EXSM 3929 Assignment 5: -  
Prioritizing Accessibility Issues

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Due: Jun 11, 2023

# Description

The purpose of this assignment is to gain practice setting priorities for accessibility issues. We will perform an accessibility audit on a website or application and then prioritize the work to be completed. To complete this assignment, you will need to use the skills and knowledge gained from the previous modules.

## Style Guidelines

Written answers must contain at least two complete sentences, and all questions must be completed. Lists may also be acceptable answers if presented with at least one complete sentence, and appropriate explanation.

Graphical content such as images and tables are recommended to support answers where appropriate. Tables must contain a title (*Table 1: “My Table Description”*) and be presented in a readable format. Images must also contain an appropriate title (*Figure 1: “My Image Description”*). All images must be explained, images of text alone are not acceptable.

# Instructions

Make a **copy** of this document, **edit**, **export** as a **PDF** and **submit** on **eClass**. Please keep this cover page.

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| --- | --- | --- |
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# Assignment

## **Part 1: Introduction**

Instructions

Complete the following questions.

Questions: -

1. **Which website or web application will you test, and why?**

**Answer:**

<https://www.canva.com/>

1. **What is the purpose of this website or application?**

**Answer:**

Canva's goal is to offer consumers a simple and convenient platform for making designs and images that are aesthetically appealing. It intends to enable people, companies, and organizations to quickly produce visual content with a professional appearance for a variety of uses, including social media postings, presentations, marketing materials, papers, and more. Users may tweak and customize their designs using Canva's large selection of design templates, fonts, photos, and other design components to suit their unique requirements and tastes. Canva's overall mission is to democratize design and open it up to all people, regardless of their experience or background in the field.

1. **How do you suppose this business or organization maintains operations? (How does it generate revenue, or where does it get funding, etc.)**

**Answer:**

Canva makes money from several different ways. The website provides both a free version with constrained functionality as well as a paid subscription called Canva Pro. Users can access more features, more sophisticated design components, a bigger collection of photos and templates, and collaborative tools with the Pro subscription. Canva Pro subscription fees are an important source of income for the business.

Additionally, Canva provides premium features and material that customers may buy on a pay-per-use basis, including premium pictures, illustrations, and templates. For the business, this offers an additional source of income.

1. **What is the main user objective when visiting this website or application?**

**Answer:**

Creating eye-catching designs and graphics for a variety of uses is the main user goal when visiting Canva. Users visit Canva to create professional-looking visual material using its straightforward design tools and extensive selection of templates, pictures, fonts, and design components. Users' main purpose is to use Canva's resources to bring their creative ideas to life, whether it's producing social media graphics, presentations, posters, flyers, or other marketing materials. Canva's goal is to empower users with the tools and resources they need to effortlessly and efficiently produce high-quality designs that match their individual goals and objectives, regardless of their design skill.

1. **Describe the steps a typical user must take for them to achieve this objective. (at least four steps)**

**Answer:**

**A.** Visit the Canva website or open the Canva application.

**B.** Sign in to their Canva account or create a new account if they don't have one.

**C.** Explore the available design options by browsing through the templates or using the search function to find a specific design type (e.g., social media post, presentation, flyer).

**D.** Select a desired template or start with a blank canvas to begin the design process.

**E.** Customize the chosen template by adding text, images, shapes, and other design elements. Users can edit the text, change the font, adjust the colors, upload their own images, and rearrange elements to suit their preferences.

**F.** Save the design to their Canva account or download it in their preferred format (e.g., PNG, PDF) for further use. Besides, they can share the design directly to social media platforms or collaborate with others by inviting them to edit or view the design.

**Part 2: Testing**

Instructions

Complete the following checklist and provide the detailed answers where indicated.

Questions (checklist): -

* **Perform a manual accessibility audit on your chosen website or application.**
  + **Include screen reader testing.**
  + **Include keyboard testing.**
  + **Describe the issues in your own words (Hints: What were you trying to do, why? What were the barriers that you faced? Are these to be expected? Is this acceptable?)**

**Answer:**

I have tested the voice over in the Canva website and it is well maintained in this case. I was trying to hear some of the text elements and some button text, then I got the expected result. Again, I have done keyboard testing. While running the keyboard testing, I got everything perfect but once I got into the dropdown menu I couldn’t unhide the dropdown it showed. That’s the only obstacle I faced there. Overall, the experience is well-enough.

* **Run two automated tests on your website or web application of choice.**
  + **Describe the automated tools (Hint: What did you choose and why? What is the tool good for?)**
  + **Screenshot the results (must be high quality images, see style guide)**
  + **Summarize the results in your own words (Hint: Describe the issue in a paragraph. Recreate any important tables inside this Google Document, you must explain all images)**
  + **Include links to the tool.**

**Answer:**

I choose two automated tools which are:

1. Button Contrast Checker (<https://www.aditus.io/button-contrast-checker/>)

2. Accessibility Insights for Web (<https://accessibilityinsights.io/docs/web/overview/>)

The website https://www.aditus.io/button-contrast-checker/ is highly regarded for its accessibility-focused approach to evaluating color contrast. It provides a user-friendly interface that allows designers to input color combinations and instantly receive feedback on the contrast ratio based on WCAG guidelines. This tool helps ensure that websites are inclusive and readable for all users, including those with visual impairments or color vision deficiencies. By emphasizing the importance of color contrast, designers can create visually appealing and accessible digital experiences.

The website https://accessibilityinsights.io/docs/web/overview/ is highly regarded for its comprehensive guidance on web accessibility. It provides detailed information, best practices, and code examples to help web developers and designers improve the accessibility of their websites. The website is regularly updated to reflect the latest accessibility standards, making it a valuable resource for creating inclusive online experiences.

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* **Identify the relevant issues from the WCAG 2.1 specification.** 
  + **Create a table for each issue (attempt to find 3-7 issues)**
  + **Include links to the appropriate section.**
  + **Refer to tables created in a previous assignment for help.**

**Answer:**

Table 1: Button contrast Checker 1.4.13

|  |  |
| --- | --- |
| Dismissible | Button Contrast Checker |
| A mechanism is available to dismiss the additional content without moving pointer hover or keyboard focus, unless the additional content communicates an input error or does not obscure or replace other content.  <https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus> | Button Contrast Checker found this issue on button hover when pointer is over to this button. |

|  |  |
| --- | --- |
| Hover able | Button Contrast Checker |
| If pointer hover can trigger the additional content, then the pointer can be moved over the additional content without the additional content disappearing.  <https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus> | Button Contrast Checker tool found this issue as there is a button causing the contrast accessibility while hovering. |

|  |  |
| --- | --- |
| Persistent | Button Contrast Checker |
| The additional content remains visible until the hover or focus trigger is removed, the user dismisses it, or its information is no longer valid.  <https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus> | There is no such issue in there. |

Table 2: Keyboard Accessible 2.1.1

|  |  |
| --- | --- |
| Keyboard Accessible | Accessibility Insights for Web |
| All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.  <https://www.w3.org/TR/WCAG21/#keyboard-accessible> | Accessibility Insights for Web showed the issue in their audit result that keyboard navigations are not identifying at some places. |

## **Part 3: Prioritization**

### Instructions

Complete the following questions, there are two parts, Section A is for your initial reaction, and Section B is for more thoughtful work.

**Section A**

1. **Is it obvious how accessibility issues should be prioritized?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * 1 (no) | * 2 | * 3 | * 4 | * 5 (yes) |

1. **What is your greatest priority issue? Why?**

**Answer:**

The greatest priority issue for me is to have a user-friendly and intuitive experience that is responsive, fast-loading, and optimized for mobile devices as those are the first reasons that is vary to the website traffic.

1. **Describe your strategies for prioritizing accessibility issues.**

**Answer:**

To prioritize accessibility issues, we use several crucial techniques. To begin with, we carry out exhaustive accessibility audits to assess websites, programs, and digital material for any barriers and flaws. These audits adhere to established standards like WCAG to verify adherence to accepted accessibility norms. Additionally, we actively involve people with disabilities in user testing and feedback sessions, which enables us to learn important details about their experiences and prioritize problems appropriately. To make sure that our products adhere to the appropriate standards, we also consider statutory requirements and accessibility-related restrictions. Finally, we adhere to a culture of continuous improvement, working hard to increase accessibility and deal with any problems as soon as they arise.

**Section B**

1. **Present your accessibility issues in a table format (unprioritized). You can use multiple tables. The table should clearly identify the accessibility issue from WCAG specification and contain a description of your experience on the website or application. See previous assignments for an acceptable table format.**

**Answer:**

Table 3: Accessibility issue and my experience

|  |  |
| --- | --- |
| (WCAG) 2.1 | My experience |
| Success Criterion 1.4.13 Content on Hover or Focus. | There are several buttons here which has hover contrast issue as well as focus issue when user clicks on it. When hovered the background color and the text color of the button is failed in the AAA criteria. Also, It is not differentiate the focused and hovered state. |
| Success Criterion 2.1.1 Keyboard | At some point keyboard navigation doesn’t work perfectly. Where it is moved to the next section without visiting some interactive elements which couldn’t be navigated by tab or arrows. |

1. **Referring to the issues above only by their table name, make an unordered list of the tables. We will use this list for the next few questions.**

**Answer:**

Table 2: Keyboard Accessible 2.1.1

Table 3: Accessibility issue and my experience

Table 1: Button contrast Checker 1.4.13

1. **Repeat the entire list above but add a comment to each line. Comment on how you were personally affected by the issue. Use a numbered system where 1 is personally unaffected, and 5 is very disturbed.**

**Answer:**

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4)

Comment: I was personally affected by this issue while doing the keyboard testing. Some interactive elements couldn’t be selected by keyboard, but it can be accessed by mouse.

Table 3: Accessibility issue and my experience (personal frustration: 4)

Comment: My personal frustration at this point is a bit similar as it also has some keyboard accessibility issue.

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1)

Comment: As I am not visual impaired, I haven’t faced any frustration at this point while the button color is changing in different states of its.

1. **Repeat the entire list above but add a comment to each line. Comment on which of the four accessibility principles are involved. Use an abbreviated letter system: P, O, U, R where each letter represents Perceivable, Operable, Understandable, and Robust.**

**Answer:**

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4, principles: O)

Comment: The operability principle emphasizes making web navigation and content usable by a variety of users. It entails making sure that users, irrespective of their ability, can easily navigate, interact with, and operate the interface. This involves making interactive features accessible and predictable, enabling people to navigate using assistive technologies, eliminating task time restrictions, and offering keyboard accessibility.

Table 3: Accessibility issue and my experience (personal frustration: 4, principles: U)

Comment: The understandability principle highlights the need of generating content that is clear, simple, and easily understood by people. It entails utilizing simple language, giving clear directions and cues, structuring material logically, and avoiding complicated or ambiguous terminology. It also comprises verifying user input and displaying helpful error messages to aid in the understanding and resolution of any problems.

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1, principles: P)

Comment: According to the Web Content Accessibility Guidelines (WCAG), buttons and other interface components must meet specified contrast ratio standards (such as 4.5:1 for regular text) to provide appropriate perceivability. Designers may ensure that buttons stand out and are clearly distinguishable by following certain contrast rules, allowing users to identify and interact with them without difficulty.

1. **Repeat the entire list above but add a comment to each line. Comment on how widespread this issue is. Use a numbered system where 1 indicates the issue occurs infrequently, and 5 indicates that the issue occurs in many places.**

**Answer:**

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4, principles: O, extent: 5)

Comment: This issue occurs to almost 100 elements here. After running the Accessibility Insights for Web automated, I have got the result.

Table 3: Accessibility issue and my experience (personal frustration: 4, principles: U, extent: 5)

Comment: This issue occurs to almost 100 elements here. After running the Accessibility Insights for Web automated, I have got the result.

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1, principles: P, extent: 1)

Comment: This issue occurs only on one button of this website which is not much affective.

1. **Repeat the entire list above but add a comment to each line. Comment on how difficult this issue might be to fix (estimate). Use a numbered system where 1 indicates the issue might be easy to fix, and 5 indicates that the issue might be difficult to fix.**

**Answer:**

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4, principles: O, extent: 5, difficulty: 4)

Comment: As this issue occurs on the various points of the website it’s hard to find the correct tab stops of the keyboard accessibility and elements checking.

Table 3: Accessibility issue and my experience (personal frustration: 4, principles: U, extent: 5, difficulty: 4)

Comment: As this issue occurs on the various points of the website it’s hard to find the correct tab stops of the keyboard accessibility and elements checking.

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1, principles: P, extent: 1, difficulty: 1)

Comment: It’s easy to fix it as it only caused the color contrast issue.

1. **Repeat the entire list above but add a comment to each line. Comment on the degree to which you believe this issue may affect the bottom-line of this business or organization (estimate)?**

**Answer:**

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4, principles: O, extent: 5, difficulty: 4, impact: 4)

Comment: When any visually impaired user visits the website for some business purpose or suppose any user who wants to get this product, but he/she finds trouble going to the element which he/she is looking for to check whether this product is perfect for him/her or not. The accessibility issue here will impact a lot there.

Table 3: Accessibility issue and my experience (personal frustration: 4, principles: U, extent: 5, difficulty: 5, impact: 4)

Comment: When a user who is blind visits the website for business purposes or, let's say, a user who wants to purchase the product but has problems finding the section where he or she is seeking to see if the product is ideal for them. There will be a significant impact from this accessibility issue.

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1, principles: P, extent: 1, difficulty: 1, impact: 2)

Comment: It’ll not create a significant impact, but it shouldn’t be negligible.

1. **Consider the five metrics presented here: personal frustration, accessibility principles, extent of issue, solution difficulty, and business impact. Order these five metrics, the first should be the most important to you, the fifth should be the least important.**

**Answer:**

When considering the importance of the five metrics presented—personal frustration, accessibility principles, extent of issue, solution difficulty, and business impact—I would prioritize them as follows:

**1. Accessibility principles:** This metric holds the utmost importance as it directly aligns with the core objective of web accessibility. Ensuring compliance with accessibility principles and guidelines allows for the creation of inclusive digital experiences that cater to a diverse range of users.

**2. Extent of issue:** The second priority is understanding the extent of the accessibility issue. Assessing how many users are affected and the severity of the barriers they face helps in determining the urgency and importance of addressing the issue.

**3. Personal frustration:** While personal frustration is a valid consideration, it takes the third position. It is essential to recognize and empathize with user frustrations caused by accessibility issues. However, it should be weighed against the broader impact and adherence to accessibility principles.

**4. Solution difficulty:** The level of difficulty in implementing a solution is significant but ranks fourth in priority. While it may affect the time and effort required for remediation, it should not be a deterrent in addressing accessibility issues. Solutions should be pursued regardless of their complexity, aiming to provide equal access to all users.

**5. Business impact:** The last priority is the business impact. While it is important to consider the financial implications and benefits of addressing accessibility issues, it should not supersede the fundamental goal of ensuring equal access and inclusivity.

1. **Finally, use the answer to question seven and eight (above) to present a prioritized list of accessibility issues. Present your list of table names as ordered by priority.**

**Answer:**

Table 1: Button contrast Checker 1.4.13 (personal frustration: 1, principles: P, extent: 1, difficulty: 1, impact: 2)

Table 2: Keyboard Accessible 2.1.1 (personal frustration: 4, principles: O, extent: 5, difficulty: 4, impact: 4)

Table 3: Accessibility issue and my experience (personal frustration: 4, principles: U, extent: 5, difficulty: 5, impact: 4)

**10. Discuss and comment on any difficulty in making the decisions required to present this final list (question nine), based on your list from question eight. Were there any conflicts in setting this final priority? If so, how did you resolve this?**

**Answer:**

One challenge in making decisions about these goals is the inherent trade-offs and conflicts that may develop. There may be tensions, for example, between addressing accessibility principles and evaluating the commercial impact or solution difficulties. Striking for an important level of accessibility may necessitate extra resources and time, potentially affecting the operations and profitability of the business. Balancing these competing forces can be difficult and may necessitate significant consideration and decision-making.

To settle conflicts, excellent communication and collaboration among parties involved in the decision-making process are required. Representatives from many departments may be present. It is feasible to identify common ground and reach a consensus on the priority order by encouraging open talks and considering many perspectives.

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