clearly labeled for different years | Look at the departure/return dropdowns | Labels like "July", "July (next year)" might be confusing | Clear distinction between current year, next year, and two years from now |  |
| 5 | UI/UX - Missing Validation Messages | Medium | Generic error message used for all scenarios | Try different invalid combinations | Same "Sorry, there are no more seats available" message | Specific error messages for different validation failures |  |
| 6 | UI/UX - Form Submission Feedback | Low | No loading state during form submission | Click search button | No loading indicator | Visual indication that search is in progress |  |
| 7 | Functional - Return Date Logic | High | Return date validation logic is inconsistent | 1. Select different combinations of departure and return dates 2. Observe validation behavior | Inconsistent validation messages | Clear validation of 1-year minimum between departure and return |  |
| 8 | Functional - Search Reset | Medium | No clear way to reset search form | After performing a search | Must manually clear selections | Reset button or clear functionality |  |
| 9 | Technical - Error Handling | Medium | Generic error handling for all scenarios | Test various error conditions | Same generic message used | Specific error messages for different scenarios |  |
| 10 | Technical - Form State Management | Low | Form state not preserved on navigation | 1. Fill form 2. Click logo 3. Return to booking | All selections lost | Option to preserve or clear form state |  |