Accessibility Inspection

AnnArbor.com
http://www.annarbor.com/

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Executive Summary

An accessibility inspection was conducted of the AnnArbor.com website, examining the various pages that comprise the site. The inspection focused on identifying any accessibility issues while also pointing out strengths of the website that should be maintained.

Several practices to continue were noted throughout the evaluation of the site. For instance, page headings and descriptive link labels are used properly throughout. Additionally, most basic content remains accessible whether or not technologies such as CSS and JavaScript are enabled.

The most significant accessibility issues in this evaluation include:

- **Alt text should be utilized properly and on all content images throughout the site.** The alt attribute of the HTML <img> tag should be given a value that adequately describes the content and context of every non-decorative image on the site to assist those browsing in a non-visual manner or utilizing a screen reader. Most images on the site currently lack the alt attribute completely.

- **The article comments section should degrade gracefully when CSS and/or JavaScript are disabled.** Users who are browsing with CSS disabled are shown numerous notification messages that do not apply to them while those browsing with JavaScript disabled are prompted to comment on articles but are unable to do so.

- **The global navigation bar should be fully functional regardless of available/enabled technologies.** The global navigation bar is unable to expand if JavaScript is disabled or the user is not using a mouse. Additionally, the response time of the bar to user interaction is longer than is desirable.

- **Advertising should not interfere with the flow of a page's content.** Advertising is featured throughout the site, often mixed in with the page's content. This becomes an even greater issue when the page is linearized by adaptive technology.

- **Text links should have a properly styled active state.** When a user tabs through a series of links, they can quickly become confused as to which link is currently selected as it will be styled identically to the surrounding, unselected links.

- **On-site search should be functional for all users.** The on-site search is entirely non-functional for users who do not have JavaScript enabled.

While these concerns are among the most pressing, a number of additional accessibility issues that deserve attention are detailed in the analysis, accompanied by recommended solutions.

Terminology & Conventions Used

Different terms are often used when referring to the same part of the browser window or web page. To facilitate understanding of this analysis, one term was used consistently for each browser/web page element. The terms are:

Active link: A specific link which is currently selected, either via tabbing through the page or currently being clicked on with a mouse.

Field names: Field names are the labels that go with text input boxes, drop-down menus, and other form elements.

Footer navigation: The series of navigational links available from every page, located near the bottom.

Global navigation: Links which are available from every page and lead to major sections of the website and/or significant pages.

Link label: The label in this case is the word or words that are linked. These words can be in graphical form or HTML text that is linked.

Page name: The primary heading for the page, often shown in larger text and located between the global navigation at the top of the layout and the text content of the page.

Page title: The text at the upper left of the browser window, located in the title bar, and specified through the use of HTML <title> tags.

Slideshow: A graphical moment which displays a series of photos meant to display a large amount of information in a relatively small space.

Utility navigation: Links which provide access to additional functionality, such as "log in" and "create an account".

Single quotes are used to indicate link labels, page names, and page titles. Double quotes indicate non-linked body text, file names, and are used when generally referring to a page.

Priority Levels

The issues identified in this evaluation are grouped into three levels of priority:

High priority: These issues are likely to impact a large number of users significantly. They should be resolved as quickly as resources allow.

Medium priority: These issues are also likely to affect a large number of users but generally are less disruptive to the user experience, relative to the high priority issues. If resources are available to address these issues, they should be addressed.

Low priority: These issues typically impact a small subset of the overall user base, although they may impact a larger group. Regardless of the number of users affected, these issues carry only a minor negative impact. Low priority issues are generally easy to resolve. There is less time pressure to fix low priority issues, compared to medium priority issues and especially high priority issues.

Accessibility Guidelines

Simplicity & Clarity

Simplicity & clarity refers to the ease of following and understanding the layout of a page as well as the site as a whole. The design should follow the rules of visual perception, emphasize important areas of the page, and not possess any extraneous or distracting elements.

Practices to Continue

- **The header and footer are consistent across all pages of the site.** Each page begins with a header featuring global navigation, search, and utility navigation. Each page ends with a footer featuring links to the latest content, top-level categories, and footer navigation. Maintaining this design allows the user to "learn" the site fairly quickly, speeding up future tasks.

- **The layout of the content section of all article pages is consistent across the site.** Each article page features a heading, the article copy, and a comment section. Advertising is also always located in the same areas – above the heading, to the left of the article copy, and below the article copy.

Suggested Changes

High Priority:

- **Avoid mixing page content and advertising within the same areas of a page.** On non-article pages, advertising moments tend to be mixed in with content throughout the page, both in the sidebar as well as in the main content area. Many users may simply begin to ignore the sidebar, thereby missing what might be important content. Additionally, users utilizing adaptive technology may be put-off by encountering advertising so often while simply browsing or attempting to reach page content. Advertisements should be grouped together in expected areas (between the masthead and page content, in the right sidebar, between the page content and footer, etc.) and not interfere with the actual content.

- **Improve the content-to-advertising ratio.** On article pages, advertising takes up nearly the entire area above the fold before the article even begins. A "one-line" ad is also present after the first or second paragraph of the article. While delivering advertising to users is important to the financial success of the site, the focus must be on the news content itself.

Medium Priority:

- **Provide additional whitespace around article links and summaries on non-article pages.** With advertising such a large part of these pages, article links and summaries almost appear to be an afterthought and would benefit from more surrounding white space to reduce the cluttered feeling.

Supporting Visual & Non-Visual Navigation

Navigation should be clear and efficient for all users, regardless of any visual disabilities. Page content must linearize logically and major document sections should be easily accessible from throughout the page.

Practices to Continue

- **Spatial references are avoided.** Phrasing such as "see picture below" are nonsensical to users browsing the web in a non-visual fashion.

Suggested Changes

High Priority:

- **Re-evaluate the behavior of the global navigation bar.** The global navigation bar is designed to expand when the user hovers their cursor over the various tabs, with the exception of "Home". When the user hovers their cursor over the bar, there is a one second delay before the menu is expanded making it possible that some users may never even discover that it is there.

- **Add "Jump To" and "Skip" links to quickly navigate throughout a page.** Non-article pages tend to be lengthy and are therefore very time consuming for users utilizing screen reader technology. Adding in-page navigation links that allow the user to jump from section to section will greatly speed up many tasks.

Medium Priority:

- **Place the "Related Content" box on article pages to the right of the article content instead of on the left.** The default behavior of screen readers on English websites is left-to-right, top-to-bottom. Currently, when a screen reader linearizes the content of an article page, it will read the contents of the "Related Content" box in between the headline and the actual content of the article.

Proper Text Markup & Phrasing

Proper text markup is essential not only to ensure that a web page displays correctly across multiple browsers but for adaptive technology like screen readers to properly read the page to the user. Additionally, the content of the page must be presented at an appropriate reading level in order for the target audience to properly grasp the content being delivered.

Practices to Continue

- **Descriptive link labels are in use.** For the most part, link labels throughout the site are descriptive, taking advantage of section and article titles and avoiding the use of non-descriptive text such as "click here" or "more information".

Suggested Changes

Medium Priority:

- **Target article content to a lower reading level.** A random sampling of articles was tested to determine the required reading level for comprehension, based on the Gunning Fog Index (GFI). The sampling contained articles which had GFIs varying from 9 to 13. For near universal comprehension, the GFI should average below 8.

Low Priority:

- **Utilize the lang and xml:lang attributes in the <html> HTML tag.** Declaring the main language of the content of the page is easy and further improves accessibility on the site.

- **Utilize the <abbr> and <acronym> HTML tags for abbreviations and acronyms.** While the site currently makes heavy use of off-site links to clarify acronyms (i.e. linking "UAW" to www.uaw.org), users should not have to leave the site for clarification of an abbreviation or acronym. Utilizing these tags will help all users, especially those who utilize screen readers which may not pronounce acronyms letter-by-letter (i.e. "U A W").

- **Remove auto-generated code that creates empty link tags.** On the homepage and subsequent pages, the text that describes how much time has passed since an article was posted is immediately followed by an empty anchor tag which has no value for the href attribute, essentially producing an empty link. While this would be undetectable on the average user's setup, a screen reader creating a link list would list multiple blanks where these empty links are.

Proper Structural Markup

Each page should have a logical document structure which assists adaptive technology in interpreting the content of the page and then conveying it to the user. This includes the use of properly nested headings and the avoidance of tables to control layout.

Practices to Continue

- **Heading tags are utilized and are nested properly.** Heading tags clearly divide the page into sections, allowing users to bypass sections altogether which do not interest them. These tags are used properly throughout most pages on the site.

- **Bulleted lists are utilized to present key data points.** Unordered lists are used throughout the site, both structurally and presentationally. Presenting information in quick, keyword-focused moments helps the user to quickly find the information they are seeking.

Suggested Changes

Medium Priority:

- **Only utilize HTML tables to display tabular data.** While the overall site design successfully avoids HTML tables to form its structure, some pages on the site were found to use them to group together series of link lists.

- **When presenting tabular data, utilize table headers.** While data tables are not in heavy use on the site, those present do not utilize table headers. This feature allows for greater accessibility and understanding of the data contained within the table.

- **Utilize ordered and unordered lists in recipe articles.** The two key parts to recipes – ingredients and instructions – are perfect examples of when to utilize HTML list markup. Currently, articles present this information marked-up as paragraphs.

Low Priority:

- **The home page and subsequent pages are lacking a level one header (<h1>).** All article pages utilize a level one header for the article name and sub-sections of the site utilize a level one header for the section name. It is suggested that the home page and subsequent pages follow suit, possibly using the traditional print term "Front Page" as the header.

- **Maintain the coding recommendations set forth by the World Wide Web Consortium (W3C).** Compared to many other sites, this site does a fairly good job adhering to the recommendations of the W3C, but there are still some errors in the code. Ensuring that each page contains proper, non-deprecated HTML markup can only benefit the user.

Providing Content & Context

Many disabled users experience content in a non-visual way and it is therefore important that they have a proper context for interpreting the information as well as access to it. Text alternatives to non-text content are essential as they can be changed into other forms such as large print, speech, and even Braille.

Practices to Continue

- **Photos in news articles are immediately followed by a caption.** Immediately following photos with captions is helpful to all users, regardless of their abilities.

- **Frames are not utilized on the site.** The use of frames can be disorienting to all users as information often loads in unexpected ways and bookmarking a particular page is troublesome.

- **Forms properly utilize the <label> tag.** Form elements are correctly paired with their field labels using <label> tags. This provides context and to ensure forms are easier to fill out.

Suggested Changes

High Priority:

- **Utilize descriptive alt attribute values on all images to convey the meaning of the image.** For users who browse the web in a non-visual modality, non-decorative images must have an associated alt attribute describing the information that the image is meant to express. While most images on the site do have the alt attribute in place, most have a blank value assigned, with some simply utilizing the filename of the image.

- **Utilize an alt attribute value and a longdesc attribute value on all advertising and/or contest graphics.** Advertising and contests, such as the "$30,000 Grocery Giveaway", are often not accompanied by alt text or longdesc text. Both should be utilized in order to explain what is being advertised or the contest that is running, with alt text providing basic information and longdesc a longer description.

- **Accompany all videos with text transcripts and appropriate captions.** The site utilizes embedded YouTube videos in some articles which are accompanied by an improperly marked-up introductory heading. Those who are unable to view or listen to these videos will likely miss a large part of the content of the article. Accordingly, these videos must be accompanied by appropriate captions and have a text transcript provided to ensure everyone is served the same information.

Medium Priority:

- **Provide additional context for the products in the Food & Grocery Specials Showcase**. The Food & Grocery Specials Showcase utilizes a slideshow which contains specials on products at local grocery stores. While the accompanying

text includes product names and prices, the logo of the store has no alt text. Users who are unable to view images would be unsure of which grocery store to go to in order to take advantage of these product specials.

- **When presenting tabular data, utilize the summary attribute.** While data tables are not in heavy use on the site, none were discovered to utilize the summary attribute. This feature allows for greater accessibility and understanding of the data contained within the table as it can provide a clue to the overall table structure.

Device Independence

Device independence refers to a page's ability to be accessed by multiple devices and not be reliant on any single one, such as a keyboard or mouse. Requiring a specific device ignores the fact that not all users will be able to use (or possess) said device.

Suggested Changes

High Priority:

- **Assign styling to the active state of standard text links.** While styling is applied to both hover and focus states, standard text links do not have a stylized active state. While a user can tab through the page, they can quickly become lost as it is unclear which link is the active one when there are multiple links in a limited space.

- **Improve the triggering of the global navigation bar.** The global navigation bar is designed to expand when the user hovers their cursor over the various tabs. Users who are using only a keyboard or similar device, however, have no way to trigger the expansion.

Low Priority:

- **Add onKeyUp event handlers to all features that use the onClick event handlers to ensure legacy support.** While most modern browsers have mapped pressing of the "Enter" key on the keyboard to fire the onClick event, older browsers such as Internet Explorer 6 do not respond as such. In order to provide full accessibility to those using a keyboard, the onKeyUp event handler should be added to "listen" for pressing of the "Enter" key to submit forms.

Graceful Degradation

Graceful degradation refers to how the user experience of a page holds up as technologies are disabled and/or adaptive technologies are used. The appearance and functionality of a page should not be negatively effected if, for example, a user has JavaScript disabled or is using a screen magnifier.

Practices to Continue

- **Article content is accessible with CSS and JavaScript disabled.** The content area of each article page is coded in such a way that the article copy is accessible regardless of what technologies are enabled or disabled and whether or not any adaptive technology is being used.

Suggested Changes

High Priority:

- **Implement an on-site search that does not require JavaScript.** When JavaScript is disabled, the on-site search box remains present but is non-functional. Use of on-site search is likely a very popular method of navigating this site and steps must be taken to prevent depriving any users of this function.

- **Modify the basis of the triggering of the global navigation bar.** The global navigation bar is designed to expand when the user hovers their cursor over the various tabs. Currently, JavaScript is utilized to handle this action. Not only does this prevent the menu from being able to expand until the full page has finished loading (due to the nature of JavaScript) it also prevents users who do not have scripting enabled from taking advantage of this expanded menu. It is therefore recommended that this triggering is instead handled by CSS.

- **Remove all references to article comments if JavaScript is disabled.** The comments section of each article page is driven by JavaScript. When JavaScript is disabled, the "Comment Now" link is still available, but merely scrolls the page to a section which is not present.

- **Re-evaluate the handling of article comment-related notification messages when CSS is disabled.** When CSS is disabled, multiple notification messages related to the article comments section are displayed in the content of the page (such as "We are unable to add your comment. Are you logged in?"). Rather than include these directly in the HTML, have them only be generated and displayed via a client-side script when necessary.

Medium Priority:

- **Ensure that all advertisements generated by JavaScript degrade gracefully.** Ads that are served via JavaScript are displayed as visible, empty containers when JavaScript is disabled. When unable to be displayed, these ads should provide appropriate descriptive text via a <NOSCRIPT> tag.

Allowing User Control

Control over the interface is crucial for disabled users – any aspect out of their control may harm the overall user experience. This includes both allowing the user to retain controls they have (such as the ability to resize text) as well as giving them additional controls (such as freezing animations).

Practices to Continue

- **Slideshows can be paused.** The option to stop a slideshow so users can review information in a static state is beneficial to those who suffer from visual impairments or slower visual comprehension.

Suggested Changes

Medium Priority:

- **Notify user of new windows being opened.** All advertisements on the site open the advertiser's website in a new window or tab when clicked on without notifying the user. Informing users of these new windows or tabs alerts the user to what is happening, allows them to stop it, and also prevents any disruption for those who use screen readers.

Low Priority:

- **Implement an on-site control which allows the user to resize text.** While no technology is in place to prevent a user from resizing the text on the site, most browsers implement a "zoom" function to do this, which can cause the page's overall layout to fail. Allowing the user to choose larger fonts for viewing the website assists those who suffer from tunnel vision, clouded vision, central field loss, or blurriness issues.

Respecting the User

Respecting the user must be a key principle while developing a website. Many bad practices can convey a feeling of disrespect or abuse to the user. These users are likely to leave the site and never return.

Practices to Continue

- **No timed processes are present on the site.** Any tasks that need to be completed are not accompanied by any time limits, limited or otherwise.

- **The back button is functional throughout the site.** No technology is in place to prevent or disable the use of the browser's back button.

- **Standard access keys remain functional.** No technology is in place to modify the settings of standard access keys such as page up and page down.

Suggested Changes

Medium Priority:

- **Change standard font color to black from gray.** The additional contrast between black on white as opposed to gray on white makes it easier for users with low vision disabilities to browse the site and read articles.

- **Increase color contrast between foreground and background color on non-white backgrounds.** Much of the text on the site that is on a non-white background, especially that within the header and the footer, falls below the minimum luminosity contrast that is recommended to ensure all viewers can clearly read text.