Hackathon Task #4

1. Functional Testing:

Objective: Verify that all functionalities work as expected, ensuring the website meets user and business requirements.

- **Tested Features**:

  - ✓ Product listing page: Verified dynamic routing and product display accuracy.
  - ✓ Cart functionality: Confirmed products are added and removed from the cart correctly.
  - ✓ Contact page: Verified form input fields and submission mechanics.
  - ✓ Hover effects: Ensured smooth and consistent transitions for interactive elements.

- **Observations**:

  - ✓ Most tested functionalities passed with no critical issues.
  - ✓ **Issues Identified**:

    - ▪ Search bar functionality is not implemented.
    - ▪ Login page lacks interactivity and functionality.

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2. Error Handling:

Objective: Ensure robust error handling for smooth user experience.

- **Tested Scenarios**:

  - ✓ API disconnection: Simulated errors to verify fallback UI and messages.
  - ✓ Non-existent product pages: Ensured users are redirected or shown a user-friendly error page.

- **Observations**:

- ✓ Clear error messages are displayed.
- ✓ API errors are gracefully handled with fallback UI.

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3. Performance Testing:

Objective: Measure website speed and responsiveness under various conditions.

- **Metrics Evaluated**:

  - ✓ Page load times: All pages load within 2 seconds.
  - ✓ Responsiveness: Verified layout and interaction consistency on different screen sizes.

- **Observations**:

  - ✓ Optimized performance with no significant delays.

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4. Cross-Browser and Device Testing:

Objective: Ensure compatibility across multiple browsers and devices.

- **Browsers Tested**:

  - ✓ Chrome, Firefox, Safari, Edge.

- **Devices Tested**:

  - ✓ Mobile, tablet, and desktop.

- **Observations**:

  - ✓ Seamless experience across all platforms and screen sizes.

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5. Responsiveness Testing:

Objective: Validate the website's adaptability to different screen sizes and resolutions.

- **Tested Scenarios**:

  - ✓ Mobile layout: Checked alignment and scaling of elements on smaller screens.
  - ✓ Tablet layout: Verified intermediate screen size adjustments.
  - ✓ Desktop layout: Ensured no overlapping or misaligned elements on larger screens.

- **Observations**:

  - ✓ Responsive layout adjusts well on all tested devices.
  - ✓ Smooth transitions and consistent spacing across breakpoints.

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6. Security Testing:

Objective: Identify and mitigate potential vulnerabilities.

- **Tests Conducted**:

  - ✓ Vulnerability scanning: Checked for common security issues like XSS and SQL injection.
  - ✓ API security: Verified secure handling of API requests and responses.

- **Observations**:

  - ✓ No vulnerabilities detected.

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7. User Acceptance Testing (UAT):

Objective: Validate the website's usability and functionality from an end-user perspective.

- **Scenarios Tested**:

  - ✓ Navigation: Verified intuitive navigation for product browsing and checkout.
  - ✓ Visual appeal: Ensured the UI is attractive and engaging.
- **Observations**:

- ✓ Positive user feedback; navigation is smooth and engaging.
  - ✓ **Issues Identified**:

    - ▪ Search functionality is missing, impacting user experience.
    - ▪ Login page does not allow user interaction.

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8. Documentation Updates:

Objective: Maintain comprehensive and professional testing documentation.

- • **Actions Taken**:

  - ✓ Detailed test cases documented with expected and actual results.
  - ✓ Updated CSV-based testing report for easy reference.