# **Assignment 3**

Test a Website's Accessibility

# **Web Accessibility Report**

Assignment 2

by Wang, JuanJuan

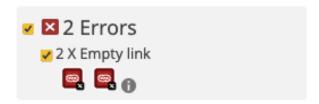
**Student Name** 

Li, Becky (000927564)

#### Introduction

Accessibility is a critical aspect of web design, ensuring that websites can be accessed and used by all individuals, regardless of any disabilities or impairments they may have. The WAVE web accessibility evaluation tool has been utilized to identify several key accessibility issues on the evaluated website. This report will outline five of the most critical issues identified, their descriptions and suggested solutions.

#### 1. Empty Links



## **Problem Description**

It has been analyzed that certain clickable elements on the website do not have any identifiable text that describes their purpose or destination. This may cause confusion or difficulty for users who rely on text labels to navigate the website.

## Applicable POUR Principle

Principle: Operable

Operable means that users should be able to operate the interface, and empty links violate this principle as they are not operable by users, especially those relying on assistive technologies.

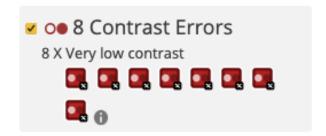
# **User Impact**

When designing a website, it is essential to consider the needs of users who rely on assistive technologies, such as screen readers. These users may face challenges in understanding the purpose or function of links on the website, which can result in confusion and difficulty navigating the site. As a result, it is crucial to ensure that links are appropriately labelled and provide clear and concise descriptions of their purpose.

## Solution Recommendation

It is important to ensure that all links on a webpage are functional and accurately describe their target. If a link is empty or lacks descriptive text, it can lead to confusion and frustration for the user. Therefore, it is recommended that any empty links be removed or explanatory text added to the links to indicate their functionality or target.

#### 2. Very Low Contrast Errors



## **Problem Description**

Some content's text and background colours have deficient contrast levels in certain instances. As a result, the text becomes unclear, blending into the background and making reading and comprehending the information presented challenging. This can lead to frustration and even cause the user to miss important details.

#### **Applicable POUR Principle**

Principle: Perceivable

Perceivable refers to ensuring that all users perceive information and user interface components. Very low contrast errors hinder perceivability, particularly for users with visual impairments.

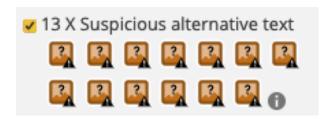
### **User Impact**

When text has low contrast, it can pose a significant challenge to visually impaired users, making it extremely difficult for them to read. Therefore, ensuring adequate contrast is crucial to ensure readability and accessibility.

#### Solution Recommendation

To enhance the readability of smaller text, it is recommended to increase the contrast between the text and background colours. However, the required contrast may be less for larger text, but it should still be easily distinguishable.

#### 3. Suspicious Alternative Text



## **Problem Description**

The text meant to describe the image for those who cannot see it is either not detailed enough to convey its whole meaning or includes information irrelevant to the image.

## **Applicable POUR Principle**

Principle: Perceivable

Providing alternative text for images is part of making content perceivable, allowing users who cannot see the pictures to understand their content or function.

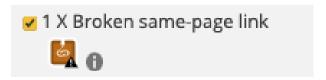
#### **User Impact**

Alternative text for images is essential for users who are visually impaired or rely on screen readers to understand the content or function of images. Inadequate or missing alternative text can confuse and hinder accessibility for these users.

#### Solution Recommendation

To ensure that all users can access and understand the content on the website or document, it is crucial to provide alternative text that accurately describes the content or function of images. The alternative text should be concise yet descriptive, avoiding repetitive phrases such as "image of..." and ensuring that the text provides an accurate and informative representation of the image. Doing so can make the content more accessible to all users, including those with visual impairments or who use assistive technologies.

#### 4. Broken Same-Page Links



## **Problem Description**

The page contains links without corresponding targets. This means these links are not properly anchored to specific sections or elements on the page. As a result, clicking on these links may take users to unexpected locations or lead to a poor user experience.

# Applicable POUR Principle

Principle: Operable

Broken same-page links impact operability, as users should be able to navigate through the website seamlessly. Broken links hinder this operability.

### **User Impact**

Long web pages can be challenging, especially if users scroll through endless content to find what they want. Same-page links can make this process much easier by allowing users to jump directly to the needed section. However, broken links can seriously hinder this functionality, causing frustration and confusion for users trying to find their way around the page.

#### Solution Recommendation

To enhance the website's overall user experience, it is necessary to ensure that all links are functional and lead the user to the intended destination. Specifically, for same-page links, verifying that the targets exist within the document is essential. If not, the links should be removed to prevent broken links and improve navigation. It is recommended that all links on the page are correctly anchored to the intended targets.

## 5. Non-Responsive YouTube iframe

### **Problem Description**

The YouTube iframe embedded on the website does not adapt responsively to different screen sizes and devices. This lack of responsiveness can lead to usability issues for users accessing the website on mobile devices or smaller screens.

# Applicable POUR Principle

Principle: Understandable

Adequately structured content helps make the website understandable. Structural elements like headings and lists provide a clear organization and hierarchy of information, facilitating understanding for all users.

## **User Impact**

Users accessing the website on devices with smaller viewports may encounter difficulty viewing or interacting with the embedded YouTube video. The non-responsive iframe may cause the video to overflow beyond the boundaries of the viewport, making it inaccessible or difficult to navigate. This can result in a poor user experience and frustration for those attempting to access the video content.

#### Solution Recommendation

To address the non-responsive YouTube iframe, implement responsive design techniques to ensure the embedded video scales appropriately across various screen sizes and devices. This can be achieved by utilizing CSS techniques such as media queries to adjust the dimensions of the iframe based on the viewport width. Additionally, consider using the YouTube iframe API to dynamically resize the iframe to fit the available space on the page. Users can access and interact with the video content seamlessly across different devices by making the iframe responsive.

#### 6. Missing Video Accessibility

### **Problem Description**

The YouTube video embedded on the website lacks sufficient accessibility features, such as synchronized captions, to ensure accessibility for users with disabilities, particularly those who are deaf or hard of hearing.

## Applicable POUR Principle

Principle: Perceivable

The absence of synchronized captions for the YouTube video affects its perceivability, particularly for users who are deaf or hard of hearing. Perceivability emphasizes that information and user interface components should be presented in ways that users can perceive. Without synchronized captions, users with hearing impairments cannot perceive the video's audio content, thus violating the perceivable principle.

## **User Impact**

Users who rely on captions to access video content can only fully comprehend the information presented in the video with synchronized captions. This exclusion of users with hearing impairments violates accessibility standards and prevents equal access to the video content for all users.

#### Solution Recommendation

To enhance the accessibility of the YouTube video, ensure that synchronized captions accompany the video content. Utilize YouTube's captioning features to either upload a caption file or enable automatic caption generation. Additionally, consider providing transcripts of the video content for users who may prefer to access the information in text format. By incorporating synchronized captions and transcripts, the video content will be accessible to users with hearing impairments, promoting inclusivity and equal access to the information presented in the video.

#### Conclusion

Addressing these accessibility issues is essential for ensuring that the website is usable by all individuals, regardless of any disabilities they may have. Implementing the suggested solutions can improve accessibility and provide a more inclusive experience for all users. Regular accessibility evaluations and updates are recommended to maintain and enhance accessibility standards.