230 Web Frontend Development Standards

The following list is modeled, in part, after <u>The Front-End Checklist</u> <u>(https://frontendchecklist.io/)</u> by David Dias.

The references are to MDN web doc by moz://a (https://developer.mozilla.org/en-US/) sources.

Overall

- All folders and files follow <u>the course naming rules</u>
 (https://byui.instructure.com/courses/98400/pages/web-naming-rules) which include lowercase only, no spaces, and are friendly/semantic.
- No relevant violations of design principles of <u>alignment, proximity, contrast, repetition</u>
 (https://byui.instructure.com/courses/98400/pages/w02-activity-design-principles), and usable typography.
- The visual appearance of all pages in the site must be **responsive**, uniform, and consistent at three, basic view levels.
- The page/site does not contain spelling and grammatical errors.

Head

The following are correctly declared and used in the head section of all https://developer.mozilla.org/en-US/docs/Web/HTML/Element/html) pages.

- <u>HTML5 doctype</u> <u>(https://developer.mozilla.org/en-US/docs/Glossary/Doctype)</u>
- meta charset attribute _(https://developer.mozilla.org/en-US/docs/Web/HTML/Element/meta)
- meta viewport (https://developer.mozilla.org/en-US/docs/Mozilla/Mobile/Viewport_meta_tag) (do not use a maximum-scale)
- <u>A meaningful title _(https://developer.mozilla.org/en-US/docs/Web/HTML/Element/title? ref=frontendchecklist) (about 70 characters maximum)</u>
- meta description (https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/The_head_metadata_in_HTML#Adding_an_author_and_ description?ref=frontendchecklist) (SEO - unique and no more than 300 characters)
- <u>external CSS file references</u> (https://developer.mozilla.org/en-US/docs/Web/HTML/Element/link)
 are in the proper order

HTML

- W3C compliant validated to identify possible issues W3C validator (https://validator.w3.org/?ref=frontendchecklist)
- <u>Semantic elements</u> <u>(https://htmlreference.io)</u> are used
- Check for broken links <u>W3C Link Checker</u> (<u>https://validator.w3.org/checklink?</u>
 <u>ref=frontendchecklist</u>)

CSS

- All embedded or inline CSS is avoided
- W3C compliant validated to identify possible issues <u>W3C validator</u> (https://jigsaw.w3.org/css-validator/)
- CSS normalize (https://necolas.github.io/normalize.css) is used and up to date
- <u>Unique ID selectors</u> <u>(https://developer.mozilla.org/en-US/docs/Web/CSS/ID_selectors)</u> if an ID selector is used, it is unique to a page (the planned use of <u>class selector</u>

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(nttps://developer.mozilia.org/en-U5/docs/web/U55/Ulass_selectors) is preierred)

- All pages are tested for responsive web design with appropriately sized text, links, and no scrolling to the right nor deadspace.
- The CSS is not repeated/duplicated unnecessarily between views nor duplicated because of the
 use of non-congruent selectors nor left unused from the design and development cycle.
- No reasonable violations of design principles in the styling and layout in all three views.

JavaScript

- No errors nor references to unused JavaScript functions per page
- No output to the console in the live version of the page

Images

- Optimized (https://developer.mozilla.org/en-US/docs/Learn/HTML/Multimedia_and_embedding/Images_in_HTML) to fit the design needs of the site (image is no larger than needed at its maximum size on the page)
- <u>Aspect ratios</u> (https://developers.google.com/web/tools/lighthouse/audits/aspect-ratio) match the saved image ratio
- The <u>alt attribute</u> <u>(https://developer.mozilla.org/en-US/docs/Web/HTML/Element/img)</u> is assigned a relevant value

Accessibility

- The <u>lang attribute</u> (https://developer.mozilla.org/en-US/docs/Web/HTML/Global_attributes/lang) is used in the opening <html> tag
- <u>Headings</u> (https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading_Elements) are used in the proper order
- <u>Accessibility</u> (https://developer.mozilla.org/en-US/docs/Web/Accessibility) test errors and warnings are reviewed wave testing through the web developer extension
 (http://www.webaim.org/)
- No <u>color contrast</u> <u>(https://developer.mozilla.org/en-US/docs/Learn/Tools_and_testing/Cross_browser_testing/Accessibility#Color_and_color_contrast)</u>
 violations <u>DevTools Audit</u> <u>(https://developers.google.com/web/tools/chromedevtools/accessibility/reference#contrast)</u>

Performance

- The page weight does not exceed 500KB
- Google Pagespeed test (https://developers.google.com/speed/pagespeed/insights) results at least 90

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