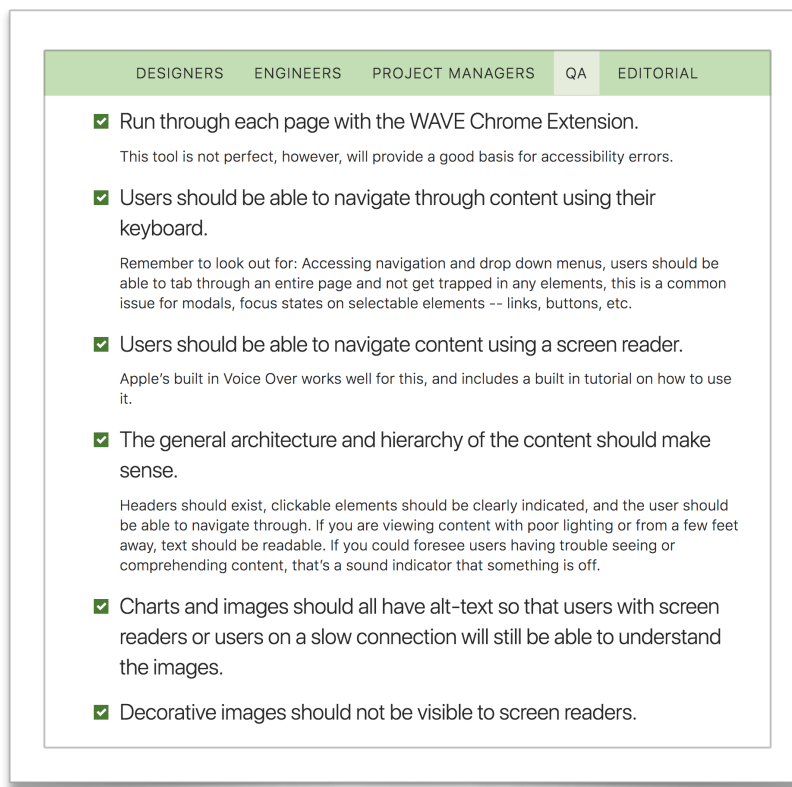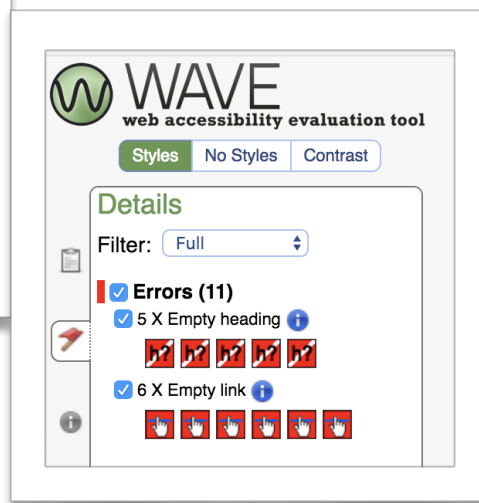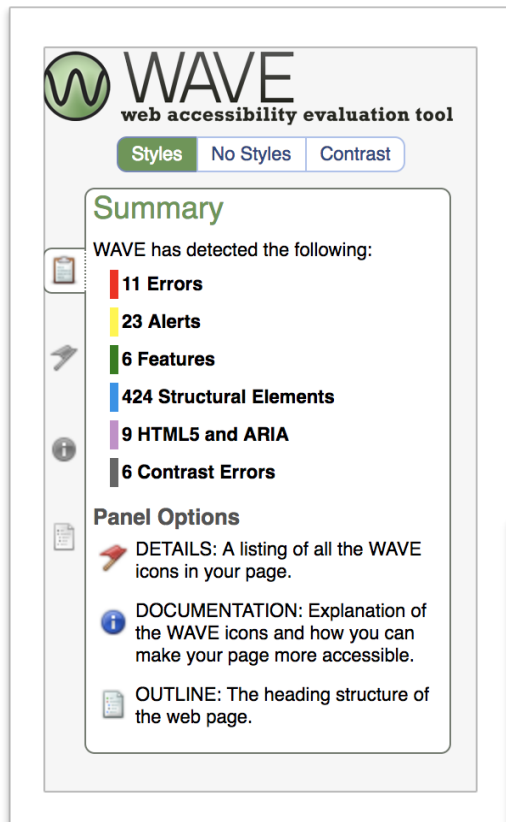# Accessibility Review
# for UofM Website_Michigan Alumnus

I used the checklist from voxmedia and picked the role of QA to perform an accessibility evaluation for the UM Alumni website. On the whole, the website does a good job related with images (i.e. every picture has well-written alt-text, and decorative images are not visible to screen readers). However, it needs improvement in keyboard navigation,  accessibility of screen reader and hierarchy of content.
Test with Wave shows that the main page has 11 errors and 23 alerts. The 11 errors mainly present in the footer part, with 5 related with empty heading, and 6 related with empty link (i.e. social media links).
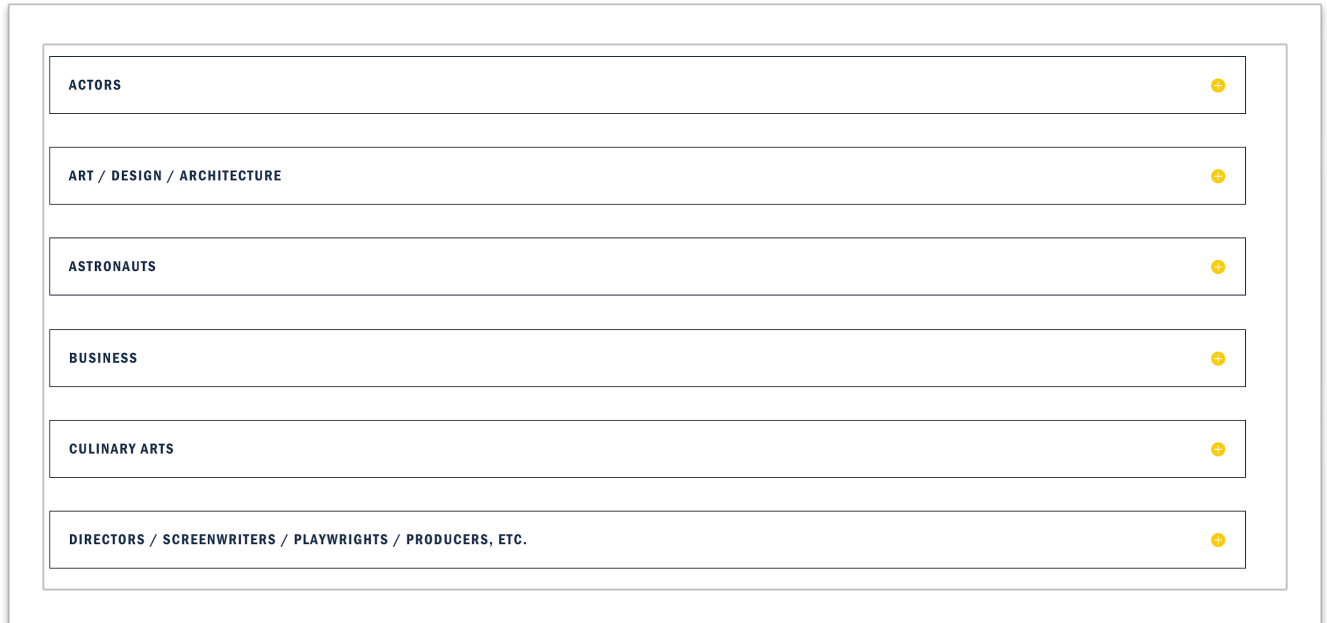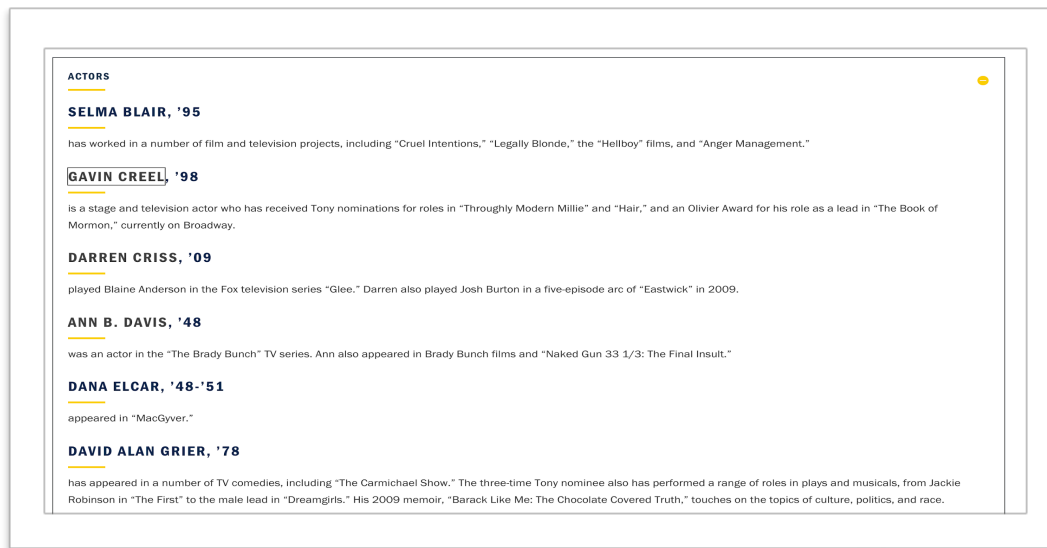
# Keyboard Navigation

Testing with keyboard is an essential part of any accessibility evaluation, however keyboard accessibility of this website is not good. Three problems exist here:

First, list of alumni categories is a main part of this webpage, but fail to get keyboard focus. Also, the drop-down menu only supports mouse to operate. With tab only, users

are unable to expand the menu below. My suggestion would be to **add  the code tabindex="1"** to make sure that this large area of content is keyboard accessible.

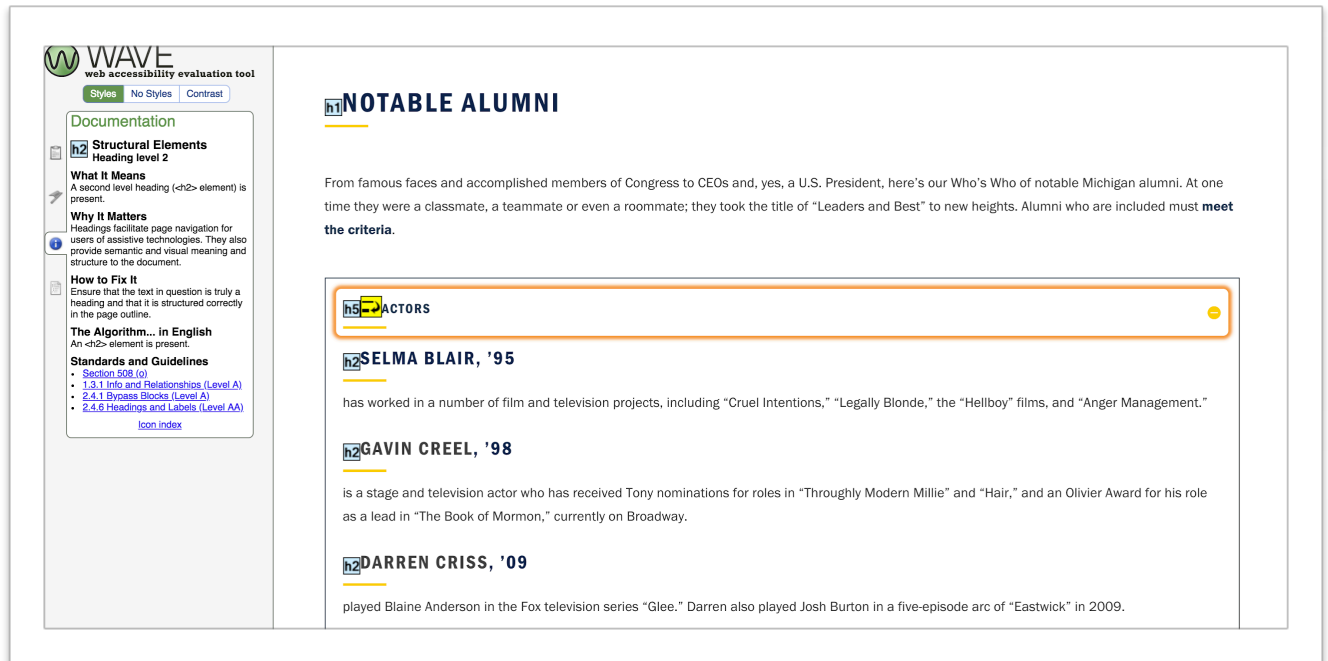| | |
|---|---|
| **ACTORS** | ⊖ |
| **ART / DESIGN / ARCHITECTURE** | ⊕ |
| **ASTRONAUTS** | ⊕ |
| **BUSINESS** | ⊕ |
| **CULINARY ARTS** | ⊕ |
| **DIRECTORS / SCREENWRITERS / PLAYWRIGHTS / PRODUCERS, ETC.** | ⊕ |

Second, when I clicked the drop-down menu, I found that the tab function works well with some of the alumni name, but not all of them. One example is as the screenshot shows below, the name"Selma Blair" cannot get tab focus, because the name has no link attached to it. A **"href="#"** code can help to solve this problem to make sure every name can get a tab focus.

**ACTORS** ⊖

**SELMA BLAIR, '95**
has worked in a number of film and television projects, including "Cruel Intentions," "Legally Blonde," the "Hellboy" films, and "Anger Management."

**GAVIN CREEL, '98**
is a stage and television actor who has received Tony nominations for roles in "Throughly Modern Millie" and "Hair," and an Olivier Award for his role as a lead in "The Book of Mormon," currently on Broadway.

**DARREN CRISS, '09**
played Blaine Anderson in the Fox television series "Glee." Darren also played Josh Burton in a five-episode arc of "Eastwick" in 2009.

**ANN B. DAVIS, '48**
was an actor in the "The Brady Bunch" TV series. Ann also appeared in Brady Bunch films and "Naked Gun 33 1/3: The Final Insult."

**DANA ELCAR, '48-'51**
appeared in "MacGyver."

**DAVID ALAN GRIER, '78**
has appeared in a number of TV comedies, including "The Carmichael Show." The three-time Tony nominee also has performed a range of roles in plays and musicals, from Jackie Robinson in "The First" to the male lead in "Dreamgirls." His 2009 memoir, "Barack Like Me: The Chocolate Covered Truth," touches on the topics of culture, politics, and race.
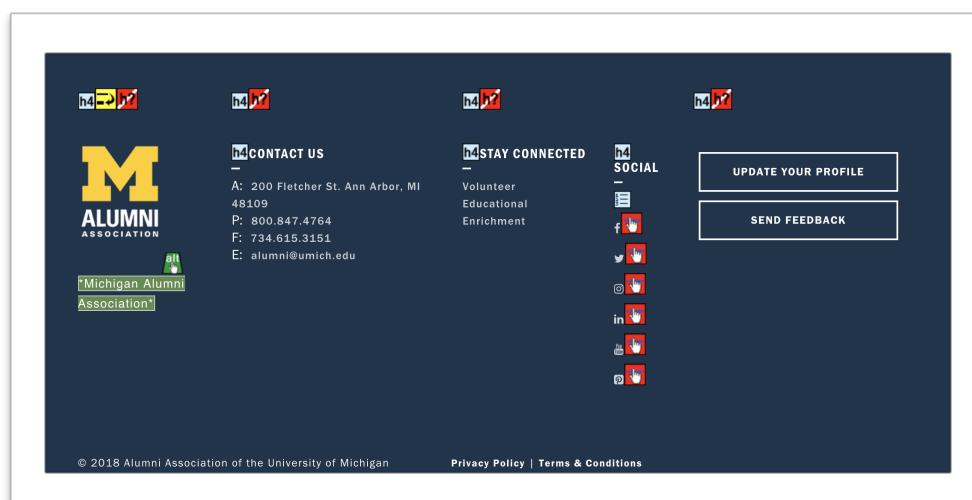
# Content Architecture

First, random use of headings is a big problem of this webpage. As we can see from the screenshot below, h5 is under h1, while h2 is under h5. The illogical arrangement of semantic headings will cause problem for screen reader to understand the structure of the webpage. I guess the purpose of doing so is the programmer's preference of using certain font size of certain headings, but I would still suggest to f**ollow the heading regulation of html language, and try to style the fonts by using css tools.**
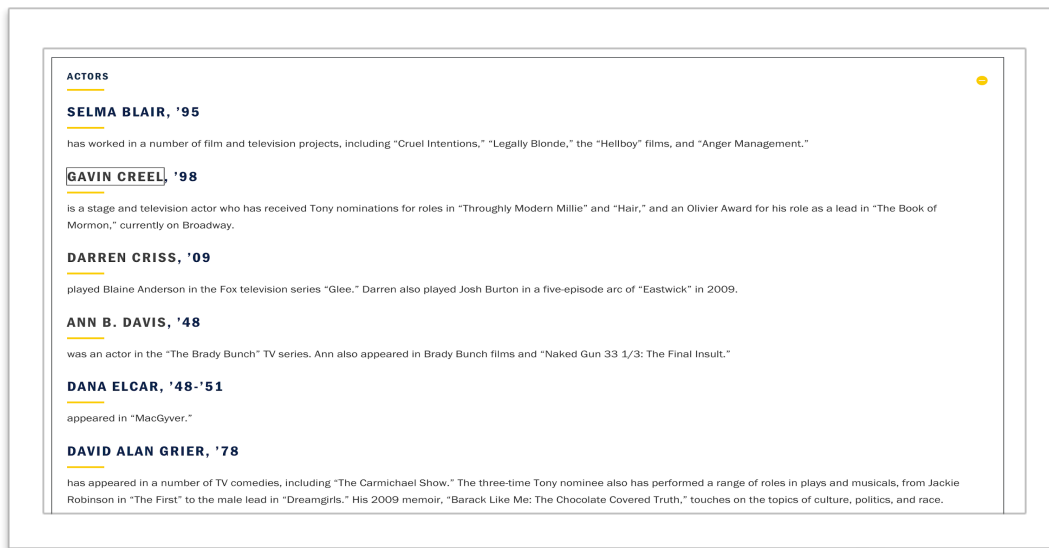


Second, In the footer area, we see four empty h4. When I checked the source code, I found that the website was built out of wordpress template, which doesn't allow users to change the html structure. If the user delete the content of the original h4 elements, the semantic tag still leaves there and makes confusion. To make the page clean, I may suggest using "visibility: hidden" to hide the unnecessary elements.

# Screen Reader

I used the Chromevox app to do screen reading of the website, and found three problems as below:

First, the screen reader reads "actors heading 5", with no indication that there is an expanded drop-down menu of the item "actor". I checked the source code and found



that the dropdown menu is written completely in divs, instead of listed items (i.e ol/ li elements), thus causes trouble for screen readers to recognize that this is a nested list. I would strongly recommend **adopting the html language of listed items**, and use css to style the font and padding things.
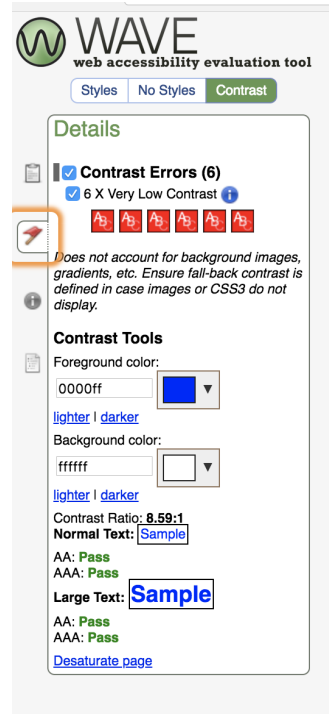
Second, In the footer part, the screen reader reads "Ordered list with 6 items. Linked item", but with no specification what social media is the user linking to. I find the reason here is a lack of ARIA label. I would recommend **add an ARIA label for each social media icon** for screen reader to recognize.

Third, I noticed is that the abbreviation of "address""phone""fax"and "email" will cause difficulty for users to understand when they are read as "A""P""F""E" by screen reader. **An <abbr> tag will help to solve the issue.**

# Contrast

As shown by Wave, this page has 6 contrast errors. I would recommend **change the font color to deep black to make it more stand out from the background.**



# Conclusion

I find the Uof M alumni webpage did a good job in putting the alt-information of images, but did an awful job in sacrificing html validness for css effects (such as the casual using of h5, and the wrong use of divs for listed items). Besides, it failed to put ARIA label for the social media icons, which is a common mistake for beginner website designers. I learned a lot from this evaluation, and hope that I can avoid similar mistakes in the future website development work.