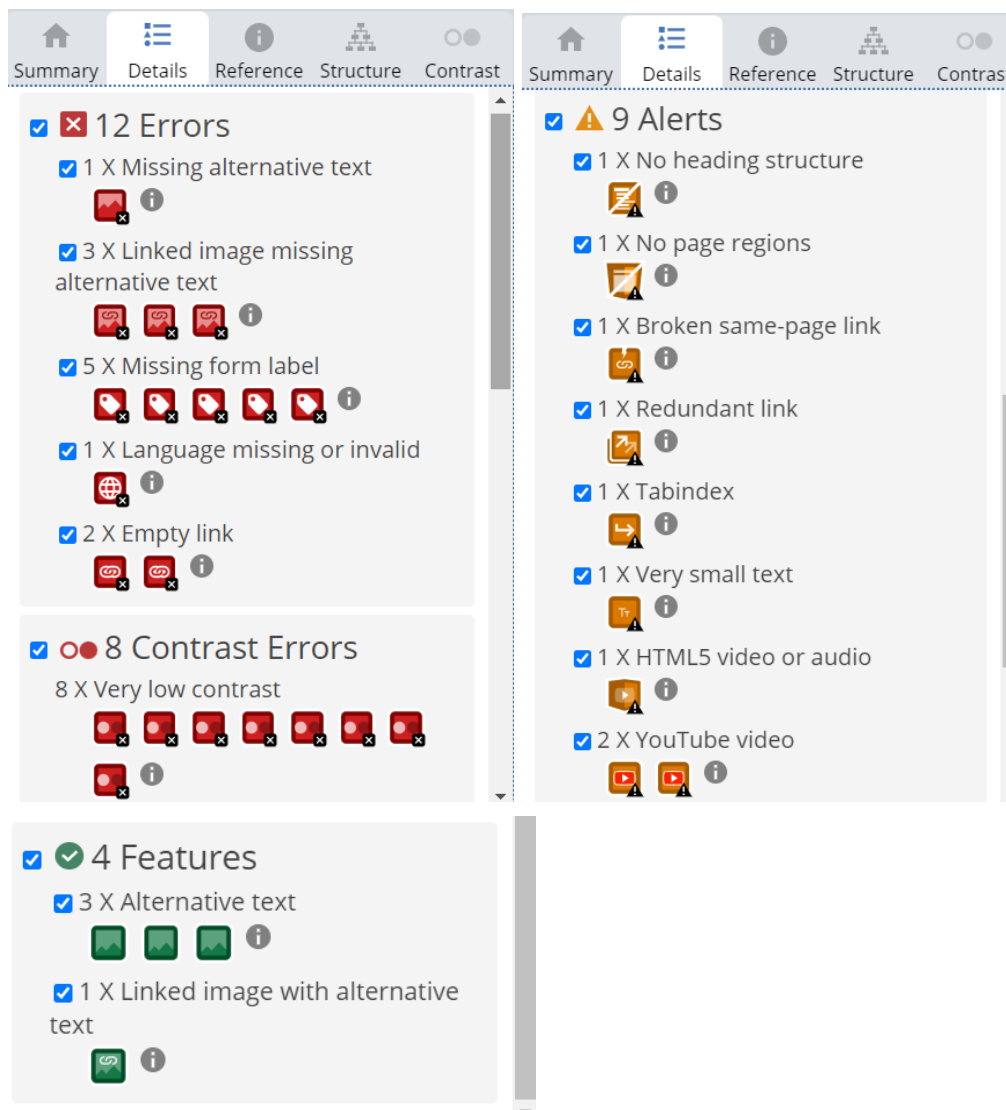Jack Diligent

WAVE output:

Image source: WAVE Extension [1]

Main Problems detected by WAVE:
- Missing alternative text
- No language attribute identification
- Low contrast between the color of text and the color of the background
- Lack of heading structure of page regions

Problem 1 (Solved at Lines 13, 15, 17, 22, 24, 26, and 32 of .html file)
- Problem description: There was no heading structure or landmarks/regions on the page, which are supposed to help effectively navigate the page using a screen reader.
- Problem severity: Severe

- How I fixed it: I changed the navigation bar's tag from <div> to <nav>. The tag <h1> is supposed to describe the page as a whole, and be similar to the page <title> [2]. Following these directions, I classified the banner image with the text "Accessibility Overview" in it as <h1> because the page <title> is "Accessibility Course Overview". As the heading tag number increases this is supposed to correspond to increasing degrees of 'indentation' [2]. I saw the video, the list of links, and the form as at the same level, so I labeled them all as <h2>.
- Whether or not it was detected: It was detected by WAVE [1].

Problem 2 (Solved at Lines 14, 17, and 27-9 of .html file)
- Problem description: alt text for images was either non-existent, or not informative enough
- Problem severity: Severe. I don't think the banner image was crucial to understanding the webpage, and I think a bunch of dots in a column could be understood as a bulleted list relatively easily. However, when combined with the navigation links, I think the problem becomes severe.
- How I fixed it: I added alt text to the banner image and navigation link images that didn't have any. The alt text of the bullet points in the list of links simply said "dot." I changed it to "bullet point" so users with a screen reader would have a better idea of the images' function.
- Whether or not it was detected: The banner was not detected at all, the bullets were not considered issues simply because there was alternative text, and the Navigation Links were detected by WAVE [1].

Problem 3 (Solved at Lines 36 and 50 of .html file)
- Problem description: Not all input boxes in the sign-up form had labels. For the name, there was only one "label" for three boxes, and its tag was "span". For the comment text area, the text "Comments:" wasn't coded as a label, which means there is no helpful association between the two.
- Problem severity: Moderate. I can imagine tech-savvy visually impaired users figuring out that the text "Name" followed by three-boxes indicates a need for your first name, middle initial, and last name. And they could probably understand that an empty text box that comes right after the text "Comments" is intended for you to leave comments in.
- How I fixed it: I made sure each box on the form has an associate label. That way it is incredibly clear which each box is for [3].
- Whether or not it was detected: It was detected by WAVE [1].

Problem 4 (Solved at Lines 43-4, and 47 of .html file, and at Lines 5, 6, and 9 of .js file)
- Problem description: The state of the spam checkbox was a mess. It hadn't been coded to advertise that it's a button. The id was "receivespambutton," even though it's a checkbox.
- Problem severity: Severe
- How I fixed it: I turned the text above the box into a label. I turned the <div> tag into an <input> tag, so it's now coded as a checkbox. I then deleted all the code from the .js file

that toggled the image that was originally there, and changed the if statement in the .js so it didn't apply to the image, but to the value.
  - Whether or not it was detected: It was not detected by WAVE [1].

Problem 5 (Solved at Lines 19-24 of .html file, and at Line 15 at .js file)
  - Problem description: There were no captions on the video
  - Problem severity: Severe
  - How I fixed it: I uploaded the video to YouTube, transcribed the audio into captions, and then embedded the video in the .html file. Since it was now an embedded video, I deleted the .html and the .js code about the video player button, because there was no need for it.
  - Whether or not it was detected: The error from WAVE [1] was "Missing Alternative Text," so it knew something was wrong, but not this specific problem.

Problem 6 (Solved at Line 28 of .html file)
  - Problem description: The video did not include an audio description of the graph being shown on screen
  - Problem severity: Moderate. The speaker describes the take away from the graph, which is now being transcribed in the captions, but the specific data is still inaccessible from visually impaired users.
  - How I fixed it: I went back into the captions of the YouTube video and edited the captions to include audio descriptions. I wrote out the numbers being shown on the graph, and wrote how the speaker was referring to the graph. Without being able to see the graph, you would have no idea what the speaker is referring to when he says "As you can see"
  - Whether or not it was detected: Once again, the error from WAVE [1] was "Missing Alternative Text," so it knew something was wrong, but not this specific problem. Since the instructions described audio descriptions as "the video equivalent of alternative text for images," I decided it was okay to not include alternative text for this video.

Problem 7 (Solved at Line 38 of .css file and at Lines 22, 44 of .html File)
  - Problem description: Lack of outline (visible focus) for the links at the top of the page. The tab order was also wrong, where elements in the middle of the page would be highlighted first, and other elements were completely skipped over.
  - Problem severity: Severe.
  - How I fixed it: I deleted "outline: none;" from the part of the css file that applied to elements of class "navigation," because this made the outline for these elements invisible [4]. I removed tabindex="5" from the videoplayer code because this made it get highlighted before elements that were located above it on the page [5]. I included tabindex="0" in the checkbox and accessibility banner image, because they were getting skipped over without it there. Now they get highlighted based on their order in the source code [5].
  - Whether or not it was detected: The positive tab index number was detected by WAVE [1], but none of the others were.

Problem 8 (Solved at Line 29 of .css file)
- Problem description: Very Low color contrast with the form, bulleted list, and banner image text.
- Problem severity: Severe
- How I fixed it: The text color for all the page's text was set to gray, so I changed it to black to increase contrast. I also added black text with a white background to the accessibility banner; replacing the gray text.
- Whether or not it was detected: The form and bulleted list text was detected by WAVE [1], but the banner image text wasn't.

Problem 9 (Solved at Lines 19-24, and 42-8 of .html file)
- Problem description: The video can't be played and the checkbox can't be toggled by using the keyboard.
- Problem severity: Severe
- How I fixed it: I embedded the video in the .html file, so it became playable using the spacebar. I turned the checkbox into an official html checkbox, so it's now toggleable with the spacebar.
- Whether or not it was detected: It was detected by WAVE [1].

Problem 10 (Solved at Line of file)
- Problem description: Originally, the only information communicated solely via color was that the labels of the form would turn red if you left the boxes empty.
- Problem severity: Moderate
- How I fixed it: Instead of having the labels turn red, I made a pop-up occur if any of the form boxes were empty. It even informs you which box is empty; if multiple boxes are empty, it tells you in left to right, up to down order.
- Whether or not it was detected: It was not detected by WAVE [1].

Problem 11 (Solved at Line 30 of .html file)
- Problem description: The <a> tag for the A11ycasts Videos Youtube link was not ended. This meant clicking on any element after the A11ycasts bullet point would just take you to the Youtube link; rendering the sign-up form completely unusable.
- Problem severity: Severe
- How I fixed it: I ended the <a> tag
- Whether or not it was detected: It was not detected by WAVE [1].

Problem 12 (Solved at Line 2 of .html file)
- Problem description: Lack of a language tag
- Problem severity: Severe
- How I fixed it: I just added <html lang="en">, like we did in Assignment 1
- Whether or not it was detected: It was detected by WAVE [1].

References

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5. tabindex. moz://a, Sep 9, 2022. https://developer.mozilla.org/en-US/docs/Web/HTML/Global_attributes/tabindex