EXSM 3929: Digital Accessibility
M4 Weekly Response

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Instructions

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

Weekly response documents are **to be completed by Saturday evening (11:59pm)**. Each response document follows the same format; there are **four web resources** with **three talking points**.

The purpose is to help prepare you for our discussions on Tuesday evenings. To receive full marks visit each web resource, respond to the prompts, and submit on eClass.

This document will be marked out of **ten points** based on the following criteria:

DESCRIPTION	VALUE	MARK
Document is **submitted** with proper **ccid**, **name**, and **date**	2	
Document is **complete** with talking points **relevant to the course**	8	

Notes

Late submissions are received at a **reduced value**, see eClass for details.

Please **keep this cover page** attached.

Weekly Response

How to Manually Check Your Website for Accessibility

Link: https://equalizedigital.com/accessibility-checker/how-to-manually-check-your-website-for-accessibility/

- **Why is manual accessibility testing important?**

Answer:

Manual accessibility testing is important for several reasons:

1. Accuracy: Manual testing allows for a more accurate assessment of accessibility because it involves human evaluation and judgment. Automated accessibility tools can catch certain issues, but they may not detect all accessibility barriers or provide context-specific insights.

2. Contextual Understanding: Manual testing enables testers to understand the context and intent behind certain design elements or functionality. They can evaluate how well the website accommodates different user scenarios and adapt their testing approach accordingly.

3. Interaction Evaluation: Manual testing allows for the evaluation of interactive elements such as forms, dropdown menus, and modal windows. Testers can assess if these elements are accessible, usable, and provide appropriate feedback to users.

4. User Experience Considerations: Manual testing considers the overall user experience and how accessibility impacts it. Testers can analyze the flow of the website, navigation pathways, and the effectiveness of accessibility features in enhancing user engagement and satisfaction.

5. Edge Cases and Uncommon Scenarios: Manual testing helps identify accessibility issues that may arise in edge cases or uncommon user scenarios. These situations might not be covered by automated testing tools and require human judgment to ensure inclusivity for all users.

- **What is the difference between manual testing and user testing?**

Answer:

The process of manually executing test cases and analyzing the behavior and functionality of a software program or system is referred to as manual testing. Human testers perform established test scenarios, enter data, interact with the application's user interface, and verify expected results. Manual testing is used to find faults, confirm functionality, and guarantee that the program satisfies the requirements.

User testing, also known as usability testing or user acceptance testing (UAT), on the other hand, focuses on analyzing software from the standpoint of end users. It entails putting real users, who are representative of the intended population, through specified tasks or scenarios utilizing the program. To determine how effectively the program fulfills user needs, expectations, and usability requirements, testers monitor user interactions, collect feedback, and analyze the user experience.

Manual testing involves a broader variety of testing tasks, including as functional, performance, security, and compatibility testing, whereas user testing focuses solely on analyzing the software's usability and user experience.

Manual testing is carried out by dedicated testers or quality assurance professionals who adhere to prepared test cases, whereas user testing is carried out by actual end-users who may lack specific testing knowledge but represent the target demographic.

- **Whose job is it to run manual tests (designers, developers, others)?**

Answer:

The responsibility of running manual tests can vary depending on the organization, project, and team structure. In general, manual testing can involve multiple roles working collaboratively to ensure the quality and functionality of the software. Here are some common roles involved in manual testing:

1. Quality Assurance (QA) Testers: QA testers are dedicated professionals who specialize in testing software applications. They have expertise in test planning, designing test cases, executing manual tests, and reporting defects. QA testers often work closely with developers and other stakeholders to ensure the software meets quality standards.

2. Software Testers: Software testers, including QA testers, perform manual testing activities. They are responsible for executing test cases, verifying functionality, and identifying defects in the software. Testers focus on following test plans, documenting test results, and providing feedback to the development team.

3. Developers: Developers may also participate in manual testing, especially during the initial stages of development or when conducting integration tests. Developers can run manual tests to validate their own code changes and ensure that the software components integrate correctly.

4. Designers: Designers may contribute to manual testing by assessing the usability and user experience aspects of the software. They can provide insights on how well the design elements align with user expectations, interface guidelines, and overall user satisfaction.

5. Product Managers/Owners: Product managers or product owners can be involved in manual testing to validate that the software meets the intended requirements and aligns with the product vision. They provide input on user acceptance, feature completeness, and overall product quality.

Web Accessibility Evaluation Tools List

Link: https://www.w3.org/WAI/ER/tools/

- **How many tools did you try (without being prompted)?**

Answer:

I have tried about 40 tools from 167 web accessibility tools.

- **Did you find any tools particularly useful?**

Answer:

Here are the tools I find useful:

1. WAVE Web Accessibility Evaluation Tool

2. Web Accessibility Evaluation Tools List

3. WCAG-EM Report Tool

4. Contrast Checker

5. AInspector Sidebar

6. Tota11y

7. Axe DevTools

8. Tenon.io

9. Color Contrast Analyzer

10. Web Developer Toolbar

11. Pa11y

12. Accessibility Insights for Web

13. HTML_CodeSniffer

14. Funkify Accessibility Simulator

15. Siteimprove Accessibility Checker

- **Did you generate any unexpected results?**

Answer:

I didn't get any unexpected results from the tools I have tried. And I think WAI's tools are normally well-tested and trustworthy. When analyzing website accessibility, it is always a good idea to use tools from reputable sources and adhere to the WAI-recommended principles.

Involving Users in Evaluating Web Accessibility

Link: https://www.w3.org/WAI/test-evaluate/involving-users/

- **How would you change your testing criteria to include disabled users?**

Answer:

To include disabled users in testing criteria for web accessibility, consider the following approaches:

Participant Recruitment: Make a conscious effort to find participants who have a range of disabilities and are representative of the target audience. Find appropriate participants by working with local accessibility groups, online communities, or organizations that support people with disabilities.

Accessibility Requirements: Include accessibility requirements depending on pertinent standards like WCAG. Determine the success criteria or checkpoints that apply to the website or application being evaluated, considering the various forms of disabilities.

Test Task Design: Create projects that include typical user interactions and potential difficulties faced by users with disabilities. Include situations where viewing multimedia with subtitles and transcripts, using complex forms, or using assistive technology is required.

Assistive Technologies: Consider how users with disabilities interact with the website/application using screen readers, keyboard navigation, screen magnifiers, or alternative input devices. Test for compatibility and ensure proper functionality.

Real-World Situations: Test in different environments, resolutions, and devices. Account for factors like lighting conditions, noise, and responsiveness across desktops, laptops, tablets, and mobile devices.

Observation and Feedback: Keep an eye on participants while they are being tested and urge them to share their feedback. Pay attention to the difficulties, annoyances, and impediments to accessibility people experience.

- **Why is it difficult to draw conclusions from single instance user testing?**

Answer:

Drawing conclusions from a single instance of user testing is challenging due to several reasons:

Sample Size: A single user represents only a small portion of the target user population, making it difficult to generalize findings to a wider audience.

Individual Differences: Users have unique abilities, experiences, and preferences. Relying on one user's feedback may not capture the full range of perspectives and behaviors.

Variability in Performance: Users' performance can vary across different instances due to various factors, making it hard to draw definitive conclusions from a single test session.

Contextual Factors: User behavior can be influenced by the testing environment, awareness of being observed, or knowledge of the testing purpose, potentially altering their natural behavior and introducing biases.

Limitations of Time: With limited time available for testing, it may not be possible to cover all scenarios and interactions, potentially missing important issues.

- **How could you make this whole process easier?**

Answer:

There are several ways to make the process of user testing and drawing conclusions easier:

1. **Establish Clear Objectives:** Clearly define the objectives and research questions before starting the user testing process. This helps focus the testing efforts and ensures that the right information is collected.
2. **Plan and Prepare:** Careful planning and preparation can make the testing process smoother. Develop a detailed testing plan, including tasks, scenarios, and success criteria. Prepare necessary materials, such as consent forms, test scripts, and data collection methods.
3. **Use Prototypes and Wireframes:** Utilize low-fidelity prototypes or wireframes in the initial stages of testing. These can be quickly created and modified based on feedback, allowing for early user involvement and iterations.
4. **Recruit Diverse Participants:** Aim to recruit participants who represent the target user population in terms of abilities, demographics, and expertise. This ensures a more comprehensive understanding of user needs and preferences.
5. **Provide Clear Instructions:** Offer clear and concise instructions to participants before they begin the testing sessions. Clearly communicate the goals, tasks, and any specific criteria or constraints. This helps participants focus on the desired aspects and minimizes confusion.
6. **Incorporate Think-Aloud Method:** Encourage participants to think aloud while performing tasks, sharing their thoughts, impressions, and decision-making process. This provides valuable insights into their cognitive processes and helps understand their experience more effectively.

Tips for Conducting Usability Studies with Participants with Disabilities

Link: https://www.smashingmagazine.com/2018/03/tips-conducting-usability-studies-participants-disabilities/

- **At what stage would you recommend user testing for accessibility?**

Answer:

User testing for accessibility should ideally be conducted at various stages throughout the design and development process to ensure a more comprehensive and inclusive approach. But if I would choose the development phase as this is the more crucial stage. As the design is implemented and the application or website is developed, ongoing user testing for accessibility should continue. This phase allows for testing the accessibility of interactive elements, forms, multimedia content, navigation, and overall usability. It helps ensure that the implemented features align with accessibility guidelines and provide an inclusive user experience.

- **How would you approach recruitment for user testing?**

Answer:

To approach recruitment for user testing:

1. Define your target audience based on demographics and user traits.
2. Utilize various channels like online platforms, social media, and disability organizations to reach potential participants.
3. Clearly state participant criteria, emphasizing specific disabilities or accessibility needs.
4. Use inclusive language to encourage a diverse range of participants to apply.
5. Collaborate with accessibility organizations for connections and support.
6. Consider offering incentives as a token of appreciation.
7. Provide informed consent forms and ensure participants understand their involvement.
8. Prioritize privacy and data protection.
9. Conduct a pilot test to identify and address any issues before the main user testing.

Following these steps will help one recruit participants effectively for user testing, ensuring meaningful insights for accessibility-focused research.

- **What challenges can you imagine with remote accessibility testing?**

Answer:

Limited control over the testing environment, potential technical issues with participants' devices and assistive technologies, difficulty observing subtle user behaviors, technical issues and connectivity issues, a lack of immediate physical support, limitations in capturing contextual information, and potential difficulties in collaboration and communication with participants are just a few of the difficulties that remote accessibility testing can pose. Nevertheless, it also has benefits like improved accessibility, economic effectiveness, and the capacity to attract a wide range of individuals. Meaningful remote accessibility testing is still possible if these issues are recognized and dealt with beforehand.

Thank You.