High-Level Accessibility Evaluation (WCAG 2.1)

O'Reilly eBooks Platform

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Prepared for:

BTAA-Library Accessibility Alliance

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TABLE OF CONTENTS

SUMMARY

This report reflects the findings of a high-level assessment of O'Reilly eBooks Platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

The analysis uncovered only a few issues with WCAG 2.1 compliance and most of the problems that were detected with the use of automatic analysis. These are the main issues to focus on correcting to improve access for all potential users of the system.

Top Findings

1. **Use of Color & Navigation -** The biggest issue with the current system is keyboard focus. Keyboard focus is primarily conveyed with changes in color, which is a violation of these two success criteria (SC 1.4.1/2.4.7). This will become more of a problem with WCAG 2.2, which has updates specifically regarding the use of a focus ring. This can be easily addressed using the standard browser focus ring.

2. **Compatibility:** There are a few minor issues with Name, Role, Value (SC 4.1.2) and many of the pages do not contain an h1 heading.

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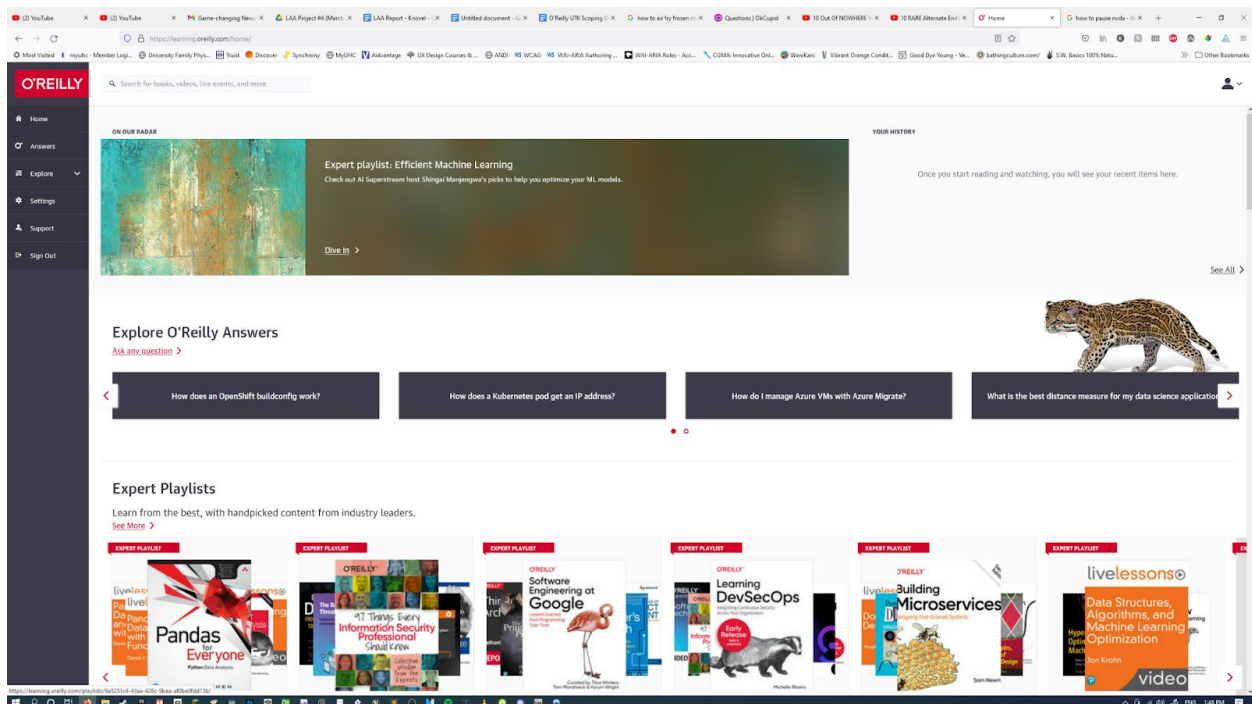TENNESSEE
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ACCESSIBILITY FINDINGS

This report was conducted against the O'Reilly eBooks Platform and covers a selection of pages and features that were to be tested as a representative sample of the database's conformance to the WCAG 2.1 AA standards.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. All problems identified by automatic tools were double checked manually. This evaluation was performed using Firefox on Windows 10.

Below are the findings revealed during the accessibility evaluation of the O'Reilly eBooks Platform.

1. Initial Interface

Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.

SC 1.3.1: In the main navigation content area, the support and sign-in/out buttons are read as being out of list.
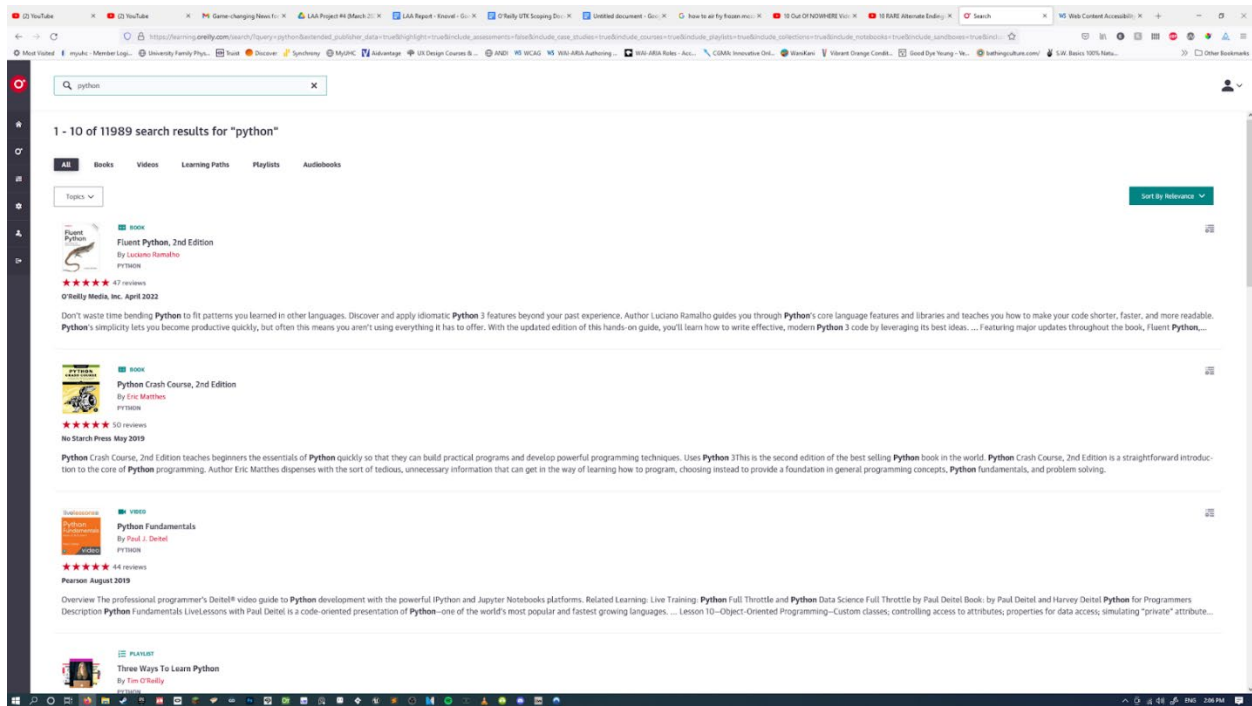
SC 1.4.1: Color should not be the only visual means of distinguishing information or interaction. Currently keyboard focus is primarily conveyed through color changes. There should be a visually distinct, contrast compliant focus ring when navigating with the keyboard.

SC 2.4.6: The page should contain an h1 heading.

SC 2.4.7: Keyboard focus should be clearly visible. This can be easily addressed using the standard browser focus ring.

2. Search Results

Test Case: From the initial landing page, conduct a search for: python. Test search results page, including filters/refine search (select "raspberry pi" in the Topics list to filter) and "sort by" options.

SC 1.3.1: In the content type navigation area, the audiobook format is read as being out of list.

SC 1.3.1: The content type navigation area is an <ul> and contains direct children which are not allowed. Lists must only directly contain <li>, <script>, or <template> elements.

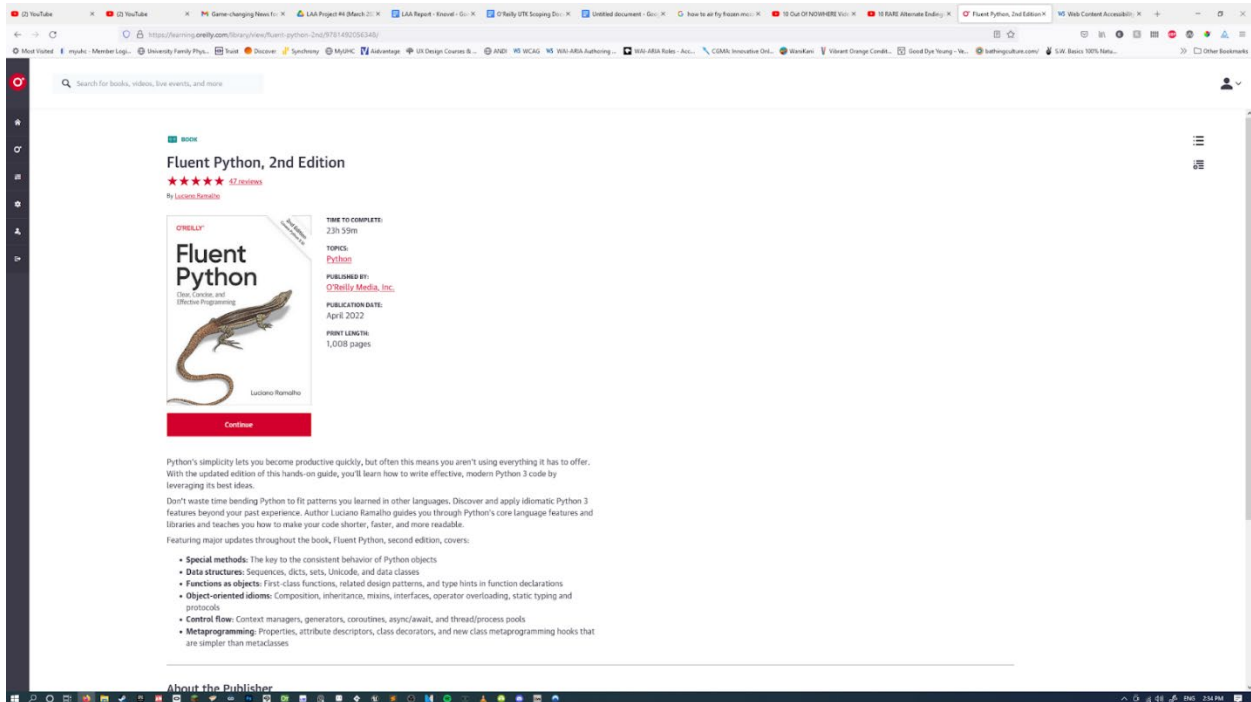**SC 2.4.6:** The page should contain an h1 heading.

SC 4.1.2: Elements must only use allowed aria attributes. The "Topics" dropdown has aria-selected="false."

SC 4.1.2: Links need to have accessible text. When the main navigation is collapsed the O'Reilly Learning logo button link should have accessible text.

SC 4.1.2: Screen reader does not announce item content type.

3. Individual Results

Test Case: Test individual search result landing page & test actual document (ebook, audiobook, video, etc.).

SC 1.2.1/1.2.2: The audiobook player is programmatically seen as a video player, which should contain captions. However, it is not actually a violation. There should also be transcripts available for any audio/video-only media.

SC 2.4.6: The page should have an h1 heading.

SC 4.1.2: The media players for videos and audiobooks should have a clear role attribute for the <div> elements they are contained within. The aria-label attribute is not well supported for a div without a valid role.

SC 4.1.2: The ratings section has nested controls.

Note: Text, Videos, and Audiobooks are all accessible, and they are very thorough and done very well.

Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance, and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UT is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.

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