WCAG 2.1 Fiero Code Evaluation

Report last updated: <u>May 17, 2023</u>

Table of Contents

1. Executive Summary

This report describes the conformance of the Fiero Code website with W3C's Web Content Accessibility Guidelines (WCAG). The review process is described in Section 5 below and is based on evaluation described in Accessibility Evaluation Resources.

Based on this evaluation, the Fiero Code website is close to meeting WCAG 2.1, Conformance Level AA. Detailed review results are available in Section 6 below. Resources for follow-up study are listed in Section 7 below. Feedback on this evaluation is welcome.

2. Background about Evaluation

Conformance evaluation of web accessibility requires a combination of semi-automated evaluation tools and manual evaluation by an experienced reviewer. The evaluation results in this report are based on evaluation conducted on the following date: September 15, 2020. The website may have changed since that time.

3. Scope of Review

Website Name: Fiero Code
Description: A learn-to-code platform for kids
URLS Reviewed:
https://app.fierocode.com
https://app.fierocode.com
https://app.fierocode.com/home
https://app.fierocode.com/gear
https://app.fierocode.com/workouts
https://app.fierocode.com/workouts/workoutID
https://app.fierocode.com/missions
https://app.fierocode.com/missions/missionID
https://app.fierocode.com/friends
https://app.fierocode.com/friends/friendID

*All pages reviewed by semi-automated evaluation tools
Dates Reviewed: September 15, 2020 - September 18, 2020
Natural Language: English

4. Reviewer(s)

Fiero Code Product Team
Luke Miller, CEO
William Kelley, Web Developer
Fiero Learning Inc
luke@fierolearning.com

480-735-1953

Natural language(s) with which reviewer(s) is/are fluent, or familiar: English

5. Review Process

Standard / Guideline	Included in Report
Web Content Accessibility Guidelines 2.0	Level A (Yes) Level AA (Yes) Level AAA (No)
Web Content Accessibility Guidelines 2.1	Level A (Yes) Level AA (Yes) Level AAA (No)

Evaluation and validation tools used: Keyboard navigation, Web compliance tools: (Deque aXe WCAG Color Contrast Analyzer, Web Developer plug-in tool

6. Results and Recommended Actions

This website appears to be close to meeting WCAG 2.1 A, AA. Accessibility features in which this site is strong include "WCAG 2.1 Level A Principle 3: Understandable" and "WCAG2.1 Level AA 1. Perceivable." Recommended actions are to programmatically improve code structure to support accessibility standards.

Table 1: Success Criteria, Level A

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content (Level A)	Supports	Fiero's platform meets the Non-text Content requirements.
1.2.1 Audio-only and Video-only (Prerecorded) (Level A)	Not Applicable	Fiero does not include audio-only or video-only content.
1.2.2 Captions (Prerecorded) (Level A)	Supports	Fiero supports the use of captions for prerecorded videos.
1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A)	Does not support	Video content in Fiero's platform does not provide audio descriptions.
1.3.1 Info and Relationships (Level A)	Partially supports	ARIA meta data applied partially to Fiero's platform. Full compliance planned in Spring 2021.
1.3.2 Meaningful Sequence (Level A)	Supports	Fiero's platform meets the Meaningful Sequence requirements.
1.3.3 Sensory Characteristics (Level A)	Supports	When styles are used to indicate functionality, written instructions are also included.
1.4.1 Use of Color (Level A)	Supports	
1.4.2 Audio Control (Level A)	Supports	All video content is fully supported.

2.1.1 Keyboard (Level A)	Supports	All areas are accessible by tab
2.1.2 No Keyboard Trap (Level A)	Supports	
2.1.4 Character Key Shortcuts (Level A 2.1 only)	Not Applicable	Fiero has no shortcut keys implemented at this time.
2.2.1 Timing Adjustable (Level A)	Not Applicable	Fiero's platform contains no time limits.
2.2.2 Pause, Stop, Hide (Level A)	Not Applicable	Fiero does not include animation.
2.3.1 Three Flashes or Below Threshold (Level A)	Not Applicable	
2.4.1 Bypass Blocks (Level A)	Partially supports	Screenreader users may use headings and landmarks to navigate the system but keyboard only users must tab through all filters and then the result list header before getting to the first result.
2.4.2 Page Titled (Level A)	Supports	All pages have descriptive page titles.
2.4.3 Focus Order (Level A)	Supports	All content is accessible in focus order.
2.4.4 Link Purpose (In Context) (Level A)	Supports	Links indicate purpose by context.
2.5.1 Pointer Gestures (Level A 2.1 only)	Not Applicable	Fiero's platform contains no zooming or left/right scrolling
2.5.2 Pointer Cancellation (Level A 2.1 only)	Supports	Execution is on up-event.
2.5.3 Label in Name (Level A 2.1 only)	Supports	UI elements have descriptive labels
2.5.4 Motion Actuation (Level A 2.1 only)	Not Applicable	
3.1.1 Language of Page (Level A)	Supports	
3.2.1 On Focus (Level A)	Supports	
3.2.2 On Input (Level A)	Supports	
3.3.1 Error Identification (Level A)	Supports	
3.3.2 Labels or Instructions (Level A)	Supports	
4.1.1 Parsing (Level A)	Supports	
4.1.2 Name, Role, Value (Level A)	Supports	

Table 2: Success Criteria, Level AA

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live) (Level AA)	Not Applicable	Fiero does not contain live audio content.
1.2.5 Audio Description (Prerecorded) (Level AA)	Does Not Support	Fiero's pre-recorded videos do not support audio descriptions.
1.3.4 Orientation (Level AA 2.1 only)	Supports	Fiero is a web-based application with no orientation restrictions.
1.3.5 Identify Input Purpose (Level AA 2.1 only)	Supports	
1.4.3 Contrast (Minimum) (Level AA)	Supports	Fiero is in compliance with the 4.5:1 minimum requirement.

1.4.4 Resize text (Level AA)	Supports	
1.4.5 Images of Text (Level AA)	Supports	Fiero does not have any images of text.
1.4.10 Reflow (Level AA 2.1 only)	Supports	
1.4.11 Non-text Contrast (Level AA 2.1 only)	Supports	
1.4.12 Text Spacing (Level AA 2.1 only)	Supports	Fiero has no loss of content or functionality when text spacing is increased.
1.4.13 Content on Hover or Focus (Level AA 2.1 only)	Suppors	
2.4.5 Multiple Ways (Level AA)	Supports	The top menu contains links to every page, and is accessible at the top of every page.
2.4.6 Headings and Labels (Level AA)	Supports	Fiero supports descriptive headings and labels.

2.4.7 Focus Visible (Level AA)	Supports	Fiero modules support visible focus.
3.1.2 Language of Parts (Level AA)	Not Applicable	Fiero language of page content is identified with the lang attribute.
3.2.3 Consistent Navigation (Level AA)	Supports	Fiero application supports consistent navigation.
3.2.4 Consistent Identification (Level AA)	Supports	Fiero supports consistent identification of inputs and actions.
3.3.3 Error Suggestion (Level AA)	Supports	Fiero supports error suggestions
3.3.4 Error Prevention (Legal, Financial, Data) (Level AA)	Supports	Fiero provides error prevention when deleting data, or updating user passwords.
4.1.3 Status Messages (Level AA 2.1 only)	Does not support	Fiero does not supply status messages for actions in our web app.

7. References

Web Content Accessibility Guidelines (WCAG) Overview
https://www.w3.org/WAI/intro/wcag
Web Content Accessibility Guidelines 2.1
https://www.w3.org/TR/WCAG21/
Techniques for WCAG 2.1
https://www.w3.org/WAI/WCAG21/Techniques/
Accessibility Evaluation Resources
http://www.w3.org/WAI/eval/
Web Accessibility Evaluation Tools List
https://www.w3.org/WAI/ER/tools/
Using Combined Expertise to Evaluate Web Accessibility
https://www.w3.org/WAI/eval/reviewteams

8. Appendices

Link to axe Beta evaluation tool results from Deque Systems.
https://drive.google.com/drive/folders/1h35JwV8r5rHxmU1GwVAEq0ioSCaao0U1?usp=sharing