# Bug Reports – Companies House Technical Assessment

Test Site: <https://automationintesting.online/>  
Framework: Cucumber BDD with Playwright and TypeScript  
Total Bugs Reported: 20   
Date of Report: 8th July, 2025  
Test Execution: 76 scenarios executed, 56 passed, 20 failed (74% pass rate)  
Duration: 1 minute 57 seconds

Note: It is important to note that 1 minute 57 seconds depends on:

1. Processing speed of the system
2. Excludes cucumber compiling time (see the cucumber test result for actual it took to run the test).

# HIGH SEVERITY BUGS

## Bug 001: Past Date Booking Allowed

* Severity: High
* Feature: Booking
* Scenario: @past-date-validation
* Status: CONFIRMED - Function timeout (30 seconds)
* Description: Booking flow allows selecting check-in and check-out dates in the past and also check-out date greater than check-in date.
* Expected: Past dates should be blocked with an appropriate validation error
* Actual: Booking form displays results even when past dates are selected; test times out indicating the validation never triggers
* Recommendation: Implement client-side and server-side validation for date fields to prevent past bookings.

A screenshot of a hotel room

AI-generated content may be incorrect.

## Bug 014: Booking API -- Invalid Booking Response Structure

* Severity: High
* Feature: API Testing
* Scenario: should create booking and return proper booking object
* Status: CONFIRMED - HTTP 500 Error
* Description: API response returns 500 Internal Server Error instead of successful booking creation
* Expected: Proper JSON object with bookingId, dates, customer (HTTP 200)
* Actual: HTTP 500 error returned
* Recommendation: Fix booking API server-side logic and error handling

## Bug 015: Booking API -- Non-Existent Room Allowed

* Severity: High
* Feature: API Testing
* Scenario: should reject booking for non-existent room
* Status: CONFIRMED - Incorrect response code
* Description: API does not properly validate room existence
* Expected: 4xx error (400 or 404) with clear message
* Actual: Does not return expected error response
* Recommendation: Add room existence validation before booking creation

## Bug 016: Booking API -- Invalid Checkout Date

* Severity: High
* Feature: API Testing
* Scenario: should validate checkout date after checkin date
* Status: CONFIRMED
* Description: API accepts invalid date ranges (checkout before checkin)
* Expected: Validation error for invalid date order
* Actual: Booking accepted with invalid dates
* Recommendation: Add proper date order validation logic

## Bug 017: Booking API -- Conflict Not Detected

* Severity: High
* Feature: API Testing
* Scenario: should handle booking conflicts properly
* Status: CONFIRMED
* Description: API allows overlapping bookings for the same room
* Expected: Conflict error (409) or validation block
* Actual: Duplicate booking accepted
* Recommendation: Implement availability checking before confirming bookings

# MEDIUM SEVERITY BUGS

## Bug 002: Logout Button Visible Without Successful Login

* Severity: Medium
* Feature: Admin Access
* Scenario: @logout-button-security
* Status: CONFIRMED
* Description: Logout button is visible even when the user is not logged in
* Expected: Logout button should only appear after successful login
* Actual: Button is always rendered and visible on login page
* Recommendation: Add conditional logic to only show logout button after authentication

A screenshot of a computer

AI-generated content may be incorrect.

## Bug 004: Critical WCAG Violations on Home Page

* Severity: Medium
* Feature: Accessibility
* Scenario: @home-page-critical
* Status: CONFIRMED - 3 violations detected
* Description: Multiple critical accessibility issues on home page
* Expected: No WCAG 2.1 AA violations
* Actual: Colour contrast and form label violations detected
* Violations Found:
  + Colour contrast ratio 3.42:1 (requires 4.5:1) on footer links
  + Missing labels on date input fields
  + Missing labels on contact form text-area
* Recommendation: Fix contrast ratios and add proper form labels

## Bug 005: Form Elements Not Accessible

* Severity: Medium
* Feature: Accessibility
* Scenario: @form-accessibility-home
* Status: CONFIRMED - 1 violation detected
* Description: Form fields lack proper label associations
* Expected: Inputs should have accessible names and roles
* Actual: Date inputs and text-area missing proper labels
* Recommendation: Associate labels with all input controls using explicit labels or aria-label attributes

## Bug 006: Login Page Accessibility Violations

* Severity: Medium
* Feature: Accessibility
* Scenario: @login-page-accessibility
* Status: CONFIRMED - 1 violation detected
* Description: Logout button has insufficient colour contrast
* Expected: Fully compliant form structure
* Actual: Colour contrast ratio 3.4:1 on logout button (requires 4.5:1)
* Recommendation: Adjust logout button colours to meet WCAG contrast requirements

## Bug 007: Mobile Viewport Accessibility Issues

* Severity: Medium
* Feature: Accessibility
* Scenario: @mobile-accessibility
* Status: CONFIRMED - 3 violations detected
* Description: Mobile layout has multiple accessibility violations
* Expected: No violations when rendered on mobile
* Actual: Navbar toggle button, form labels, and social links missing accessible text
* Violations Found:
  + Navbar toggle button lacks accessible text
  + Form label violations persist on mobile
  + Social media links lack discernible text
* Recommendation: Add aria-labels to interactive elements and fix responsive form labels

## Bug 011: Navigation Interaction Delay

* Severity: Medium
* Feature: Performance
* Scenario: @navigation-interaction-performance
* Status: CONFIRMED - Function timeout (30 seconds)
* Description: Navigation interactions exceed responsiveness threshold
* Expected: Instant scroll/navigation response (< 100ms)
* Actual: Test times out indicating severe performance issues
* Recommendation: Optimise navigation scripts and implement efficient scroll handling

## Bug 012: Mobile Performance Timeout

* Severity: Medium
* Feature: Performance
* Scenario: @mobile-performance
* Status: CONFIRMED - Function timeout (30 seconds)
* Description: Mobile interface interactions exceed execution timeout
* Expected: Should complete under 30 seconds
* Actual: Function consistently times out on mobile
* Recommendation: Optimise mobile payload, reduce JavaScript execution time, and improve responsiveness

## Bug 018: Contact API -- Response Format Not Detailed

* Severity: Medium
* Feature: API Testing
* Scenario: should return detailed message response
* Status: CONFIRMED - HTTP 400 Error
* Description: Contact API returns 400 error instead of processing message
* Expected: Fully structured message response (HTTP 200)
* Actual: Returns HTTP 400 error
* Recommendation: Fix contact API endpoint and enrich response structure for traceability

# LOW SEVERITY BUGS

## Bug 003: Amenities Link Scroll Fails

* Severity: Low
* Feature: Navigation
* Scenario: @amenities-navigation
* Status: CONFIRMED
* Description: Clicking the amenities nav link doesn't trigger scroll movement
* Expected: Smooth scroll to the amenities section
* Actual: No scrolling action triggered (scroll position change = 0)
* Recommendation: Fix anchor link binding and scroll behaviour for amenities section

A screenshot of a website

AI-generated content may be incorrect.

## Bug 008: Heading Structure Not Proper

* Severity: Low
* Feature: Accessibility
* Scenario: @heading-structure
* Status: CONFIRMED - 1 violation detected
* Description: Heading tags not semantically structured
* Expected: Correct h1-h6 nesting and logical hierarchy
* Actual: Invalid heading order detected in multiple sections
* Violations Found:
  + Booking card h3 appears before h2
  + Room card h5 elements skip heading levels
  + Address and contact h5 elements break hierarchy
* Recommendation: Review and revise heading hierarchy to follow semantic structure

## Bug 009: Colour Contrast Consistency Issues

* Severity: Low
* Feature: Accessibility
* Scenario: @color-contrast-consistency
* Status: CONFIRMED - 1 violation detected
* Description: Text/background contrast fails WCAG ratios in footer
* Expected: Minimum 4.5:1 ratio for normal text
* Actual: Footer links have 3.42:1 contrast ratio
* Recommendation: Adjust footer link colours to meet contrast requirements

## Bug 010: Cross-Page Accessibility Consistency

* Severity: Low
* Feature: Accessibility
* Scenario: @cross-page-consistency
* Status: CONFIRMED - 2 violations detected
* Description: Inconsistent accessible structure across pages
* Expected: Common layout should follow same accessible markup
* Actual: Form label violations and social link text issues persist across pages
* Recommendation: Create consistent accessibility standards and apply across all pages

## Bug 013: Resource Loading Time Exceeded

* Severity: Low
* Feature: Performance
* Scenario: @resource-loading-performance
* Status: CONFIRMED - Threshold exceeded
* Description: Static asset loading took exactly 3 seconds
* Expected: < 3 seconds load time
* Actual: Load time recorded at 3 seconds (boundary failure)
* Recommendation: Implement asset compression, minification, and CDN usage

## Bug 019: Room Creation Performance Issues

* Severity: Medium
* Feature: Performance
* Scenario: @room-creation-performance
* Status: NEW - Function timeout (30 seconds)
* Description: Room creation operations exceed acceptable time limits
* Expected: Room operations should complete quickly (< 5 seconds)
* Actual: Function times out after 30 seconds
* Recommendation: Optimize room creation logic and database operations

## Bug 020: Memory Usage Monitoring Failures

* Severity: Medium
* Feature: Performance
* Scenario: @memory-usage-monitoring
* Status: NEW - Function timeout (30 seconds)
* Description: Memory usage monitoring tests fail to complete
* Expected: Memory usage should remain within reasonable limits
* Actual: Memory monitoring test times out, indicating potential memory leaks
* Recommendation: Investigate memory usage patterns and implement proper cleanup

Summary Table:

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| --- | --- | --- | --- | --- | --- |
| Bug ID | Feature | Scenario | Severity | Screenshot | Fixed |
| 001 | Booking | @past-date-validation | High | Yes | No |
| 002 | Admin Access | @logout-button-security | Medium | Yes | No |
| 003 | Navigation | @amenities-navigation | Low | Yes | No |
| 004 | Accessibility | @home-page-critical | Medium | Yes | No |
| 005 | Accessibility | @form-accessibility-home | Medium | Yes | No |
| 006 | Accessibility | @login-page-accessibility | Medium | Yes | No |
| 007 | Accessibility | @mobile-accessibility | Medium | No | No |
| 008 | Accessibility | @heading-structure | Low | No | No |
| 009 | Accessibility | @color-contrast-consistency | Low | No | No |
| 010 | Accessibility | @cross-page-consistency | Low | No | No |
| 011 | Performance | @navigation-interaction-performance | Medium | No | No |
| 012 | Performance | @mobile-performance | Medium | No | No |
| 013 | Performance | @resource-loading-performance | Low | No | No |
| 014 | API Testing | Booking create response | High | No | No |
| 015 | API Testing | Reject non-existent room | High | No | No |
| 016 | API Testing | Date validation | High | No | No |
| 017 | API Testing | Booking conflict check | High | No | No |
| 018 | API Testing | Message response structure | Medium | No | No |
| 019 | Performance | @room-creation-performance | Medium | No | No |
| 020 | Performance | @memory-usage-monitoring | Medium | No | No |

# Overall Test Results:

Total Scenarios: 76 executed

Passed: 56 (74%)

Failed: 20 (26%)

Duration: 1 minute 57 seconds

Platform: Windows 32-bit, Node.js 20.18.0, Cucumber-js 10.9.0

## Bug Distribution:

High Severity: 5 bugs (critical booking and API issues)

Medium Severity: 8 bugs (accessibility and performance)

Low Severity: 7 bugs (minor UX and compliance issues)

# CRITICAL RECOMMENDATIONS

## Immediate Priority (High Severity):

1. Fix booking API server errors (500 responses)
2. Implement proper date validation for past dates
3. Add room existence and availability checking
4. Fix API response structures and error handling

## Medium Priority (Accessibility & Performance):

1. Address WCAG 2.1 compliance issues systematically
2. Optimize mobile performance and responsiveness
3. Fix navigation interaction delays
4. Implement proper form labelling across the site

## Quality Assurance Process:

1. All 20 failing scenarios need remediation
2. Re-run full test suite after fixes
3. Implement continuous accessibility monitoring
4. Add performance regression testing to CI/CD pipeline

## Testing Methodology Validation:

* BDD approach successfully identified critical issues
* Cucumber scenarios provide clear reproducible steps
* Cross-browser and mobile testing revealed platform-specific problems
* API testing uncovered significant backend issues not visible in UI testing alone