Tools and Strategies for Web Accessibility

AccessGA Webinar

DATE: November 13, 2014

Introduction

Liz Persaud: We are thrilled to present a webinar today titled Tools and Strategies for Web Accessibility, and this is brought to you by AccessGA here at AMAC Accessibility.

I want to do some quick housekeeping tips here. Within the webinar, if all of you look to the right-hand side of your webinar window, you will see the attendee block, the attendee section. And in there, you can see your hosts for today, your presenters, and then also all the participants on. And you should be able to scroll through that window, so you should be seeing your peers from across the country.

You are able to private chat with some of your peers, if you just click on their name, and you can send them a private message.

Underneath the attendee section, we have a chat window. Some of you have -- may have seen us during the sound-checking period chatting with each other. If any of you all have questions and comments throughout today's webinar, please go ahead and type them in the chat area when you're ready, and I, along with some other folks here, AMAC will be keeping our eye on that window, and we'll be ensured to reading out those questions and comments out loud so they're fully accessible to everyone.

Right in the middle of your screen, you should see the opening slide for today's PowerPoint. It's a blue background with white writing, and it says Tools and Strategies for Web Accessibility.

And that's where most of the content will be today.

So before we jump into the overview of today's webinar, I'd like to go ahead and introduce our speakers. We've got two professionals here with us, two folks that are experts in the field.

The first person -- okay. Okay. I'm just adjusting my microphone. So hopefully folks can hear me, it's a little better now. I want to talk today a little bit about our presenters.

Background of John Rempel

The first person I want to introduce to is John Rempel. I've known him for a few years, excellent presenter, excellent. Having a visual impairment himself he understands firsthand the nuances and complexities, usability and flexibility. Certified as orientation and mobility specialist and vision rehabilitation therapist and has written extensively for Access World and John will be talking to you all about some of the issues that he's dealing with, throwing in some tips and strategies for overcoming that and sharing lots of helpful information.

Background of Janet Sylvia

Our second speaker that we have joining us today is Janet Sylvia, WAG founder and leader. Web Accessibility Group has membership from 23 University System of Georgia institutions and beyond. Janet has provided web-accessibility consulting and training for past years. Her areas of expertise include: accessibility higher education; 508 compliance; Web Content Accessibility Guidelines; regional, national, international events; Global Accessibility Awareness Day; distance learning; administration conference and the annual conference. Her accessibility articles have been published through websites, including media access in Australia. So the overview of today's webinar again, we're thrilled to have you all on today.

Web accessibility means considering all levels of human ability when designing your website. In today's session, our presenters are going to discuss strategy, technique, and resources for ensuring your website meets accessibility standards and guidelines including WCAG 2.0. Going to talk about best practices and what it means to provide useable versus technical accessibility, and demonstrate website evaluation techniques.

With that being said, I'm going to go ahead and pass it over to John Rempel, who is going to go ahead and jump in today's webinar. If anyone has any questions or comments, type them in the chat area, when you're ready and we'll be reading those out loud.

So John?

Accessibility Regarding Blindness and Low Vision

Background and Definition

John Rempel: All right. Thank you, Liz. It's an honor to be here. So I'm going to be giving a little bit of background on blindness and low vision, and the more functional aspects of how a blind or vision-impaired person would access the internet.

And to begin with, I'm going to give a bit of a background on the definitions and maybe some misconceptions that are out there about blindness and low vision. The legal definition of blindness is central vision acuity of 20 over 200 or less, in the better eye with best possible correction and/or a visual field of 20 degrees or less. So this means that there's a large number of people who are -- who are considered legally blind but may still have a lot of functional vision.

So there's a misconception that a person who is legally blind has no vision and that's obviously not the case. Now, functional definition related to internet access is a little grayer. So primary access to the internet using a screen reader or refreshable Braille display for individuals who access the internet nonvisually, that's usually the indicator; if they're using a screen reader and/or a Braille display combined. Now the definition of low vision gets a little grayer. There is no agreed-upon legal definition for low vision. In fact, even in the state of Georgia, depending on the funding source, the acuities for low vision can change as well.

So one definition for low vision, according to vision aware is a condition caused by eye disease in which visual acuity is 20 over 70 or poorer, in the better-seeing eye. And cannot be corrected or improved with regular eye glasses.

Some funding sources require 20 over 60 or less. So functionally, what does this mean for low-vision users on the internet?

Types of Web Access for Blind or Low Vision Users

Primary access to the internet using screen magnification or screen enhancement beyond typically used, in other words, low vision needing to sit down in front of a computer, needing to make some sort of modification in order to access that site and that can even change with mobile devices. You know, these days we have such small little screens on mobile devices, so someone who may not have been considered low vision -- I apologize. You know what? I'm -- okay.

We're just catching up here with the slides.

So, accessing the internet using screen readers - This is -- when I train people, low vision and blind individual-- internet access is usually one of the last things that I train on. The reason for this is it's the most complex thing to learn. There's a lot of skills involved with accessing the internet. So there's a lot of elements to this cognitive load. Especially for someone who is recently impaired or blind, the amount of information thrown at them audibly is a great deal and the auditory fatigue, so you know, someone who is fairly new to accessing the internet audibly, maybe they can go for 20 minutes to half an hour and then they slowly build on that as they become more proficient with screen reader. Screen readers commonly used-- the most popular one, especially in the work force these days, still JAWS. Fairly costly, around $1,100. And NVDA, another popular one, nonvisual desktop application, free open-source screen reader. That's available, actually from Australia. Window-Eyes is also a very popular one and it's becoming progressively more popular, especially since January of 2014. They partnered with Microsoft, so now anyone who has Office 2010 or later can run Window-Eyes at no cost, whereas previously it was $900. And then VoiceOver, not to be confused with VoiceOver on iOS devices. VoiceOver is a screen reader on the Mac.

Liz Persaud: There's a question there. Is Windows-Eyes different from narrator?

John Rempel: Window-Eyes is much more powerful than narrator. Narrator is the built in screen reader in the Windows platform. So narrator is very, very limited. Window-Eyes is a very respectable screen reader that's been around for several years. So especially on the internet, you'll have a lot more success with Window-Eyes than narrator.

Factors to Consider for Visually Impaired Users

Alright. So when it comes to low vision, these are some of the factors that are taken into consideration: reduce acuities, visual fatigue. How long can a person actually spend time on the internet without fatiguing visually and having to take a break? Color blindness, we often think of color blindness as something you're born with. For a lot of the eye conditions, actually, the secondary impact is color blindness. Macular degeneration, impacts the macula, alter the color that a person may see. Something very important to consider when looking at website design is essential or peripheral field loss. Screen magnification program offered, popular one is MAGic, the statement design -- designed by the same company that produces JAWS, Freedom Scientific. ZoomText is also very popular program.

(Stopped writing for technical support.)

John Rempel: How am I doing for time?

So another -- another tool that a lot of people use on websites, whether they're low vision or blind, is the find command, so I can very easily do a control F here, and then I can type out whatever I'm looking for. So -- and that will land me on it. That's a very effective tool. Regardless of which screen reader a person is using or screen magnification program they're using.

So that -- that wraps up my piece of it.

Are there any questions that came up that needed answering?

Liz Persaud: John, there is a question from Lucy. And she typed in, control plus and had question marks.

John Rempel: Okay.

So there's two ways, control and the spin wheel on the mouse, the spin wheel is located between the left and right mouse button. Another method you can use is a control and plus on the keyboard as well, to increase or decrease the viewable size. I'll mention one other thing here.

Typically, if a website is designed well, it's going to allow a person to magnify it 150 to 200%, or 1.5 to two times magnification.

And what a person wants to try to avoid is the -- the scroll bars on the bottom. That just creates a lot more work for someone with low vision, so if a person can navigate in vertical manner, it's going to be a lot easier for them.

Liz Persaud: Great job, John. Thank you so much for all the helpful information. And again, if anyone has questions or comments as we're continuing on with today's webinar, specifically for John, please go ahead and put them in the chat area and we'll definitely get back to that.

At this point, we're going to pass the microphone over to Janet Sylvia, so she can continue on with her portion. So Janet, when you're ready, we're ready for you.

Web Accessibility Tools and Tips

Janet Sylvia: Okay, thank you, Liz, and the screen still shows the website that John was sharing. Is it possible to get back to the slide?

Liz Persaud: Janet, we have your slides up. Whenever you're ready.

Right now I'm seeing a black screen with a spinning circle in the middle. I'm not seeing a slide.

Liz Persaud: It might take just a moment. We can pull out and then come back in with the PowerPoint. If you want to go ahead and start with some of your talking points, if that's possible, we'll try to work on it. It's showing up on our end.

So it may just take a moment. Okay. And participants are saying that they're seeing the slide, so again, it may take a moment, if you want to go ahead and continue with your talking points and if you want us to flip slides for you, we can do that. Let me know when you're ready and it should pop up momentarily.

Janet Sylvia: I'm not sure what -- I'll start with the agenda. And so in this segment, we're going to cover an introduction to web accessibility, and also a brief overview of WCAG 2.0 and most of our time ten tips for creating accessible websites. We have five tips for content managers and five tips for designers and developers and we'll talk about accessibility checking as we cover the content.

I really feel like I do need to be able to see the slides to proceed. Is there anything that I could do to make this black screen go away, Liz? It seems like it's still trying to end the app share.

Liz Persaud: Hey, Janet, we aren't sure what's going on. We're able to see them, and participants can too. So at this point, we might just have to pause for like a ten second break and if you can sign out and come back in.

Janet Sylvia: I think it would be easier if I can see my slides. Okay. I'll be back --

Liz Persaud: Absolutely. Sure. And thank you, folks, we're just going to have Janet pop out and come back in and that way she can see her slides. We want to make sure that all the participants can see their slides. See the slides that are up on the screen? Okay. Great.

Okay. Wonderful. Thanks for your feedback and we appreciate your patience. If anyone has any questions for John, he's still here with us, so we can fill some time with that or any comments. Thank you, everyone, for your feedback.

Liz Persaud: And we actually have a question for John. It's from Rachel Thomson and colleagues from University of Alabama.

John, for testing with a screen reader, do you recommend one over the other?

John Rempel: Am I coming through okay? Okay.

Typically, the -- the two screen readers that are used for testing are JAWS and NVDA. JAWS because it's the primary screen reader that's used in a work environment, not all work environments but it still is the predominant screen reader that's used. And NVDA because it's very popular and it's free. So those are the two that are primarily used.

Liz Persaud: Thank you, John. We appreciate that.

And Janet, when you're ready.

Janet Sylvia: Okay. Great.

This is great. I can see my slides, so we're moving forward. Thank you so much.

Introduction to Web Accessibility

So we'll begin with an introduction to web accessibility, in case we have any new comers. First, Section 508 of the Rehabilitation Act amendments of 1998 states in part that Electronic and Information Technology must be equally accessible to people with and without disabilities. Section 508 was written by and for the U.S. federal government, but the U.S. Department of Education has ruled that all states that receive funding under the Assistive Technology Act must also comply with Section 508. All 50 states in the U.S. do receive this funding and this is why we're -- we are required to comply with Section 508. So we have the Section 508 standards. They were released in 2000, and they are still a solid basis and foundation for creating accessible websites. But some technologies have changed in the last 14 years, and new ones have been introduced, so we have this Section 508 Refresh, which is forthcoming and is expected sometime next year.

We also have the Web Content Accessibility Guidelines, and the acronym is WCAG, and that's pronounced WCAG and this is WCAG 2.0 and these are international guidelines. Accessibility best practices, and together, these ensure the accessible delivery of our Electronic and Information Technology.

So what happens if we don't comply? Well, first and foremost, there will be a loss of equivalent access to your website and your web-based content for people with disabilities.

There is also legal recourse. Individuals can visit the website for the U.S. Department of Education, the U.S. Department of Justice, Office of Civil Rights, and file civil rights complaint against your institution.

They can also file a lawsuit in state or federal court. And it is important to note that in the civil rights compliance and lawsuits over the last 15 years that involve institutes of higher education as well as public website have all included inaccessible university websites or web-based content and applications, inaccessible multimedia and resource links to third party websites that were not accessible.

Web Content Accessibility Guidelines

So now we'll talk about the Web Content Accessibility Guidelines, or WCAG 2.0.

So Section 508 Refresh, the draft as it's currently written, harmonizes the web accessibility standards with WCAG 2.0 levels A and AA.

In the higher education civil rights complaints and lawsuits that we just mentioned, they all contain remediation plan. And these plans inevitably require compliance with WCAG 2.0 levels A and AA. But it is important to note also that WCAG 2.0 alone is not enough. WCAG 2.0 are international guidelines, Section 508 is U.S. federal law.

So Section 508 and the Section 508 Refresh include more than just web-based content. It covers things like procurement policies, and purchasing and utilization of accessible hardware and software, provides requirements links to third party websites and other information.

So the bottom line is this: We'll also be required to comply with Section 508, but in the future, the Section 508 Refresh is expected to direct us to comply with WCAG 2.0 for our web-based content.

So WCAG 2.0 is based on four principles of web accessibility: Perceivable, operable, understandable, and robust. Within these four principles, there are a total of 12 guidelines.

So we have the four principles in the 12 guidelines. Within 12 guidelines is the heart of WCAG 2.0, and these are the 61 success criteria that we must follow to ensure compliance of our website. They are designated by level of compliance, we're required to comply with everything designated, level A and AA. There is a level AAA. This is the highest level of accessibility you can achieve following these guidelines. We should comply with level AAA any time we can, but we -- we are and will be required to comply with level A and AA.

There's great documentation, very thorough documentation available from WC -- how to meet WCAG 2.0, provide techniques and provide sample code if you need to update

your website, comply with WCAG 2.0 and provide great information for understanding all of the success criteria.

This documentation is a total of about 400 pages. And that can be overwhelming for new comers. So if you are a beginner with WCAG 2.0, my recommendation would be to follow the WebAIM WCAG 2.0 checklist and the link is on your handout that's available today.

The WebAIM WCAG checklist, lists all of the principles and the guidelines. Within each guideline are the criteria. Below each success criteria is the level of compliance, and again, we're looking for everything that is level A and level AA. If you need more information or understanding about any of the particular success criteria, on their web page, each success criteria is hyperlinked to that section of the 400 pages of documentation, specifically about this success criteria.

Also, we're talking about accessibility checking today. And so if you like to use a checklist to ensure your website is compliant, you can download this document as a printable PDF and go off and check each item to make sure you're complying with WCAG 2.0.

There are two important concepts in both Section 508 Refresh and WCAG 2.0. And this is the idea of useable accessibility, or functional versus technical accessibility.

So our websites may pass an accessibility checker, but is the content actually useable by the intended audience? So for example, they have an example of technical alt text. And here I have an image on the screen with a question mark. And we need to determine the contents of that image based on the alt text I have provided.

So in my image tag, I have the alt attribute and the alt text I have provided here is logo. Now, technically, the accessibility requirement has been met through the use of alt text because I have provided alt text, alt text's logo. Is this really functional? Does the word logo fully convey the meaning of the contents of this image? What is this a logo for, of? It leaves us guessing to use the word logo, so to remediate or repair alt text, I've changed it here to Global Accessibility Awareness Day. This is a logo for Global Accessibility Awareness Day. That is the text appears inside the logo so this is useable alt text, so functional goes beyond merely meeting our technical requirements, but it means that the alt text or the other things that we are doing are actually useable by our website visitors.

10 Tips for Creating Accessible Websites

So now we're going to go into our ten tips for creating accessible websites. And we'll start with five tips for content managers.

So content managers tip number one, provide page title, use headings and use them properly and also use semantic structure properly. So beginning with page title, provide the title tag for all your web pages. Now, the title is the visual equivalent of providing a title on the outside cover or the binding of the book. So if you can imagine walking into a library or visiting a library and the shelves are filled with books, but there's no titles on the binding. So it would be very difficult to find the information that you're looking for. And this is similar to providing titles on our web pages. So this is why it's important to provide title.

Regarding heading, all web pages should have a heading 1. There should be only one heading 1 designated per page. And the text used for your heading 1 should be the same text that you would use in your title.

And then I notice my slide is a little out of order, so I'll use the arrow. You should use a heading 2 for all section titles, a heading 3 for all your sub-section titles. Now, for most websites, this is enough title.

But if you have a more complex website, you might need to use a heading for, for all of your sub-sub section titles, and all the way down to a heading 5 and a heading six. What we can't do is use a heading 1 for our heading or title of our page and jump down to a heading six, because that's the font size we like. We need to make sure that we use our headings properly and also -- let's -- one second. Use our heading structure properly. So how do you check your web page or your titles and your heading structure?

Well, there are a number of free accessibility tools available and they're listed on page 2 of your handout for today. I'm using the Web Accessibility Toolbar in all of these examples.

So if you download this free toolbar, you can go to structure, heading structure. And what you're looking for here is, first, to ensure that a title is listed. If there is no title, you do need to go back to your html code and add your title tag. You're looking to ensure that there is an H1 or heading 1, and that there's only one heading 1 for the page, and that the title, or the text of your heading 1 is either exactly the same or contained within the title of your page.

You also want to go through all your heading 2s, make sure these are actually section titles, and the same if you've had heading 3 or heading 4.

And also, use semantic structure properly. So for example, use ordered lists any time you have information that needs to be provided in progression or sequence and this might be numbered one, two, three, four, et cetera, or A, B, C. Any time information needs to be provided in a sequence, you need to provide an ordered list for that information.

Use unordered lists any time the information is related, but in no particular sequence, and this is the same as using a bulleted list.

What we need to avoid is using either of these, simply for indent or layout purposes. Always have a defined purpose and use your structure properly.

And also, just as a reminder, be sure to use strong instead of bold and em or emphasis instead of italics.

So to check your web page, to be sure that you've used your -- your structure and your list properly, using again the Web Accessibility Toolbar, you can go to tables, linearize and what you're looking for here is any information that's provided as a bulleted or a numbered list, and you want to be sure that that information is truly a list and that it's not being used for layout purposes. You also want to check your information and be sure that if you have information that belongs in the list, that you do go back and code that as an ordered or unordered list.

Tip number two, provide descriptive hyperlinks. Your hyperlink text should make sense when it's pulled out of context, the destination, website, or your document title, and it should be unique for each unique destination. You always want to avoid big terms, such as click here or e-mail me. That text is not descriptive. You also want to avoid using a true URL, such as HTTP://www, et cetera, that also is not descriptive.

Check your web page for hyperlinks, using the Web Accessibility Toolbar again, you can go to doc info and list links. This will list all of the links on the page. It will include any images that are used as links. And in this case, this is where your alt text needs to be descriptive and provide the -- the website that will be visited, typically people put a logo on their web page, and it's an image link and it will always take people back to your home page, and in that case, your alt text needs to be the name of your page.

And then you want to go through all of the hyperlinks that are listed. Be sure they are descriptive, that you don't have any vague terms.

Tip number three, provide alt text for all non-text content. Every image on your page requires alt text. It might be a photograph. It might be a submit button. It could be a chart, a graph, or a map. All images require alt text.

Now, alt text is a clear, concise description approximately 120 characters or less. And the reason we say 120 characters is that some screen reader or assistive technologies truncate at 120 characters. For it to be truly useable, want to limit the number of characters we use to describe our images to approximately 120 characters or less. And the text that we use to convey the function, the meaning, or the purpose of the image.

Also, provide a long description, in addition to alt text, when the alt text alone isn't enough to provide an adequate description of the image. And in this case, your long description should be provided in the surrounding text around the image or you can link to a separate, accessible document.

So for example, I have an image of a map on the screen. And my image source tag, my image tag, I have the alt attribute and my alt text says, map to UGA Tate Center. In the text surrounding the image, I have a description of driving directions from point A to point B, which is a little bit off my screenshot.

But the point here is that we do not need to describe that Route 15 is to our west and Highway 78 is to the east. You don't have to mention any landmarks or other streets that people will follow. The purpose of the meaning conveyed by this image are the driving directions from point A to point B, and that's the information that should be provided in the text surrounding the image.

Now, if the exact alt text that you would use exactly is provided in the surrounding text, then you can use null text. And begin quote, end quote, universal symbol for null next and what this means, assistive technologies will skip this and will not announce the presence of this image. If you need more information about writing effective alt text, there is a link on today's handout and you're welcome to contact me and we'll be glad to send you a link to the 30-minute training.

How do you check your website? You can use the Web Accessibility Toolbar, select images, and list images. And what you're looking for, below each image will be your image tag. You want to be sure that you have included the alt attribute, and also check your alt text to be sure that it meets the requirement for writing effective alt text.

Content managers' tip number four, provide accessible document. Most websites have a wide variety of documents that are also posted alongside html content. Might be a PDF document, Word document, Excel, PowerPoint, et cetera, and there are resources

available on today's handout that will give you information about how to create accessible documents in each of these different formats.

And content manager's tip number five, provide accessible multimedia. If you have an audio only file, must provide a text transcript of the spoken word, along with audio link. If you have a video only file, and we must provide a video description and this is a text description of the key visual elements required for understanding, what is taking place in the video.

And if you have audio and video combined, provide closed caption, text transcript, and the video description. These two documents can be separate or combined into a single document.

And also, be sure to provide an accessible media player, we're going to talk about that next in our next section.

So as review and summary, our five tips for content managers, provide your page titles, provide headings and use your headings properly, and use proper semantic structure. Provide descriptive hyperlinks, use alt text for all non-text content, and be sure that you provide accessible documents, and accessible multimedia.

So next we'll describe five tips for designers and developers.

So designers tip number one, don't auto play video. We need to provide an option to turn off multimedia, and this is through the use of a stop or a pause button on the media player.

And this is why we need to ensure that the media player itself is indeed accessible. Many are not. If you provide your video on YouTube, the default YouTube player is not accessible. And what you should do is instruct yourself site visitors to request the html player, which is -- html5 player, keyboard accessible. I have the link on the handout today you're welcome to post on website and on next screenshot, I'll show how to get it.

If you embed YouTube, you might want to use JW Player or also the link Vision Australia, code to make it accessible and as a side note, you could embed the html file.

So this is a screenshot of how to request a YouTube html5 video player and if you visit the website, www.youTube.com/html5 it will bring up this page, and it will let you know if your default player is your current setting, and so in my example, it is. And all you would need to do is select the button, request html5 player, from there forward the

html5 player should be the default and individuals can also log into their YouTube account and edit their preferences to ensure that they request the html5 player.

Designers' tip number two. Ensure JavaScript is device independent. So what does this mean?

That the functionality of the JavaScript does not rely on mouse-only or keyboard-only. Need to be able to function with both a mouse and a keyboard.

Now, JavaScript itself can help to increase accessibility, sometimes people think they have to turn off all the JavaScript, but it's not necessarily true. You can use JavaScript to provide prompts or warnings or error messages, instructions, or additional information.

But since JavaScript is so widely used in so many different ways, there really is no one single easy fix for all Java YouScript. What you really need to do is evaluate each web page, and device unique solutions, so how do you devise those solutions? A wonderful resource is available, the link is on your handout, from WebAIM, it's called accessible JavaScript, and in this document, they will give you examples of how you might be using JavaScript. They'll tell you whether it is accessible or not. And if it is not, they provide examples of things that you could do to ensure that you are using JavaScript accessible.

Designer tip number three. Ensure keyboard accessibility. This is often overlooked but it's a significant aspect of website accessibility. So how do you test this? Well, unplug your mouse, and then use the tab key on your keyboard to move forward through the web page, then use shift tab and move backwards through the page, and use the enter key on your keyboard to be sure that you can activate all links, buttons, form controls, et cetera.

There are five accessibility requirements for keyboard. The first is the one that most websites fail. And this is a visual requirement. Focus indicators should be visible when you use the tab key. Now, have some screen -- I have some screenshots I'm going to share with you next to demonstrate this. To experience this yourself, I would recommend that you also visit the WebAIM site and use your tab key and tab through their site to see what you should be seeing on your own site in terms of these focus or visual focus indicators.

Also, when you go through, check for -- keyboard accessibility, ensure that the navigation order is logical and intuitive. Ensure that all interactive elements are accessible through the keyboard. All scripted elements and widgets are accessible with the keyboard. And for lengthy navigation, which is most navigation on most of our

websites, need to provide a skip to main content link. Use the headings properly, and also use your ARIA landmarks properly.

So here I have a screenshot of the WebAIM site to share with you what you should see when you visit their site.

Now, when you test a page for keyboard accessibility, the first few times you hit the tab key, you'll be up here in the browser bar, jump over to the web page. Now I'm clicking over to the right. It might click some of these options on the right and then your key might guess lost here, but then it would ultimately land on the first part of your web page that you are responsible for in terms of keyboard accessibility.

And when you tab to your web page, the first thing that should pop up is a skip to main content link. And what this link does, it allows individuals who are using the keyboard to skip all of the navigation elements here, every time they visit your site and instead they can select this link and it will take them straight down to the content.

You'll also notice the skip to main content button has a red background and you can use a background color as a visual indicator for a focus indicator for keyboard accessibility.

Now, next when you visit the WebAIM site, what you should notice is that a light gray dotted box around the next item that you land on, and this is the WebAIM logo, and as you tab through the site, everywhere your tab key lands you should also have this dotted box. Now, if you don't have the dotted box on your own website, it's typically because in your CSS style sheet you may have display, colon, none, or display, colon, zero, and you need to take that out to remediate that. Those are the visual focus indicators when checking your website for keyboard accessibility. You can also check the navigation order using the Web Accessibility Toolbar, and select structure, and tab order indicator.

And this will put numbers and these are just numbers, all the red circles on this page are mine. Just to highlight where all of the tab order will land. But this will go through numbers, and it will tell you the order that the tab will land. So I'm on four, fifth, sixth. What you're looking for is that this is a logical order and this is what is happening with the WebAIM site. What you don't want is to begin at the top, and then all the way down at the bottom, maybe over to the right, somewhere in the middle, back to the bottom, that would indicate that your html code underlying your web page is out of order. And that you need to make sure that your html code is in order and use your CSS style sheet for the visual layout of your website.

Designer tip number four. Ensure sufficient color contrast. You want to shoes a high contrast color scheme between your foreground, which is your text color, and your background colors.

Always avoid large blocks of text with a dark background and light text. Ensure that your background, design or color, does not overpower your text and also you want to avoid color coding.

So in this example, which provides a better contrast? I have example A, which is a dark brown background with light tan text, and then I have example B, which is a grainy tan background and it has little fish floating all over the background and overlaid those two designs is plain white text. So visually, when you look at this, your first inclination would be, well, A is better, because it provides better contrast, but the question is, is A really accessible? Well, the answer is no. I've checked that color scheme and it's not accessible. So when you're remediating your own color scheme, always be sure to compare your new option to the best possible option for high contrast and this is a white or light background with a dark text. There is a great tool available to check color contrast. There are several tools, but one that I like particularly is called the Colour Contrast Analyzer. If you use the Web Accessibility Toolbar, this tool is built into the toolbar.

It uses both keyboard short cuts and mouse, and I'm going to describe the mouse movements of how you would use this tool. You can use it for your website; you can use it on PowerPoint slides. And so what you would do is you would select the eye dropper for your foreground color. This is your text. And you would hover over your text color, and make sure that that color goes into the little box for the color.

If you're a web designer and you know your hex code you could plug that in there and select the eye dropper for your background color. Click on your background. It will put the text color there and it will automatically analyze your color scheme. What you want for results are four check marks or -- most people do not achieve four passes on their first try. Most have primarily three, sometimes two.

If you do not pass, if you have a fail, in any of these boxes, the way to remediate is to simply make your background color a little bit lighter, perhaps a shade lighter would do. And your foreground or your text color a shade darker, rerun the test and typically that will remediate your color scheme.

And the last designer tip, number five, provide an accessibility statement. If your institution does not have a statement, you can use the one that is available in today's handout, and that's also on this slide. And I'll read the text, it says, the, fill in your

institution name, complies with Section 508 and WCAG 2.0 guidelines for website accessibility. And please contact us if you cannot access information on this website. Provide both your e-mail and a phone number so that individuals can contact you in the manner that works best for them.

And also, we are required to respond to accessibility request within 24 hours or one business day. So you may not be able to remediate the problem within 24 hours, but you do need to respond to the initial request within 24 hours, and do check with your home institution to check on their policy regarding both the response and the remediation needed.

So in summary, we have five tips for designers and developers. Don't auto play video, ensure your JavaScript functionality is device independent, and ensure keyboard accessibility, provide sufficient color contrast, and also provide an accessibility statement and your contact information.

So to wrap up today I've provided ten tips, and also shown you how to check a single web page using the web accessibility tool. There's another great tutorial, it's called the W3C easy checks. Most of their nine checks are also included in the tips that we just talked about. The reason I wanted to point this out to you is this. On the W3C easy checks, they provide step by step instructions for using four different toolbars to check your website for similar things we just covered here today. If your preference to use the Firefox accessibility toolbar or the WAVE toolbar or even your safari browser, you'll find step-by-step instructions in the W3C easy check. All we've talked about today allows you to check a single page for accessibility.

Once you've learned to check individual pages for accessibility, you understand what you're looking for, and you also understand how to remediate and make those repairs. That's the time you're ready to run an automated checker on website. What happens, people want to jump straight through the automated evaluator and not sure what to do with the report. Check a few pages manually, understand what you're looking for, what you need to fix, it will be much easier to understand the reports for automated checkers. A link on handout today for the free Functional Accessibility Evaluator and the acronym is FAE and it will run an automated report, you can either run it on a single page or request a free account, and it will go through website and it will check both static and dynamic pages for you, for free. You can also view your reports by category, so today, for example, we talked about descriptive hyperlinks. You might go to the hyperlink section and check all of your hyperlinks at one time or you might like to check all of your images for the correct alt text at one time.

And you also have the option to view the report in terms of the WCAG guidelines. It's the same report provided in a different format. If you've gone through the W -- WCAG 2.0 checklist or if learning this, if you go straight through the list and make sure that you are complying and repair your website as needed.

So the last thing that I would like to say, we've covered a lot of information today. But I would like to leave on a positive note, and that is, a quote from a video called worldwide access and they say, if you can design a website, you can design an accessible one. And this has been true in all of the trainings I've provided. In general, we have created -- we have learned how to create accessible documents and website -- inaccessible documents and websites. Those are just habits. We can create new habits and learn how to create accessible contents and websites to make sure that our websites are indeed accessible for all users. On a closing note, I'd like to mention, all are welcomed to join WAG listserv, meetings, trainings, or visit our web page and look at all the other resources that are available. So that is the end of my section. And thank you very much.

Question-and-Answer

Liz Persaud: Thank you, Janet. Wonderful job! Such helpful, important information. Very valuable information. We actually have two questions that were posted in the chat area for you. And I will go ahead and read the first one. You can answer, and then I'll read the second one.

Dan asked, is the use of color as a focus indicator different than using color to convey a message?

Janet Sylvia: No. And the color, you'll notice on the WebAIM site, the color scheme they use for focus indicators are indeed accessible, so it is okay, passes accessibility requirements, so you can use a background color for your focus indicators.

Liz Persaud: Thank you, Janet. Another question from Michelle. Michelle asks, is the response time determined by institutions or the law?

Janet Sylvia: Okay. So in general, from what my discussions with UGA opportunity -- with our coordinator, the response of 24 hours is a requirement by law. I would check with home institution, home state. Make sure that is the same. We do want to at minimum respond to the request, say, yes, we have received our request, we are working on it, or maybe it's something you could remediate within that 24 hours. But I have been told here for Georgia that it is a law that we need to respond within 24 hours.

Liz Persaud: Thank you, again, Janet.

A few more comments and another question for you. Janet asked, is the WAVE tool accessible to people using screen readers?

Janet Sylvia: Yes, for the WAVE toolbar, and yes, it is.

Liz Persaud: Thank you again.

And then Dan just has another comment. 508 specifies you cannot use color only to convey a message.

Janet Sylvia: Right. And I understand what he's saying, and Dan, it's both the text is the indicator that the skip to main content link is there because that skip to main content is not visual -- visible, excuse me, on that web page until you hit the tab key, so that information is coming up in two ways. One, by the wording skip to main content and two, additional attention is drawn to it using the color so it is compliant in that way, so I hope that helped.

Liz Persaud: Thanks again, Janet, and I wanted to point out, Lucy posted a link, video, if you click on that link, it will take you to it.

Questions and comments about the handouts, about today's presentation and also about the recording of today's webinar, and Norah has been responding, but we want everyone know we will send today's PowerPoint, today's recording, today's handout, including the chat -- excuse me, chat transcript to everyone via e-mail. Those handouts were sent to everyone with the webinar announcement but we'll be sure to send them out to everyone again.

So be on the lookout for that. So with that being said, I'm going to go ahead and pass it on to accessibility in Georgia, Joy Kniskern.

AccessGA

History of AccessGA

Joy Kniskern: I appreciate that so much. And thank you, Janet, and also John, appreciate you joining us today.

Solutions -- I want to take one brief moment to let you know that about a year ago, launched -- AccessGA Accessibility Services, supported through the A.D.A. Coordinator's Office to work with state agencies to receive assistance in resources through phone, electronic ticketing, informational Wiki, webinars, electronic newsletters and in-person trainings in the state of Georgia.

Some of you are not in the state of Georgia. For agencies in Georgia and higher ed institutions in Georgia, we can support them in areas of document content remediation training, web and application evaluation, assistive technology quality assurance, procurement consultation, so you can be sure to get the IT and devices that are accessible. We can help you with policy development around accessibility, and we can look at the Voluntary Product Accessibility Template. Use of that in terms of procuring devices AT that is accessible and IT as well.

Examples of Accessibility Checkers

My slide -- okay. So I'm going to spend just a moment in talking about one of the very robust accessibility checkers. Janet made some wonderful comments about all kinds of accessibility checkers that are free and a good place to start. For those of you who are working within state agencies or university systems, it -- if you do decide to go down the path and looking at automated checkers, one of the ones you might want to take a look at, and certainly is not a sales pitch by any means at all, is HiSoftware Compliance Sheriff. It so happened, we had a chance to look at that at Georgia Tech, which Georgia Tech does use it, and basically what it does, it will offer a comprehensive and automated solution for managing content compliance against the web governance standards in WCAG and Section 508. It can validate websites, Intranets, document libraries, e-mail, social media, and collaborative media for compliance issues against standards. It can also do validation against standards and actually custom organizational policies for things like privacy concerns, accessibility, and social media. It will help you look at integrity of your site, site quality and data and information security, that you can actually plug in some of the concerns that are relevant to your site, and validate against that.

Okay. And if you wanted to take a look at the voluntary product accessibility template that is used by government agencies to look at different Electronic and Information Technology and accessibility to different kinds of products, eReaders, computers, to different kinds of software application, you can use a voluntary accessibility template. If you want to look at ones on Compliance Sheriff, you can go to this website. It will give you accessibility information you might want to take a look at.

The features of Compliance Sheriff, it will do an audit of your web content and application. And that includes Microsoft and PDF documents. It will do Section 508 recording, test files for accessibility compliance. Against the 508 standards and can report on compliance to those standards. And it will look at WCAG Reporting and look at WCAG 1.0 priorities 1-3 as well as WCAG 2.0, and it will report on the W3C priority and

WCAG compliance. It will also, and you know, I don't think we have any of our participants are from Canada, except for John Rempel, who is here, so he might be interested in knowing that it will also do reporting for Canada's compliance standards, and it will also do Alt Text Quality Reporting, so it will look at alt text and look at the quality of it.

Now, and it will site those alt text violations in each of the web files. It will also do some custom accessibility reporting as I mentioned, so that you can look at custom reports against some of the specific requirements of your environment.

Additional features of Compliance Sheriff is it will show comprehensive reports. It will give you the exact location of compliance violations. When, as Janet said, when using other free checkers, like the Functional Accessibility Evaluator, you will get fairly robust report that it won't tell you where you need to go to fix code and that's something that a programmer would really need to look at.

Supposedly Compliance Sheriff will give you e-mails to the managers that are tagged in the software on questionable violations, so in other words, it will identify ones where don't know -- won't tell you whether or not it is or is not one but it's something your manager could check out.

Test results are archived in history, using this in a really large system, like university with many different applications that you want to look at, you can also see the progress toward reaching higher levels of compliance. All of us who are in this business know that when you begin to look at compliance issues, sometimes you have to start out with kind of low hanging fruit. Some of the stuff that Janet mentioned and really look at what you reasonably can do and you need to prioritize when you're looking at your site as to, you know, which pages are most frequently looked at or used by people, which ones are interactive, where compliance is just a very big issue.

And then also, Compliance Sheriff will not repair web content but it will drill down through links provided in the report to pinpoint the exact location of these errors, as I mentioned, and it will highlight them in the html code, which is really helpful to the programmers and will help provide the links that tell you how to repair that content.

Now, here's one thing that's very, very important, Janet certainly mentioned this. Is there is no automated checkers that ever takes the place of human expertise. You need to have users who are proficient using screen readers, navigation software, like John mentioned, and screen enlargement software. You need to really think about this as a three legged stool, automated checker, using maybe some of the free ones, users of assistive technology, and sometimes you also may want to bridge in somebody who is

not necessarily using assistive technology but can see if there are several layers of problems within websites that have link after link after link. Automated checkers should -- can't replace too -- cannot replace human interpretation of images. Cannot tell you some of those contextual issues, and it can't tell you how to create a good header description or talk with you furthermore about usability of the site. So one of the things we're offering here through Access Georgia through anybody in the state of Georgia, state agency, also higher education, we do have trusted testers who are working with us, to work with us on websites, and if you're from another state, we encourage you to talk with maybe somebody in your state, Assistive Technology Act program. If you need further information let us know, and we can post links to resources in your state that you may want to check out.

With that, I'll turn this back over to Liz, and see if there are any further questions. Thank you so much.

Liz Persaud: Thank you, Joy. Great job! And again, such helpful, important resources and information. Again, if any participants out there have questions for John, or Janet, or for Joy, now is the time to go ahead and type them in the chat area.

And I just want to reiterate, again, that today's recording of today's webinar, the PowerPoint, any additional handouts that were mentioned will all be e-mailed, including the chat transcript, will all be e-mailed to everyone out there, to be on the lookout for that. So any questions for John, Janet, or Joy, as we're wrapping up today?

Alright. Again, want to extend our thanks to John, Janet, and thank you Joy for all of your helpful information and resources. We help this was helpful to all of you all out there. Thank you to Norah for pulling this together and managing some of the technical difficulties that we had, but all in all, it was a wonderful webinar, so great job, team, and thanks everyone out there for taking time out of your busy day and busy schedules to join us. Any questions you have, you can contact folks here at AccessGA, AMAC Accessibility, and we'll talk to you next time. Thanks, again.