Web Accessibility Consultancy Service

Accessibility Review

Version: 0.1

March 21

Prepared for:

https://www.fiverr.com/willcapellaro

Will Capellaro

Version control

Version	Author	Date	Description
0.1	Aslam Dakaev	3/13/2021	Technical overview
0.2	Maxim Yefremov	3/14/2021	Technical Review

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1 Report Summary

In March 2021, Maximum Data Solutions conducted an accessibility testing of https://www.fiverr.com/willcapellaro website (https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html) against the Web Accessibility Initiative Web Content Accessibility Guidelines (WAI WCAG) 2.0 and 2.1 specifications.

The findings in this report are aimed to assist web developers in assessing the barriers that the website currently poses to people with a disability, its current level of conformance and the legal risk faced by the organisation.

1.1 Findings

The parts of website were reviewed against WCAG 2.0 Level A, Level AA and WCAG 2.1 Level A and Level AA success criteria.

As the below table shows, the website fails to comply with 8 of the 38 WCAG 2.0 success criteria (A, AA) and 0 of the 12 WCAG 2.1 success criteria (A, AA).

WCAG 2.0	Passed	NA	Failed	Total
Level A	15	4	6	25
Level AA	7	4	2	13

Level AAA	NA	NA	NA	23
Total	22	8	8	61
WCAG 2.1	Passed	NA	Failed	Total
Level A	4	1	0	5
Level AA	5	2	0	7
Level AAA	NA	NA	NA	5
Total	9	3	0	17

1.1.1 Accessible features

- The reading sequence of content on page is logical.
- No images of text (apart from brand and logo images) were utilised.
- A consistent layout and navigation system is used throughout the webpage.
- The HTML and CSS styles used, mainly provide accessible and clear design.
- Keyboard navigation is implemented with accessibility requirements in mind.

1.1.2 Priorities for redevelopment

- Ensure that there are no missing or orphan labels.
- Check and amend HTML and CSS to ensure stricter compliance.
- Ensure all elements provide sufficient contrast ratio of background/foreground colors. Where the background images are used a background colour should be used as a 'fallback' mechanism to ensure that browsers that don't support (or display background images) will still display relevant information.
- Ensure that all the document headings are structured that heading levels are not skipped.

2 Introduction

In March 2021, Maximum Data Solutions was approached to conduct an Accessibility Review of the https://www.fiverr.com/willcapellaro website. The website was checked against all Level A and Level AA success criteria of the Web Accessibility Initiative Web Content Accessibility Guidelines (WAI WCAG) 2.0 and 2.1 specifications.

The accessibility issues discovered on the website and recommendations on how to address them are discussed in this report.

2.1 Scope

In scope for the accessibility review:

- The following pages were used for the assessment:

  https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html
  https://willcapellaro.github.io/Braille-Toolbox/quick-reference.html
  https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Out of scope:

- Pages outside of the described above were not assessed.

2.2 Methodology

2.2.1 Expert review

The selected page was reviewed against the WCAG 2.0 and 2.1 specifications by an experienced accessibility consultant. The consultant:

- Ran a set of scripts across the page to identify problems that can be found with a set of automated testing tools.
- Checked the mark-up of the problem pages identified by the script.
- Checked the validity of the HTML and CSS against W3C standards, using W3C validator Suite ©.
- Checked for other issues using browser based tools.
- Navigated the website by reading the site content in linear fashion to identify any potential barriers for people using assistive technologies.
- Considered and tested possible solutions to the identified issues.

2.2.2 Accessibility tools

The following tools were used for automated testing:

- W3C validator Suite ©

- HiSoftware Compliance Sheriff

- Colour Contrast Check Tool

2.2.3 Software tested on

The manual testing was conducted using:

- Chrome (including compatibility modes and developer modes)

- NVDA

- Windows Magnifier

2.2.4 Quality assurance

A second accessibility consultant reviewed the first draft of this report and checked:

- The suggested solutions.

Changes were discussed and incorporated into the final report.

2.3 About the Web Content Accessibility Guidelines 2.0 and 2.1

On 11 December 2008, the World Wide Web Consortium (W3C) released the Web Content Accessibility Guidelines 2.0 (WCAG 2.0) as a W3C recommendation.

These guidelines are an international standard that:

- Define how to make web sites more accessible to people with a range disabilities.
- Consists of 12 guidelines supplemented by 61 success criteria — testable standards that web sites should meet. These are arranged in three levels with level A (the lowest), being the most fundamental and essential.

The more success criteria a site meets, the more accessible it is likely to be. However, it is still possible that people with some types, degrees or combinations of disabilities might still have problems using the site.

In February 2010, the Australian Federal Government endorsed the use of WCAG 2.0 within Australia and this is now the benchmark for Australian government websites. Based on this endorsement, the Australian government released the Web Accessibility National Transition Strategy in June 2010. The strategy identified that government websites were expected to meet Level A conformance by 2012 and Level AA conformance by the end of 2014.The Australian Human Rights Commission has endorsed version 2.0 of the Web Content Accessibility Guidelines. The Commission believes the guidelines will help organisations meet their obligations under the Disability Discrimination Act 1992 with respect to web accessibility.

WCAG 2.1 was introduced to address the dynamically growing use of mobile devices, providing 17 additional success criteria to address:

- mobile accessibility

- people with low vision

- people with cognitive and learning disabilities

All success criteria from 2.0 are included in 2.1. The 2.0 success criteria are exactly the same (verbatim, word-for-word) in 2.1.

3 Findings

Findings are grouped by guideline and success criterion. The findings include the list of all the pages violating the guidelines. For most issues, only one example is given. The findings have to be extrapolated from these examples to the rest of the website.

Guideline 1.1 Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

1.1.1 Non-text content A

The intent of this Success Criterion is to make information conveyed by non-text content accessible through the use of a text alternative. Text alternatives are a primary way for making information accessible because they can be rendered through any sensory modality (for example, visual, auditory or tactile) to match the needs of the user. Providing text alternatives allows the information to be rendered in a variety of ways by a variety of user agents. For example, a person who cannot see a picture can have the text alternative read aloud using synthesized speech. A person who cannot hear an audio file can have the text alternative displayed so that he or she can read it. In the future, text alternatives will also allow information to be more easily translated into sign language or into a simpler form of the same language.

Issue 1	Non-decorative IMG element contains empty ALT attribute.

Description

When using the img element, specify a short text alternative with the alt attribute. Note. The value of this attribute is referred to as "alt text".

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Code used

Line 158, column 14, img element, SRC = "https://willcapellaro.github.io:443/braille/comp_cap_sign.svg"

Implications

Using an empty "alt" attribute for non-decorative images (logos, brand images etc.) discriminates visually impaired users or users whose browsers don't support images.

Solution

Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image.

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Issue 2	Missing form label

Description

If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<textarea class="spaceafter" placeholder="your braille here"></textarea>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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Issue 3	Orphaned form label

Description

A form label is present, but it is not correctly associated with a form control.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

<label for="fname">

Type or paste text to see it written in braille

</label>

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

Guideline 1.2 Time-based Media

Provide alternatives for time-based media.

Guideline 1.3 Adaptable

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

1.3.1 Info and Relationships A

The intent of this Success Criterion is to ensure that information and relationships that are implied by visual or auditory formatting are preserved when the presentation format changes. For example, the presentation format changes when the content is read by a screen reader or when a user style sheet is substituted for the style sheet provided by the author.

Issue 4	Missing form label

Description

If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<textarea class="spaceafter" placeholder="your braille here"></textarea>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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Issue 5	Orphaned form label

Description

A form label is present, but it is not correctly associated with a form control.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<label for="fname">

Type or paste text to see it written in braille

</label>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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Issue 6   Skipped heading level

Description

A heading level is skipped.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Code used
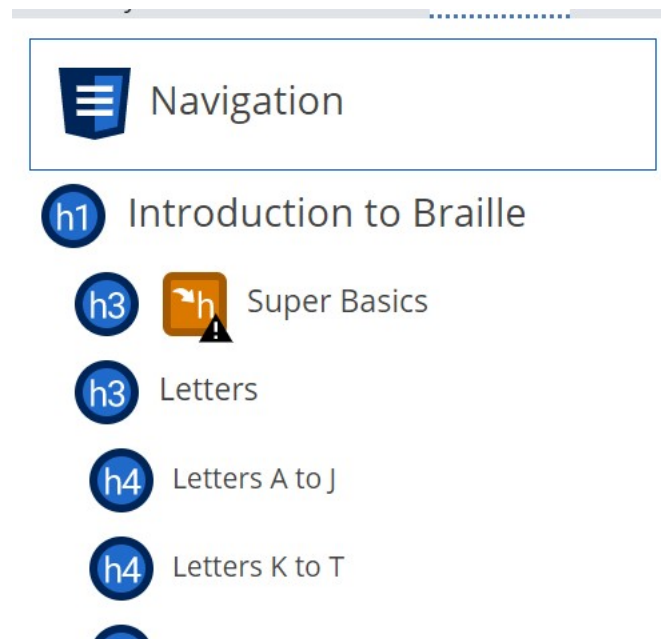
Implications

Headings provide document structure and facilitate keyboard navigation by users of assistive technology. These users may be confused or experience difficulty navigating when heading levels are skipped.

Solution

Restructure the page to avoid skipping heading levels

Guideline 1.4 Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

1.4.3 Contrast Minimum AA

The intent of this Success Criterion is to provide enough contrast between text and its background so that it can be read by people with moderately low vision (who do not use contrast-enhancing assistive technology). For people without color deficiencies,

hue and saturation have minimal or no effect on legibility as assessed by reading performance (Knoblauch et al., 1991). Color deficiencies can affect luminance contrast somewhat. Therefore, in the recommendation, the contrast is calculated in such a way that color is not a key factor so that people who have a color vision deficit will also have adequate contrast between the text and the background.

Issue 7	Page has invalid color contrast ratio

Description

Although majority of colors used by the web pages demonstrated acceptable contrast ratio between foreground and background, some exceptions were found.
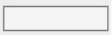
Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Code used

```
<button onclick="myFunction()" id="myBtn1" class="inline" style="color: rgb(221, 17, 187); background-color: rgb(245, 245, 245);">

More

</button>
```

Click a Contrast icon below or within the web page to view details.

Foreground Color
#DD11BB

Lightness

Background Color
#F5F5F5

Lightness

Contrast Ratio: 3.95:1

Text Size: Normal

Normal Text: Sample
AA: **Fail**
AAA: **Fail**

Large Text: Sample
AA: **Pass**
AAA: **Fail**

Implications

The paragraph uses foreground color (#DD11BB) and background color (#F5F5F5) resulting in contrast ratio of 3.95:1 therefore failing this criterion

Solution

Change either foreground or background color to achieve the necessary contrast ratio of 4.5 :1

Guideline 2.1 Keyboard Accessible

Make all functionality available from a keyboard.

Guideline 2.2 Enough Time

Provide users enough time to read and use content.

Guideline 2.3 Seizures and Physical Reactions

Do not design content in a way that is known to cause seizures or physical reactions.

Guideline 2.4 Navigable

Provide ways to help users navigate, find content, and determine where they are.

2.4.1 Bypass Blocks   A

The intent of this Success Criterion is to allow people who navigate sequentially through content more direct access to the primary content of the Web page. Web pages and applications often have content that appears on other pages or screens. Examples of repeated blocks of content include but are not limited to navigation links, heading graphics, and advertising frames. Small repeated sections such as individual words, phrases or single links are not considered blocks for the purposes of this provision.
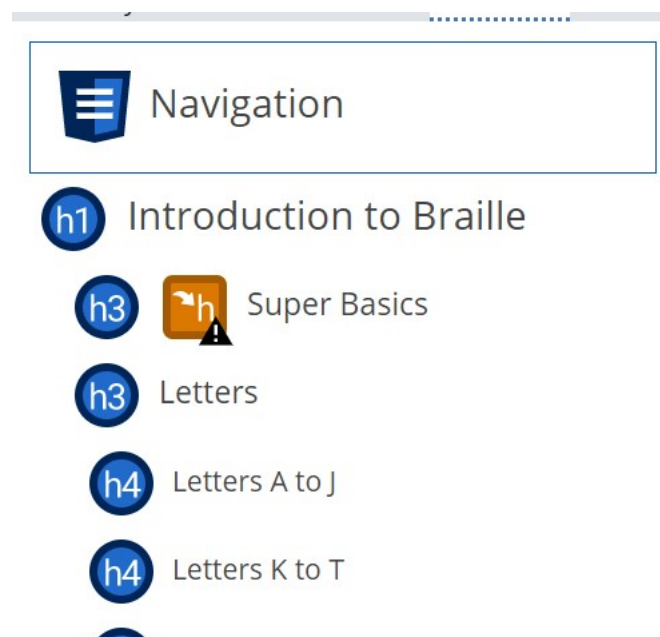
Issue 8	Skipped heading level

Description

A heading level is skipped.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Code used

Implications

Headings provide document structure and facilitate keyboard navigation by users of assistive technology. These users may be confused or experience difficulty navigating when heading levels are skipped.

Solution

Restructure the page to avoid skipping heading levels

2.4.6 Headings and Labels AA

The intent of this Success Criterion is to help users understand what information is contained in Web pages and how that information is organized. When headings are clear and deive, users can find the information they seek more easily, and they can understand the relationships between different parts of the content more easily. Deive labels help users identify specific components within the content.

Issue 9	Missing form label

Description

If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<textarea class="spaceafter" placeholder="your braille here"></textarea>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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Issue 10   Orphaned form label

Description

A form label is present, but it is not correctly associated with a form control.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<label for="fname">

Type or paste text to see it written in braille

</label>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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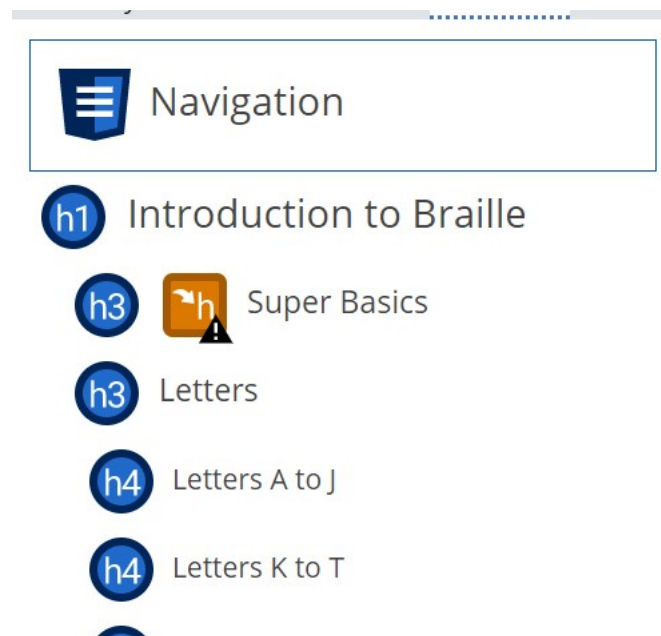
Issue 11   Skipped heading level

Description

A heading level is skipped.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Code used

Implications

Headings provide document structure and facilitate keyboard navigation by users of assistive technology. These users may be confused or experience difficulty navigating when heading levels are skipped.

Solution

Restructure the page to avoid skipping heading levels

Guideline 2.5 Input Modalities

Make it easier for users to operate functionality through various inputs beyond keyboard.

Guideline 3.1 Readable

Make text content readable and understandable.

Guideline 3.2 Predictable

Make Web pages appear and operate in predictable ways.

Guideline 3.3 Input Assistance

Help users avoid and correct mistakes.

3.3.2 Labels or Instructions   A

The intent of this Success Criterion is to help users avoid making mistakes when their input is required. To help avoid mistakes it is good user interface design to provide simple instructions and cues for entering information. Some users with disabilities may be more likely to make mistakes than users without disabilities or recovery from mistakes may be more difficult, making mistake avoidance an important strategy for users with disabilities. People with disabilities rely on well documented forms and procedures to interact with a page. Blind users need to know exactly what information should be entered into form fields and what the available choices are. Simple instructions visually connected to form controls can assist users with cognitive disabilities or those accessing a page using a screen magnifier.

Issue 12   Missing form label

Description

If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<textarea class="spaceafter" placeholder="your braille here"></textarea>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

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Description

A form label is present, but it is not correctly associated with a form control.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<label for="fname">

Type or paste text to see it written in braille

</label>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned label to link to that id

Guideline 4.1 Compatible

Maximize compatibility with current and future user agents, including assistive technologies.

4.1.1 Parsing A

The intent of this Success Criterion is to ensure that user agents, including assistive technologies, can accurately interpret and parse content. If the content cannot be parsed into a data structure, then different user agents may present it differently or

be completely unable to parse it. Some user agents use "repair techniques" to render poorly coded content.

Issue 14	Majority of pages have multiple validation errors

Description

Clean HTML code ensures that the pages can be easier used by assistive technologies and robust for future changes

Page(s) with the issue

All tested pages

Code used

Showing results for https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html

Checker Input

Show ☐ source   ☐ outline   ☐ image report   [Options…]

Check by [address ⌄]

`https://willcapellaro.github.io/Braille-Toolbox/intro-to-braille.html`

[Check]

Press the Message Filtering button to collapse the filtering options and error/warning/info counts.

[Message Filtering]

Errors (3) · Hide all errors · Show all errors

1 ☑ CSS: Parse Error.

2 ☑ End tag `a` violates nesting rules.

3 ☑ Stray start tag `script`.

Press the Message Filtering button to collapse the filtering options and error/warning/info counts.

Message Filtering

Errors (1) · Hide all errors · Show all errors

1 ☑ End tag `a` violates nesting rules.

---

1. **Error** **End tag** `a` **violates nesting rules.**

   From line 35, column 96; to line 35, column 99

   `"sr-only">`↵

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Check

Press the Message Filtering button to collapse the filtering options and error/warning/info counts.

Message Filtering

Errors (2) · Hide all errors · Show all errors

1 ☑ End tag `a` violates nesting rules.

2 ☑ The value of the `for` attribute of the `label` element must be the ID of a non-hidden form control.

---

1. **Error** **End tag** `a` **violates nesting rules.**

   From line 36, column 96; to line 36, column 99

   `"sr-only">`↵

2. **Error** **The value of the** `for` **attribute of the** `label` **element must be the ID of a non-hidden form control.**

   From line 59, column 3; to line 59, column 21

   `hp" -->↵` `<label for="fname">Type o`

Implications

Assistive technologies can experience difficulties parsing invalid HTML code

Solution

Fix error identified by W3 validator (see image for details)

4.1.2 Name, role, value A

The intent of this Success Criterion is to ensure that Assistive Technologies (AT) can gather information about, activate(or set) and keep up to date on the status of user interface controls in the content.

Issue 15   Missing form label

Description

If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<textarea class="spaceafter" placeholder="your braille here"></textarea>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

It seems like the textarea and the label were supposed to be 'matched' but as the label specifies fname as the for attribute and text area has no id - they are not correct associated. Add according id to the text area and change for attribtue for orphaned

label to link to that id

4.1.2 Name, role, value   A

The intent of this Success Criterion is to ensure that Assistive Technologies (AT) can gather information about, activate(or set) and keep up to date on the status of user interface controls in the content.

Issue 16   Orphaned form label

Description

A form label is present, but it is not correctly associated with a form control.

Page(s) with the issue

https://willcapellaro.github.io/Braille-Toolbox/write-in-braille.html

Code used

```
<label for="fname">

Type or paste text to see it written in braille

</label>
```

Implications

An incorrectly associated label does not provide functionality or information about the form control to the user. It usually indicates a coding or other form labeling issues.

Solution

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References

Web Content Accessibility Guidelines 2.0
http://www.w3.org/TR/WCAG20/

What's New in WCAG 2.1?

https://www.w3.org/WAI/standards-guidelines/wcag/new-in-21/

Understanding conformance to the Web Content Accessibility Guidelines 2.0
http://www.w3.org/TR/2008/WD-UNDERSTANDING-WCAG20-20080430/conformance.html

Web Accessibility National Transition Strategy
http://www.finance.gov.au/publications/wcag-2-implementation/index.html

World Wide Web Access: Disability Discrimination Act Advisory Notes
http://www.hreoc.gov.au/disability_rights/standards/www_3/www_3.html