**Test Strategy for Warranty Lookup Functionality**

**1. Introduction:**

This test strategy outlines the approach to be taken for testing the warranty lookup functionality on the Barco website. It aims to ensure the system correctly handles valid and invalid serial numbers, works consistently across different browsers and operating systems, and provides a user-friendly interface.

**2. Test Objectives:**

* **Verify Functionality:** Ensure that the system retrieves and displays correct warranty information for valid serial numbers.
* **Validate Error Handling:** Confirm that the system appropriately handles invalid serial numbers by displaying relevant warnings or error messages.
* **Check Compatibility:** Ensure the system operates consistently across different web browsers and operating systems.
* **Assess Usability:** Evaluate the usability of the warranty lookup interface to ensure it is user-friendly and intuitive.

**3. Scope of Testing:**

* **Automated Scope:**
  + Warranty lookup functionality.
  + Compatibility across different browsers (Chrome, Firefox, Edge).
  + Error handling for invalid serial numbers.
  + Usability of the warranty lookup page.
* **Manual Scope:**
  + Compatibility across different operating systems (Windows 10, macOS, Android, iOS).
  + Non-warranty related functionalities on the Barco website.

**4. Test Types:**

* **Functional Testing:**
  + Ensure element loaded successfully
  + Verify that valid serial numbers return correct warranty information.
  + Ensure invalid serial numbers trigger appropriate error messages.
* **Compatibility Testing:**
  + Test the warranty lookup functionality across various browsers and operating systems.
* **Usability Testing:**
  + Assess the ease of use and clarity of instructions on the warranty lookup page.

**5. Preconditions:**

* **Test Environment:**
  + **Browsers:** Chrome, Firefox, Edge
  + **Operating Systems:** Windows 10, macOS, Android, iOS
  + **Devices:** mobile devices (smartphones and tablets
* **Automated Test tools:** 
  + **Python+Selenium+Pytest**
* **Network connectivity**

**7. Test Data:**

* **Valid Serial Numbers:** e.g: 1863552437
* **Invalid Serial Numbers:** eg: empty, 1234abc, 1111111111111111111111

**8. Test Cases:**

|  |  |  |
| --- | --- | --- |
| **Test Case Name** | **Test Steps** | **Expected Results** |
| **TC01 Valid Serial Number Lookup** | 1. Open a web browser and navigate to https://www.barco.com/eu-en/support/clickshare-extended-warranty/warranty. | 1. URL is connected, and the page loads successfully. |
| 2. Handle the cookie pop-up if it appears. | 2. Cookies are accepted successfully. |
| 3. Enter a valid serial number, e.g., 1863552437 and click "Get Info". | 3. Serial number is entered, and the "Get Info" button is clicked successfully. |
| 4. Verify the warranty results. | 4. warranty results for serial number shows correctly. Eg:Warranty results for 1863552437 Description: CLICKSHARE CX-50 SET NA Part number: R9861522NA Installation date: 28 September 2020 Warranty end date: 27 September 2021 |
| 5. Close the browser. | 5. Browser is closed. |
| **TC02 Invalid Serial Number Lookup** | 1. Open a web browser and navigate to https://www.barco.com/eu-en/support/clickshare-extended-warranty/warranty. | 1. URL is connected, and the page loads successfully. |
| 2. Handle the cookie pop-up if it appears. | 2. Cookies are accepted successfully. |
| 3. Enter an invalid serial number: short/long/not a number(e.g., 1234abc, 00, 100000000000, etc.) and click "Get Info". | 3. Serial number is entered, and the "Get Info" button is clicked successfully. |
| 4. Check the response. | 4. No warranty results are displayed. A warning should indicate that the serial number is invalid. |
| 5. Close the browser. | 5. Browser is closed. |
| **TC03 Browser Compatibility** | 1. Repeat TC01 and TC02 on different web browsers (Chrome, Firefox, Edge). | 1. Results are consistent across all tested browsers, with no errors or discrepancies. |
| **TC04 System Compatibility** | 1. Repeat TC01 and TC02 on different operating systems (Windows 10, macOS, Android, iOS). | 1. Results are consistent across all tested operating systems, with no errors or discrepancies. |
| **TC06 Usability Test** | 1. Perform a general walkthrough of the warranty lookup page, focusing on ease of use, clarity of instructions, and error messages. | 1. The page is easy to navigate. |
| 2. Input fields are intuitive. |
| 3. Error messages are clear and helpful. |

**9. Risk:**

* Inconsistent behavior across different browsers or operating systems.
* Delays in loading warranty information.
* Unclear error messages that confuse users.

**10. Entry and Exit Criteria:**

* **Entry Criteria:**
  + Test environment is set up and accessible.
  + Test cases are reviewed and approved.
* **Exit Criteria:**
  + All high-priority test cases are executed.
  + No critical defects are outstanding.
  + All defects are triaged and either resolved or accepted as known issues.

**12. Test Deliverables:**

* **Test Plan:** Document outlining the testing strategy and approach.
* **Test Cases:** Detailed test cases based on the scenarios outlined.
* **Test Execution Report:** Summary of test execution, including pass/fail status and any defects identified.
* **Defect Report:** Detailed log of defects, including severity, status, and resolution.

**Draft:2024/08/18**

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