Accessibility report assignment

ENGL 5386: Web accessibility and disability studies

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# Basic instructions

Write an accessibility report of one Blackboard course website assigned to you and your classmate as part of our client project this semester with the Online Accessibility Lab. [An alternative to the client project: Ask students to choose any website to write their reports on.] You and your classmate will report on the results of your comprehensive web accessibility evaluation, using the tools discussed in class. We will talk at length about various automated accessibility checkers, criteria for evaluating websites (e.g. WCAG 2.0, level A and AA), accessibility report templates, and other tools and procedures. **Two deliverables for each group:** A written accessibility report and a completed course review for online accessibility checklist.

* The written accessibility report will be a 3-5 pages, single-spaced in the genre of an accessibility audit or evaluation. See below for a link to a template you can use.
* Address your report to [name of client]. She will be using your report to help her assess the accessibility of external websites that our faculty are interested in using in their classes. I will be solely responsible for assigning a grade on your report but I hope to be able to confer with [name of client] on her assessment of the quality of your reports.
* The Course Review for Online Accessibility Checklist is a short form that you will also fill out and submit with your written accessibility report.

# **The process**

* To get started: Review the available tools (see below), install some or all of them, and begin working with them to see which ones you like, what the differences are, etc.
* Get familiar with WCAG 2.0 and Section 508.
  + See Appendix B in *A Web For Everyone*
  + Full text of [WCAG 2.0](http://www.w3.org/TR/WCAG20/) but it’s very complex. Check out some of the user guides for WCAG 2.0, such as this [WCAG 2.0 checklist](https://www.wuhcag.com/wcag-checklist/). WebAIM also has an excellent [another WCAG 2.0 checklist](http://webaim.org/standards/wcag/checklist).
  + Section 508 (federal law for web accessibility) is being refreshed and will follow WCAG 2.0 levels A and AA. **Your accessibility report should conform to WCAG 2.0 levels A and AA. By following WCAG 2.0, you can be sure that you are adhering to federal guidelines (508).**
* **Very important**: Checking for accessibility involves a combination of software tools and human judgment. Don’t rely solely on the tools. A tool can tell you whether alt-text is present and perhaps tell you if it’s too long, but no tool can tell you whether the alt-text is appropriate for the situation. Only humans can do that.
  + You may need to have some knowledge of HTML – not a lot but enough to be able to scan the source code to look specifically at the markup. You need to know how to find in the source code: alt-text, headings, titles, style sheet (CSS), etc.
  + Tip: Right-click any content on a webpage and choose “inspect” or “inspect element.” You’ll be taken right to the code for that element and you can look at alt-text, heading tags, etc.
* List of techniques you might try as part of a **preliminary evaluation**: turn off images in your browser, check another screen size, turn off style sheets, check with different devices (e.g. mobile), hide the mouse (i.e. surf unplugged: keyboard only). Google these techniques for instructions on performing each one.
* A handy [“first review” checklist](http://www.w3.org/WAI/eval/preliminary.html) that you may want to use to get a handle on the basic features of accessibility.
* Another quick “first pass” review procedure: [10 accessibility checks in 10 minutes](http://www.maxability.co.in/2015/09/10-accessibility-checks-in-10-minutes/).

# Tools

You don’t have to use every tool listed here, of course. Choose a good selection of tools after having browsed them to see how well they work and which ones are easiest for you to use.

## Software (stand-alone or browser add-ons)

* The [WebAIM toolbar](http://wave.webaim.org/toolbar) is excellent. You can use it in the browser or add the extension for Chrome.
* [Firefox Accessibility Extension](https://addons.mozilla.org/en-US/firefox/addon/accessibility-evaluation-toolb/). It also includes Validators.
* [Fangs screen reader emulator](http://www.standards-schmandards.com/projects/fangs/): It will show you how a screen reader will read your site to blind and low vision users. Not a substitute for testing with a screen reader but a good first-pass tool.
* Try the [Web Accessibility Toolbar](http://www.paciellogroup.com/resources/wat-ie-about.html) (for IE and Opera) by the Paciello Group.
* Try other tools, such as [NCAM accessibility QA favelet](http://ncam.wgbh.org/webaccess/favelet/) and [Section 508 toolbar](http://rampweb.com/Accessibility_Resources/Section508/). (Section 508 testing is important but remember that you are testing for WCAG 2.0, levels A and AA, which are more rigorous than 508.)
* Test with text-only browser. You can do this with the WebAIM toolbar (click text-only) or with a [Lynx text-only browser](http://csant.info/lynx). You can also turn styles off to simulate a text only environment.
* Test with a screen reader: JAWS, Window-Eyes, or [NVDA](http://www.nvda-project.org/). Display all the Headings and all the Links in separate windows. (Remember: we know that many screen reader users like to browse by headings and links.) Look for “skip navigation” or “skip to content” links. See how easy it is to move around. Have the software read the page to you. Move around the site by choosing links, etc. NVDA is free. Plan on using it to get a feel for how screen reader users navigate the web. Just be aware that regular users of screen readers will provide the best feedback on how a site works with a screen reader. Try this [NVDA tutorial](http://webaim.org/articles/nvda/).)
* Make sure you have a [color contrast analyzer](http://www.paciellogroup.com/resources/contrast-analyser.html) too. You’ll need to be familiar with the ratios in WCAG 2.0 in order to interpret the results. See [Guideline 1.4.3: Contrast](http://www.w3.org/TR/WCAG20/#visual-audio-contrast). See the course notes for a list of color contrast analyzers too.
* Test with a screen magnifier such as [ZoomText](http://www.aisquared.com/zoomtext/more/download_zoomtext_trial/). Also, use your browser to magnify to 200% (usually ctrl+ or cmd+) to make sure the layout doesn’t break.
* View the web page’s source code, even if you’re not used to doing this. (In Firefox: Web Developer > Page Source). Get used to finding alt-text and Headings (<H1>, <H2>, etc.) in the code. Right-click > Inspect is also handy.
* Another [massive list](http://www.w3.org/WAI/RC/tools/complete) of tools.

## Web-based automated tools

* Free (**User beware**: Make sure you understand the strengths and weaknesses of the free tool before relying on it to pass judgment on a site. Make sure you can test for WCAG 2.0 [not 1.0] at levels A and AA.)
  + SiteValet: <http://valet.webthing.com/>
  + Colorblind Filter: <http://colorfilter.wickline.org/>
  + Functional Accessibility Evaluator: <http://fae.cita.uiuc.edu/>
  + AChecker: <http://achecker.ca/checker/index.php>
  + WAEX: <http://www.it.uc3m.es/vlc/waex.html>
  + WAVE (web-based version): <http://wave.webaim.org/> (**the best tool – use this one if not sure how to proceed**)
  + Meta-checker (checks multiple tools): <http://uitest.com/en/check/>

## Additional techniques/options

* Test the website on different devices if you can. Responsive design (i.e. it looks good on an iPhone and on a laptop) is an important component of accessibility.
* Review my course notes for links to tools, videos, info, etc.
* Review Youtube videos and sources on [how people with disabilities use the web](https://www.w3.org/WAI/intro/people-use-web/).
* Use validation services too for markup and CSS. Validators are included in [Firefox Accessibility Extension](https://addons.mozilla.org/en-US/firefox/addon/accessibility-evaluation-toolb/). A validator will tell you if the site is up to HTML standards.
* View pages as plain text. Turn everything off and make sure the page makes sense.
* Turn off javascript and reload the page. The page should still be fully functional with javascript turned off.
* Do a “wayfinding” evaluation per Ch. 6 in *A Web For Everyone*. Evaluate the site’s navigation for consistency and simplicity.
* Evaluate typefaces, layout, white space, and plain language (see *A Web for Everyone* Chs. 7-8).
* Remember the importance of your human judgment in making an evaluation. Don’t rely solely on the software tools. No software tool can tell you whether an image’s alt-text is appropriate for the purpose of the site.
* Don’t dump your data into a report but make sense of the data for the client. Interpret data. Don’t dump raw data into a Word file.

# Your accessibility report

* *must* reference relevant standards and guidelines in WCAG 2.0, levels A and AA. This is what is called a [conformance evaluation](http://www.w3.org/WAI/eval/conformance.html). Cite the official standards verbatim. **If the software you’re using only tests for WCAG 1.0, you must choose a different software program that tests for WCAG 2.0.** **See above on** [**Section 508 Refresh**](http://www.interactiveaccessibility.com/blog/section-508-refresh-status#.VgQOOHtNtow)**, which will adhere to WCAG 2.0, level A and AA.**
* *must* balance analysis with recommendations. While you don’t have to fix the website, you do need to point out what should be done to fix it.
* *should* most likely be divided up into sections and sub-sections. For example: abstract (summary of findings), description of website, findings, recommendations. Under findings, you most likely can’t list everything, so you should cover a handful of the most pressing issues.
* *should* balance positive and negative evaluations. Mention what the website does well in terms of accessibility. Don’t just focus on what’s wrong.
* *should* cover a representative sample of the entire website. See [Select a Representative Sample](http://www.w3.org/TR/2012/WD-WCAG-EM-20120920/#step3).
* *should* be addressed to the client. Imagine you’re tasked with assessing the client’s website for compliance with WCAG 2.0 (level AA) and Section 508.
* *should* assume a readership that is unfamiliar with the technical details of making websites accessible. Make the report itself accessible to a general readership. Include images and very clear, general language.
* *should* use a report template.
  + See this [Accessibility report template](http://www.w3.org/WAI/eval/template.html) (and adapt it for WCAG 2.0, since it is written for WCAG 1.0).
  + See the [WCAG-Evaluation Methodology report tool](https://www.w3.org/WAI/eval/report-tool). I haven’t tried this yet but it may help you select a representative sample and put your report together.

# Questions?

Let me know ([seanzdenek@gmail.com](mailto:seanzdenek@gmail.com)).