Lab 3: WCAG 2 AA: Understanding the Web Content Accessibility Guidelines (WCAG)

Analyzing real-world accessibility defects and linking them to the appropriate WCAG success criteria are essential aspects when documenting accessibility compliance. Within this lab, your responsibility is to connect accessibility issues with WCAG guidelines, explain the impact on users with disabilities and recommend solutions that are aligned with the latest accessibility best practices.

# Objectives

In this lab you will:

* Analyze accessibility defects.
* Interpretate WCAG success criteria, sufficient techniques, and common failures.
* Communicate accessibility failures in alignment to WCAG
* Elaborate on the impact on users with disabilities.

# Lab Submission

On Brightspace, upload one Microsoft Word file with your answers in the table format provided below.

Include your first name and last name and student number in the filename i.e., Lab4\_YourName\_YourStudentNumber.docx

# Instructions

Use **WCAG 2.1 Level A and Level AA** references below to answer the questions

Resources:

* [WebAIM's WCAG Checklist](https://webaim.org/standards/wcag/checklist),
* [WCAG quick reference](https://www.w3.org/WAI/WCAG21/quickref/)

# Question 1

For each accessibility defect provided:

* Identify the corresponding WCAG success criteria.
* Find one related technique or failure associated with the issue.
* Determine how users are impacted by each defect.

Note: The first defect is an example to use for practice.

|  | **Accessibility defect** | **Failure of Success Criteria** | **Sufficient technique (General, HTML) or failure** | **Impacted users** |
| --- | --- | --- | --- | --- |
| **EX** | **(Example) The HR diagram does not have any text alternative** | **1.1.1** | **H37: Using alt attributes on img elements** | **Screen reader users will not be aware of the information on the graphics** |
| 1 | The heading "Your leave balance" has been styled to look like a heading but has not been marked up as a heading within the HTML code. | 2.4.6 | G130: Providing descriptive headings | Screen reader users may not be able to "skim" the headings to locate the specific content they need |
| 2 | The progress bar: When it receives focus, the screen reader does not announce any role (i.e., slider) | 4.1.2 | |  | | --- | |  |  |  | | --- | | ARIA5: Using WAI-ARIA state and property attributes to expose the state of a user interface component | | Screen reader users cannot perceive role/state of progress bar |
| 3 | The “username” label is not connected to the corresponding input field | 1.3.1 | H44: Using label elements to associate text labels with form controls | Screen reader users cannot associate input with label |
| 4 | Common input fields below lack a way to communicate purpose.  -Your full name -your mobile phone  -Your email address | 1.3.5 | H98: Using HTML autocomplete attributes | Users with cognitive disabilities and screen reader users cannot benefit from autofill or purpose recognition |
| 5 | Heading level 3 appears after heading level 1, skipping heading level 2. | 1.3.1 | G141: Organizing a page using headings | Screen reader users and keyboard users may be confused by inconsistent structure |
| 6 | “Add employee” modal dialog: When the dialog is closed, the focus goes to the top of the page instead of the trigger element on the page | 2.4.3 | H102: Creating modal dialogs with the HTML dialog element | Keyboard and screen reader users lose their place on the page |
| 7 | Instructions necessary for form completion, especially regarding required fields, are missing. | 3.3.2 | G131: Providing descriptive labels | Users with cognitive disabilities and new users cannot complete forms accurately |
| 8 | On a mobile view (320 CSS pixels), the carrousel back and next buttons disappear | 1.4.10 | F102: Failure of Success Criterion 1.4.10 due to content disappearing and not being available when content has reflowed | Mobile users and low vision users cannot navigate carousel |
| 9 | The first paragraph is clipped with 200% zoom | 1.4.4 | G142: Using a technology that has commonly-available user agents that support zoom | Low vision users relying on zoom cannot read full content |
| 10 | The color contrast ration between the text & the background in the error message is 3.1:1 | 1.4.3 | G18: Ensuring that a contrast ratio of at least 4.5:1 exists between text (and images of text) and background behind the text | Low vision users cannot read error messages clearly |
| 11 | The video “Tutorial for new users” has no closed caption | 1.2.2 | H95: Using the track element to provide captions | Deaf and hard-of-hearing users cannot access video content |
| 12 | Added to employees list: This is a status update that dynamically changes without page reload but it is missed from the alert live region content and therefore not indicated to screen reader users. | 4.1.3 | ARIA19: Using ARIA role=alert or Live Regions to Identify Errors | Screen reader users are not informed of updates |