



UNIVERSITY OF SYDNEY
INFO2222

Usability and Security

LOGBOOK Sem Break of Project Brief

SID: 490441372

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Accessibility Report

The screenshot shows the University of Sydney's homepage with an accessibility audit overlay. A large green circle in the top right corner displays the score '96'. Below it, the word 'Accessibility' is written. A detailed report follows:

- Names and labels** — These are opportunities to improve the semantics of the controls in your application. This may enhance the experience for users of assistive technology, such as a screen reader.
 - ⚠️ <frame> or <iframe> elements do not have a title
- Navigation** — These are opportunities to improve keyboard navigation in your application.
 - ⚠️ Some elements have a [tabindex] value greater than 0
- Additional items to manually check (10)** — These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

At the bottom left, there is a cookie consent message from Privacera.

Steps taken to generate the results for USYD:

The manual check steps that been followed is Easy Checks from WAI and assisted by Web Developer Extension of Chrome. The automated auditing tool is Google Lighthouse. Lighthouse grade the accessibility of the Sydney University page 96/100.

Lighthouse Test:

Overall, the accessibility of sydney.edu.au is almost perfect. There are two tiny problems, one is about names and labels and the other one is naviagtion. One video does not contain a title, it can be improved. And some elements hava a [tabindex] value greater than 0.

Manual Test:

Page Title:

The title that adequately and briefly describes the content of the page.

Image Alternatives:

All elements have alternatives.

Text:

Headings – None is missing. (as shown right side)

Contrasts – It has a sufficient contrast ratio.

Resize – Well performace after resize the website.

Interaction:

Keyboard access and visual focus – Well performance in interaction.

Forms, labels, and errors - Well performance in interaction.

General:

Moving, Flashing, or Blinking Content:

Nothing automatically starts or lasts more than five seconds. Nothing will automatically update.

No content flashes or blinks more than three times in one second.

The screenshot shows a detailed site map for the University of Sydney. At the top, there are navigation links: Document Outline, Documents, Collapse all, Expand all, and Help/Developer. The main content area shows a hierarchical tree of pages:

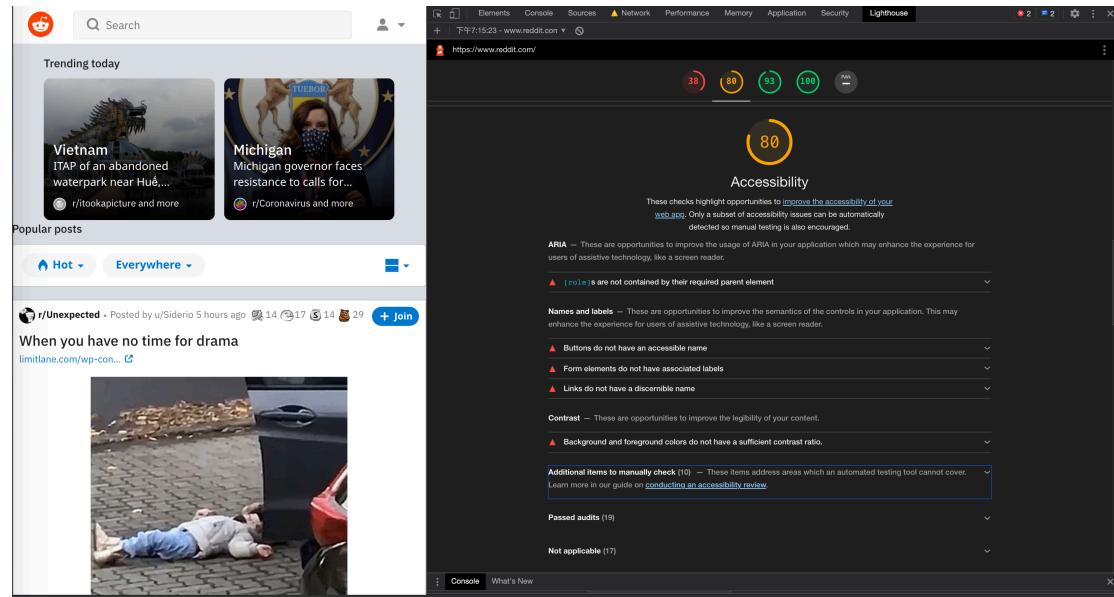
- https://www.sydney.edu.au/
- 11 headings
 - Home - The University of Sydney
 - Starting university
 - Find a course
 - News & opinion
 - The WHO report into the origins of COVID-19 is out, here's what happens next
 - Academics partner with industry and policy makers on new research
 - Cancer Council NSW and the University of Sydney partner to enhance Australia's cancer research capacity
 - Media
 - Student links
 - About us
 - Connect

Multimedia (video, audio) alternatives:

There is a video can be played after mouse-clicking, and can be access by keyboard. The video will not start automatically. But the video cannot access the captions, which means it cannot access the transcript.

Basic Structure Check:

After disabling all the image and CSS, the web still works, which means structure is well.



The image shows two side-by-side screenshots. On the left is the Reddit homepage with several posts visible, including one about a waterpark in Vietnam and another about Michigan's governor. On the right is a screenshot of the Google Lighthouse extension in a browser, specifically the Accessibility audit section. It shows a score of 80. The interface includes various audit categories like ARIA, Names and labels, and Contrast, each with a list of findings and some explanatory text.

Steps taken to generate the results for Reddit:

The manual check steps that been followed is Easy Checks from WAI and assisted by Web Developer Extension of Chrome. The automated auditing tool is Google Lighthouse. Lighthouse grade the accessibility of the Reddit page 80/100.

Lighthouse Test:

Overall, the accessibility of reddit.com is great. There are several problems related ARIA, Names and labels and Contrast. For ARIA, [role]s are not contained by their required parent element. Some ARIA child roles must be contained by specific parent roles to properly perform their intended accessibility functions. For names and labels, buttons do not have an accessible name, form elemets do not have associated labels and links do not have a discernible name. At last, for contrast, background and freground color do not have a sufficient contrast ratio.

Manual Test:

Page Title:

The title that adequately and briefly describes the content of the page.

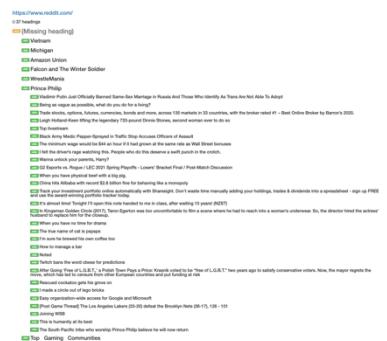
Image Alternatives:

Most of elements have alternatives.

Text:

Headings – Heading<h1> is missing. (as shown right side)

Contrasts – background and freground color do not have a sufficient contrast ratio.



Resize – Well performance after resize the website.

Interaction:

Keyboard access and visual focus – Well performance in interaction.

Forms, labels, and errors - Well performance in interaction.

General:

Moving, Flashing, or Blinking Content:

Nothing automatically starts or lasts more than five seconds. Nothing will automatically update.

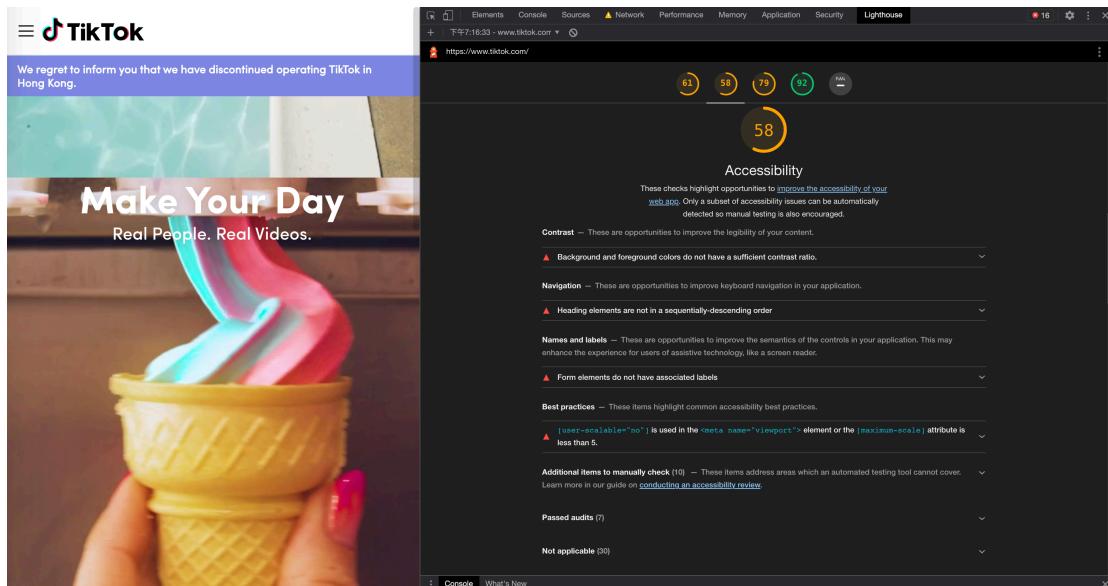
No content flashes or blinks more than three times in one second.

Multimedia (video, audio) alternatives:

If user scrolls the page to the position where contains a video will automatically play and end after the duration of the video. But the media player cannot be accessed by the keyboard but can be done with mouse. User also can change the volume. But there is no any caption or audio description.

Basic Structure Check:

After disabling all the image and CSS, the image is still showing, the reason is not detected. But the main function still works, the web structure is basically well except the content followed by video also cannot be shown.



Steps taken to generate the results for Tiktok:

The manual check steps that been followed is Easy Checks from WAI and assisted by Web Developer Extension of Chrome. The automated auditing tool is Google Lighthouse. Lighthouse grade the accessibility of the Tiktok page 58/100.

Lighthouse Test:

Overall, the accessibility of tiktok.com is great. There are several problems related Contrast, Navigation, Names and Labels and Best practices. For contrast, background and foreground colors do not have a sufficient contrast ratio. For Navigation, Heading elements are not in a sequentially-descending order. Also for names and labels, form elmetns do not have associated labels. The

aspect of best practices. [user-scalable="no"] is used in the <meta name="viewport"> element or the [maximum-scale] attribute is less than 5. Disabling zooming is problematic for users with low vision who rely on screen magnification to properly see the contents of a web page.

Manual Test:

Page Title:

The title that adequately and briefly describes the content of the page.



Image Alternatives:

All elements have alternatives.

Text:

Headings – Heading<h3> is missing. (as shown right side)

Contrasts – background and foreground color do not have a sufficient contrast ratio.

Resize – TikTok pages have text resizing issues. When the plain text is enlarged, the text on the page will fall off the button or overlap with other components.

Interaction:

Keyboard access and visual focus – Only accessible via mouse hovering.

Forms, labels, and errors - Well performance in interaction.

General:

Moving, Flashing, or Blinking Content:

Nothing automatically starts or lasts more than five seconds. Nothing will automatically update.

No content flashes or blinks more than three times in one second.

Multimedia (video, audio) alternatives:

There is only one video, and it will automatically start but will not pause after three seconds and there is no way to pause the video.

Basic Structure Check:

After disabling all the image and CSS, then linearizing the page, the information on the page still makes sense. Headings are the information right above them that they apply to. Alternative text can convey information when images are disabled.

Overall Discussion of the results:

Human habits are always different. Automation tools can indeed easily and clearly show the accessibility, but they may not be able to completely recombine the use habits of human beings even after countless iterations.

GROUP MEETING NOTES

During these weeks including semester break, we held two meetings that all evaluate the design for our project. At the beginning of these two meetings, we discussed the evaluation idea from our mock users, and decided the direction of our evaluation. We split the idea to different parts and assign to each members. After meetings, so far, our project prototype have three iterative version, the first one is our raw prototype. And after the first user evaluation, we added more meaningful icon and alternative text. At last, we decided the final version of our prototype to demonstration.

Overall Reflection of Logbook

For these two weeks, I completed some tasks for our project and finished the tutorial sheet on time. But during the process, I found tons of things needed to be improved. For week 3 tutorial, we mainly focus on the accessibility auditing. We review the WCAG2.1 and perform accessibility checking during the tutorial for tiktok.com. By using Lighthouse and Manual testing tools, I found that a good website cannot just shown well, but also needed to perform a good structure. The accessibility audit is a good way to check the sufficiency and to renew and improved the idea.

Evaluation of own design

My own parts mainly focus on the account page and some course page. To sum up, the evaluation of my own parts is essential for our prototype, because the account part is really core function of one website. First of all, the account page can be mock updated the information in our prototype and log out the account in account page directly. And the other part is about java script course page, the information becomes more meaningful and clear.

Graphical representation of own design journey

