

## **3 Ways to Get an Easy Win to Accessible Web Design**

STEPHEN LOCKER: All right. Good afternoon, everybody. Thanks for coming to the second web accessibility workshop here at Washington State University. And today we're going to talk about three areas to get an easy win in tech accessible web design, or three keys, or-- we titled it before we actually wrote it, so this title may or may not be completely accurate of what exactly this presentation will be. But I'm pretty sure we're going to hit on at least three things that will help with accessible web design today in this workshop.

We also don't have a clicker today. So I'll be going over here. So Steve Locker, Jeremy Felt, Allen Johns. We're all with University Marketing and Communications. We've recently changed our name. I just need to double check that.

And so we're talking about this a little bit. And this is the same thing I posted the last workshop, which is just Wikipedia's top paragraph on web accessibility, which I think I'm going to probably post this every single time.

"Web accessibility refers to the inclusive practice of removing barriers that prevent interaction with or access to websites by people with disabilities. When sites are correctly designed, developed, and edited, all users have equal access to information and functionality."

Today I'm going to back that up also with our friends at the W3C, who say the web is "fundamentally designed to work for all people", which is, I think, a really important point here. The web removes barriers to communication and interaction that many people face in the physical world. However, when websites, applications, technologies, or tools are badly designed, they can create barriers that exclude people from using the web.

So with this-- and it took us about halfway through the workshop last time to get the interaction really going-- I'm going to start with a question now. Why do we care about web accessibility? Does anybody want to just start? The first answer is going to be the easiest one. So who wants to start? Great.

AUDIENCE: Everybody matters.

STEPHEN LOCKER: Everybody matters. Correct.

AUDIENCE: It's the right thing to do.

STEPHEN LOCKER: The right thing to do. Right. Everything matters, everybody matters, right thing to do.

AUDIENCE: Everyone is different.

STEPHEN LOCKER: Everyone is different.

AUDIENCE: Those are all nice. Mine is more-- in addition to all those wonderful things, I want to reach the broadest audience possible.

STEPHEN LOCKER: Right. Reach the broadest audience. We're all communicators at university. And I think we talked about this last time. There's not anybody we want to exclude when trying to do the things we do for this institution.

AUDIENCE: It's a legal requirement.

STEPHEN LOCKER: It also happens to be a legal requirement. Yes. Anybody else want to jump in? Thanks, Allen, I really appreciate this. So my part of the conversation today is really simple. I'm just kind of introing here.

And so usability we care about a lot in the web. Accessible websites are the most usable websites. If you've done a lot of work on your website to make sure your architecture is good and all those things, and then you make sure that the effort is there to make it accessible, those are the best websites you can have.

An example for myself is I don't often like to wear headphones when I'm out in a coffee shop or other places with things. But I still like to watch videos. But you can't necessarily have the sound up. So having captioned videos for me is really important. Now I may have different potential disabilities myself, but sight is not one of them, hearing is not one of them. But you're still reaching me with the video because you put captions on it.

It's good to think about when we do stuff for the broadest amount, it even helps the folks that you are not thinking about when trying to create this content. So it's a really important thing to keep in mind. The broadest amount, and then making sure that we make the content as easily digestible as possible for anybody that wants to have it. Accessible websites are the most usable websites.

Text size. This is another thing that I've often run into. I've worn glasses since just after college. Sight's not always one of my best things. Having text that's legible, big enough, contrast enough, where you don't have to strain to see what's there, like light gray on a lightish gray background, is really, really handy. While there might be a design aspect that makes it look pretty nice, it does make it pretty difficult to read.

So just things like that. Just know that what you're doing you're doing for everybody. But also it's important to know you're doing it also for people that have different disabilities when it comes to whether there's access.

The web is for everyone. It is a place where people, as long as they have access to the internet, they can get information. We should supply that information in a way that doesn't create any other barriers for them.

So yeah, you can start. So with this, I'd like to move on to color contrast and pass off to Allen Johns, who's the lead designer here at Washington State University, to talk a little bit about color contrast.

ALLEN JOHNS: So color contrast is pretty-- very simple. Contrast, right? Is everybody familiar with the term contrast and what that means? We have a definition here. Color contrast is the ratio of foreground color, text, and background color. Kind of easy, but it's pretty important. If we're not overthinking it, this should be really simple to do.

So the contrast ratio that we need here at the university using the WCAG 2.0 AA requirement is 4.5 to 1. And I don't know how they figure that out, but we have tools that figure it out for us. Is anybody a mathematician that knows what to break down what 4.5 to 1 means? No? OK.

So on the web.wsu.edu we have some good tools that will help with this. The one that I use the most is this Color Contrast Analyzer. I'm going to guess this one wasn't made in the states since they spell things funny. But this tool is super handy. And so the link is on web.wsu.edu. So if you don't have this tool on your machine, I would encourage you to get it. It's a free download and you'll use it all the time.

Another tool that's fun and can help introduce you to the idea of color contrast is randomly.com. So that's fun, where it'll just randomly generate accessible color combinations. This doesn't look accessible on our projector, but this orange color and the black color has a 4.81 to 1 ratio.

So any combination, whether it's the blue on orange or the orange on blue, is an accessible color combination. There have been some combinations that have surfaced on this website that I thought for sure were not accessible, but they are accessible. And the interesting thing about this is this is working with-- contrast is light and dark, right?

And different colors have a different darkness to them. And so some we'll look at and go, there's no way that that's accessible. But that's because we're seeing different light waves. And so we can get all nerdy and talk about the way we see light. But sometimes color combinations we think are obviously accessible aren't, and sometimes it works the other way.

So if you've got some free time, and even just to introduce yourself to the idea of color contrast, I would spend a little bit of time on this site just refreshing and looking at all of the color combinations.

Here at WSU we have a very challenging color palette to work with when it comes to accessibility. And so for the next little bit, I want to look at our color palette so we can just kind of see what's going on with it.

Now it's hard to see, but this row right here is our standard color palette. So crimson and gray are our primary colors. And then we have a green orange-- don't touch the screen, Allen. We

have a green and orange, a blue, and a yellow. Is anybody in here not familiar with the WSU color palette? Because it's not super obvious on the screen.

Using the color analyzer tool that we had talked about, I've sampled different combinations in our color palette. When we first started looking into accessibility and color contrast, I made the comment, and it stuck around for a little while, that our color palette is not accessible. And then I learned that I was wrong because no color palette is in itself inaccessible, but we can use it in a way that's absolutely not accessible. But we can also use it that's very accessible. We just need to be mindful of the combinations that we're choosing.

Actually, go back one more. So this one here, these are our accent colors. These are the brighter colors in our color palette. And if we were to start at this end, we would find-- and we'll see on the next slide-- that these against white don't meet the contrast ratio that we need.

The red one, however, does. So red is a deep color. It's a dense color, I guess, is one way to say it. And so on white, we meet a 6 to 1 contrast ratio, so we more than exceed that minimum requirement for normal text.

So an important thing to know is normal text is the browser default, so usually it's about 16 pixels. Is that an accurate statement? So it's about 16 pixels, and then large text is 1 and 1/2 times the base text size. So if our browser's base text size is 16 pixels, who wants to do the math for me and tell me what large text would be?

24, right? Yeah. So anything larger than 24 pixels. Or if you set your base font size at 1m, large text would be anything at 1.5 or above. So that's an important thing to keep in mind. Otherwise you're going to feel very defeated as you work with contrast.

So we can get away with a lower-- well, let's look at the next one.

AUDIENCE: It was an online question. The question is, do all four entries need to pass?

STEPHEN LOCKER: The question is, do all four entries need to pass?

AUDIENCE: To be compliant, because the bottom left appears to be a fail.

ALLEN JOHNS: The bottom left will fail most of the time. So for the 2.0 AA, the double A, we need this one to match. We need this one to pass and this one to pass. So the top two are double A and the bottom two are triple A. And we're not required-- required-- to meet the triple A. So legally, we're not required to meet this one. If you can, it's good practice. We want to make it as accessible as we can. We are required to meet the double A, which is the top two.

So in our next-- here I sampled the green, and it failed all the way around. So that's at 2.6. And the orange and the blue and the yellow are all right about that same place. So practical

application is don't set any text in the highlight colors, which is a mistake I've made. And if we need to, we'll look at-- you can look at [research.wsu.edu](http://research.wsu.edu). You can see my accessibility mistakes.

AUDIENCE: Yeah, I was going to ask you if we've got a website-- if we've got a website that your office has helped with in the last few years, has this been considered or do I have to worry about this?

ALLEN JOHNS: It's being considered.

AUDIENCE: Do I have to think about it?

ALLEN JOHNS: Let's work together.

STEPHEN LOCKER Yes, you do have to think about it.

ALLEN JOHNS: Yeah. So we've changed the way we work significantly since we've started considering accessibility. Yeah.

AUDIENCE: So these are just on the background of white, right?

AUDIENCE: Can you wait for the microphone, please?

AUDIENCE: Oh, I'm sorry. So these are just on the background of white, right?

ALLEN JOHNS: Right. So if I add 10% black, a really light gray, this changes. If these aren't working on white, they're not going to work on a light gray. Once we switch over to really dark, they work. So the top one's our foreground color, our text color. And then the bottom one is our background color, which is white.

So if we go to our main colors, so here's our main colors, I've sampled the yellow. And it still fails on white. And this is one of our standard colors. And then if we go to our standard blue, we pass on large text. So our contrast ratio isn't 4.5 to 1, but with the double A standards, we technically pass the minimum required contrast. Stephen.

STEPHEN LOCKER: Minimum contrast for large text is 3 to 1 - for the contrast ratio for large text, which is roughly 24 pixels for large text.

ALLEN JOHNS: So that's our-- OK, so here we've switched it to a dark. And so we're still using this blue, but we're on black and it passes the double A standard on small text.

Now you'll want to consider if this is the right design decision. But with the contrast ratio, we pass. So again, a reminder that's not got anything to do with accessibility but has everything to do with designing for WSU. You can follow the brand guidelines and design something that looks nothing like WSU. Something to consider that maybe that's not the best thing to do.

So here we have our green, and I sampled one of the light shades of green. And we pass on the large and we fail on the small. So this is our very lightest green that we have, and it barely passes the large text at 3.6 to 1. So this will be a common issue with all of these colors. So that can be just a thing to consider. It's not broken on its own. But we do them wrong, it doesn't meet the standards.

And so here is the green with the darkest green. And again, it passes the large text just barely. So something to consider as you're working with the color palette. There are, however, different color combinations, like this is a combination that's used on Voiland's site, where they have the dark blue and the bright yellow. And that passes with a 4.7 to 1. So that's a combination within our standard color palette. Now it's right down at the extremes, but it works. So the palette in itself is not inaccessible. It's just, be careful.

A space that you will not run into issues that we're finding-- and we're spending a lot of time working in this space-- is working with crimson, highlight red, and dark and really light grays.

So if we push things to the extremes, if we're using, like, 10% gray, 15% gray, so really light, and then the really darks, dark grays, so more down and in this area, like 80% black, 90% black-- we don't run into contrast issues. We can put crimson on the really light grays, like over here, and we don't have contrast issues. We can run we can run dark body text on light gray and we don't have contrast issues.

Now our gray, the 431 Pantone gray, sits in the better really pay attention zone. You've got to be careful how you use it because it's not super-- it's safe unless you just use it wrong, which is easy to do.

Do we want to look at samples of color? I don't know what we're doing here.

STEPHEN LOCKER: Does anyone have a question or a comment.

AUDIENCE: Are you looking for a place to get samples?

ALLEN JOHNS: You betcha.

AUDIENCE: Because we have been going through our site, and we have a color contrast issue. Right? Oh, no? You don't know? And I was kind of wondering if it's our spine, which is made through our IT group, the [? Umbraco ?] and stuff like that through enrollment management. So if you're looking to test one, you can use ours. That'd be great.

ALLEN JOHNS: So one thing I can tell you is the spine the way it launched a few years ago had a lot of accessibility issues. I mean, we were working with a lot of mid-tone grays and a lot of light grays that caused a lot of issues.

AUDIENCE: We have white writing, white text on crimson.

ALLEN JOHNS: White text on crimson's accessible.

AUDIENCE: We keep getting not accessible. Reading.

ALLEN JOHNS: That's interesting.

STEPHEN LOCKER: So I'll just make a comment on that. So what's really important with web accessibility is that we have checkers that you check, and the different-- like using aXe or whatever those other checkers we have for your browsers. It's really important then, on that step, is do a manual check. So put in the crimson color that you have there with white and make sure that you see that in the tool that Allen had shown there on the other tool like that.

But there is a lot of warnings and sometimes false positives, just depending on how a page is structured. Now one of the things that we'll be changing-- Jeremy might speak a little bit of it here when he's up here-- is the spine release 2.0 that will be coming out, which corrects some of the things of how we handle background color in the spine itself to not raise false positives, and with a slew of other small things.

So yeah, I think some of those that you're coming up with are dependent on how the background color was actually coded into the site.

ALLEN JOHNS: And if it's in the spine navigation-- like there was a while where crimson background in the navigation, a lot of those are light grays, and so a lot of the text on there is a light gray and not white. So like Jeremy mentioned, maybe double check that it's white and not gray, because if you're going into 10%, 15%, 20% black for your grays, you'll run into contrast issues.

AUDIENCE: Do you anticipate brand.wsu.edu will be updated in the next couple of years to give us a little help as these disabilities standards come more into realistic focus?

ALLEN JOHNS: Yeah. Yeah, there's lots of issues with brand.wsu.edu that we'll be addressing shortly. The best place to go for the accessibility help right now-- and we'll link to it in brand-- is web.wsu.edu.

So if you go-- let's look that up-- don't laugh at how slow I type. Take it easy. So here in the left-hand navigation, the fourth thing down is web accessibility. And then there's accessibility guides. And hopefully you've also spent a little bit of time here. There's a lot of really good information that will be helpful.

With color and contrast we've got some good examples right here. And then images, which we'll talk about in a minute, there's a lot of good information. So for now this would be the place to go, but we will address this on the brand site.

AUDIENCE: So if the spine is being updated, does it make sense for people to go in and try and make updates to the current spine they have right now, or should they wait until the update?

ALLEN JOHNS: So chances are that if you've made modifications to the default themes, go ahead and address the default themes that you've made. If it's an issue with the spine navigation, those changes are coming.

AUDIENCE: OK, great.

ALLEN JOHNS: Now there were some spine options that had all sorts of accessibility issues, which we've discontinued. They're not available anymore. But people that have used them on their sites may still have them. If your site's one of those, we would strongly encourage you to update that with the options that are currently available.

So the really dark ones, like research has, really light ones like

STEPHEN LOCKER: Insider.

ALLEN JOHNS: Yeah, like the WSU Insider. Those, the navigation is accessible, and then there's updates being made to those. So if you're using any of the gray ones, please consider moving over to one of the other ones. What's that?

JEREMY FELT: I can bring it up.

ALLEN JOHNS: Yeah.

JEREMY FELT: Yeah. We'll do the deprecated one. There's lightest, which is not accessible and we're not going to fix, lightly, which is not accessible and we're not going to fix, lighter, not accessible, not going to fix. Light-- they couldn't come up with enough words for light-- which is actually really bad. I think if any of these, if you recognize it as the color that your site has right now, then either look at changing it or come talk to us and we can figure out how to get that going.

Gray, darkest, I think, is technically accessible but looks--

ALLEN JOHNS: Crimson's an issue on it.

JEREMY FELT: Crimson. This is where the highlighted text is white but the non-highlighted is this light gray, and that can be a little off. We're officially calling that, I think, done for now.

So ideally you're looking at dark, darker, or white as your options. If you go to [web.wsu.edu](http://web.wsu.edu) right now, there's a link to these test files where you can kind of go through and take a look at it.

ALLEN JOHNS: OK. So I'm taking the blame for all of these, OK? So it's OK if you look at it and go, dumb Allen. That's all right. So research. Does anybody think what the issue is here? Who wants to point out the issue?

STEPHEN LOCKER: Call them out.

AUDIENCE: Is it the white text on yellow?

ALLEN JOHNS: Yep. Which white text?

AUDIENCE: Well, the header's probably fine, but the smaller the smaller text in the primary image.

ALLEN JOHNS: Yeah, this isn't working, right? I'm fairly certain we might be OK with the big stuff. I think here it works. That's one where you could go, OK, we're maybe pushing it. So the white on the blue and the yellow being the light version of Open Sans maybe not the best choice if we're trying to be as accessible as possible. Will meet the guidelines on that one, but maybe not the best design decision. But we're OK up there.

If we go down into the site, we're working OK. These are working. We maybe don't have enough contrast on our inactive tabs, so that's something we need to look at. If we go into a story, the size of our headers is large text. We'll want to double check that it actually has the 3.0. And then there's the decision of, OK, we've met the minimum, but is that still the right decision?

So Insider, this is an example of a site where we've worked in the very darks and the very lights. So we're meeting the accessibility standards without issues on Insider. So that's an example of where we've made changes to be accessible. And-- does anybody have another site they want to get group feedback on? No? OK. I don't blame you.

AUDIENCE: Yeah, we do.

ALLEN JOHNS: You do? Which one?

AUDIENCE: Commencement. [? It's commencement.wsu.edu ?]

ALLEN JOHNS: Spell that right? So are we OK? You didn't design this one. So it's OK to open it up, right? All right. What's the issues? Anyone? Anyone? So the spine issues, right? Again, issues that we delivered that we're addressing.

The gray's just not got enough. Up here is white on crimson, and that has enough. That meets accessibility requirements with contrast, but not over here.

AUDIENCE: The Fall checklist. Spring checklist. I'm curious if there were links, but I can't really tell if they are or not, so I don't really know if that contrast-- sorry, forgot about the microphone. Looking at the bottom of that paragraph where it has the links of fall checklist or spring checklist, it's hard to tell it from here if it's a link or not.

ALLEN JOHNS: You know what? That's a mess. I'm going to let Jeremy deal with in just a second. So-- yeah, I'm going to let Jeremy deal with that one. So I'm not going to close this tab in case we need to bring it back up. Do we see anything else? Yeah. Feeds have all kinds of accessibility issues that we'll not address today. But just be aware. I'm pretty sure we have related content on web.wsu. Maybe not. OK, we'll just say feeds have issues.

STEPHEN LOCKER: Just be very conscious of when you're using a third party feed, whether it's Twitter or Facebook embeds, YouTube embeds, all those things, they bring their own accessibility issues with them. So just something to be mindful of. It's something we'll cover in one of the future month's workshops. But just be conscious of that.

ALLEN JOHNS: I think another area where we might be having some issues-- again, this is a color that we let loose-- is these are showing up a little bit darker than they are on the screen. And so the gray in some of these headers is questionable. We'd want to double check it and make sure. It might be working.

AUDIENCE: What if you choose a header and it only gives you that color? Can you change the color on it?

ALLEN JOHNS: Yeah. With CSS overrides and stuff. So you'd have to get into the code. So a lot of communication people, I wouldn't blame you if you didn't want to get into the code. So you should have somebody in your office, or talk to us.

Open labs. We'll plug open labs. So every Friday there's an ITB 2025. What time do we start? 9:30. 9:30 we're there. And so come, and there's a bunch of us there that are there to help. So if you don't have the ability in your office to make some of these changes, then you come on over to to open labs. Yeah.

AUDIENCE: If you have text on a gradient background, does this contrast ratio apply to every part of that gradient?

ALLEN JOHNS: Yep. So even though this blue is a little bit denser or darker color than this yellow or green, we have the same issues here as we have over here. And if this was black and faded over, which I'd question your decision to do that. But if you did, if you went from black to really light color, just because this much met and this much didn't, we don't meet that requirement.

Let's see. Let's go-- yeah.

AUDIENCE: So I'm not just saying it's because it's our website, but I think the research website actually looks pretty nice, while these other ones-- do you feel like we're turning into a land of boring, plain websites?

ALLEN JOHNS: There is that danger. And--

AUDIENCE: [INAUDIBLE]

ALLEN JOHNS: Yeah. And we pointed out the research not to say you guys are doing everything wrong, because really, there's a couple of places on the research site that have the issue, which is that paragraph text in the white. That's the main accessibility issue with color contrast on there.

AUDIENCE: I just feel bad [INAUDIBLE]

ALLEN JOHNS: Yeah, we're looking at ways to keep it. I want to keep it. I'm kind of proud of the way research turned out. I like telling people I did that one.

So there is the danger that everything becomes white and really dark gray. But like we saw looking at the color palette, not everything in the color palette isn't accessible. We just need to use it the right way. I don't know how to get this to take up the screen like it did before. Anybody want to help me out?

STEPHEN LOCKER: This is not an area of my strength, but we did it once.

ALLEN JOHNS: Full screen Mode. There we go. Thanks. So here's another thing to look at is text over images, or graphics on our site. So this is something that we're going to be excited to share with everybody here in the next few weeks is the new events calendar site. So hopefully we'll plug it here. Start putting your events on the event calendar because we're working out how to make it look awesome.

STEPHEN LOCKER: Please do.

ALLEN JOHNS: Yeah, please do. So looking at this, this is accessible. We're on black down here, and our red color right there meets the necessary contrast requirements. Every light spot on this image has been tested against white, and we have sufficient contrast.

But this is accessible because of the way we handled the text on the image. If this was a graphic, if this was a JPEG and this text was part of the image, it was pixels, this would not meet the accessibility requirements regardless of the contrast that it might have. Does anybody know why that wouldn't meet accessibility requirements? Yeah.

AUDIENCE: Because it will register as a JPEG file, and so when a screen reader goes over it, it won't actually pick up that there is text there.

ALLEN JOHNS: Yeah. It's all hidden text, right? So Stephen, you want to tell us how we can make an image like that accessible? Is it possible?

STEPHEN LOCKER: Yes.

ALLEN JOHNS: How?

STEPHEN LOCKER: You can put everything that's happening into the alt of the image is one approach. There's also the ability to do it in a title. The interesting issue you have here, though, is it's probably going to want to be a background image because of how you want it to cover and load for your design and flexible design of this. So you don't have a lot of great options. Your best option is doing the approach you did do here, which is actually having HTML text over top of the image.

I would argue to just about anybody here, if there's an absolute need to put text as a graphic-- let me back up. It's hard for me to imagine a need where you have to put text as a graphic. I mean, for a long time in the web did it because they didn't have a font they wanted that rendered. So they wanted to put that font on there. They want to control.

But concerning the web is on all sizes now, whether it's on a desktop, tablet, mobile, that stuff doesn't scale very well. And so it is-- in my opinion, putting text as a graphic, I would say don't do it. Like I said, I can't think of a situation-- just work on that. HTML over a graphic, not a don't do it. We're showing how you can do it. But also not always-- it can be complicated. You really have to pay attention, again, at all the different sizes.

So when Allen was showing you the research site with that gradient there, so maybe it's fine at desktop, but soon as that gradient changes when it becomes a tablet or even a phone, there's a chance that those background and foreground ratios change. So you just got to be very conscious through all the different sizes there when you have backgrounds.

ALLEN JOHNS: Yeah. And even if you put the text in the alt, in the alt text of the image, if that text-- like Stephen was saying, if it looks fine here, as soon as you go to mobile and it shrinks down, then it's become inaccessible for everybody that's not using a screen reader. So you can swing it both ways if you do it wrong. So this one's working because it's a background image with text that's been considered at all of the different sizes so that it renders and gives you what we need.

Before we leave color contrast and images, does anybody have any other questions?

AUDIENCE: I just have a question. When you're choosing an image and then you have text over the image, I think you really have to be considerate of what that image is and when it shrinks down, because depending on how it shrinks, you may have had it meet the minimal compliance. But as it shrinks, it might go over to a white area, and then now it doesn't meet. So that's just something to consider when you're choosing a background.

ALLEN JOHNS: So I would love to tell you that this is really easy, and just spend a little time and you'll have it licked. That's not an honest thing to say. It is going to take some work. It's not totally insurmountable, though. The more you spend even considering it, the easier the solutions will be. You just have to consider it beyond just the proper contrast, or we've got enough contrast between the text. There's a lot of images, so please consider all the way through. Just be a little bit more thorough. And do check out the resources on web.wsu.

AUDIENCE: Could you make the WSU color palette an interactive tool where you select a font size, click on a color, and then it shows you which ones of those meet the contrast ratio? No?

STEPHEN LOCKER: Yes. We could technically do that, but we do have a git hub repo at Washington State University. If you would like to contribute to that project, that would be outstanding. I do believe somebody else has already put a project together where they have a spreadsheet showing all the different colors against each other and if they pass or fail based on that with Lesa. Could you share that?

So Lesa has done that work over in CAHNRS, and it sounds like she'd be willing to share that. Maybe we can get her to post it on WSU Slack channel. It's not complete, but again, maybe it's another project. If somebody wants to help complete that out, that'd be great as well.

ALLEN JOHNS: So until that is available, there is a link to this tool up there. And it's free to download and really handy and helpful. So there are other ones out there. This is the one I use. I'll pitch it a little bit. You can click here and it'll expand out, and you can adjust the RGB sliders that let you explore a little bit of what's available. So until we have all of those tools provided by our web community here at WSU, there's a lot we can do for ourselves.

STEPHEN LOCKER: Next up we have Jeremy Felt. He's going to talk about links. And he's done some fun deep diving into this area. He's our lead developer here at Washington State University.

JEREMY FELT: It's not that fun. I just want to try something here. Oh no, it didn't work. Two hands does it? How do you get it to move? No. All right. I just wanted to see if it would work.

All right. Back to it. So we're still going to talk about contrast a little bit. As with many things on the web, it all just used to work and be completely accessible. And then we thought that we can do better and make it look good and kind of ruined it.

So if you took a website and looked at it in Google Chrome and probably several other browsers, these are the way that anchors are styled in paragraph text. I think the color is 000FF, which is just a solid blue, and there's an underline.

So for what, 30 some years now we've been using the web and our brains kind of say, if I see a underlined text that's blue, it's a link. So when we do stuff on the web and write paragraph text

and then design sites, I think it's probably a good idea to stick as close to that as possible, understanding that people see underlines and kind of see links.

The farther we move away from that, the more trouble you can get in. So the WCAG 2.0 double A standards say that you don't have to have underlines as long as the contrast ratio between that link text is 3 to 1 with the other text. So like Allen was talking about, both of them have to be 4.5 to 1 to the background, but then 3 to 1 to each other so that as you're reading through the text, you can kind of differentiate without these additional cues what the difference is.

The only catch is in a case like this, on hover, you would then need to add something like an underline or make the text bold or make it larger or something to indicate that it's a link, which may or may not be helpful for average users trying to read through that and see it.

Something that I kind of learned through this process that I still don't entirely understand about color is that that lightness and darkness contrast is separate, in a way, from hue. Am I getting that right? So something can be a different color, but then say you're color blind, it would look something more like this. So technically, this meets WCAG 2.0 double A standards. That linked text has a 3 to 1 contrast ratio with the black text that's right next to it.

And this is what it might look like if you were fully colorblind and you were reading that previous paragraph, which we think has enough of a difference there. And so if you stare at this long enough, you can probably figure it out. And I already showed you a couple examples that had the links there, which helped. But kind of like our current spine, which you brought up, it can be a little hard to figure that out. And the red that we're using, the crimson, I guess, that we're using-- go back to that.

STEPHEN LOCKER: So I'd like to make a quick comment just about usability there. And maybe Jeremy's going to talk about that. And sorry to steal anything. But that bad example passed. So just because something passes accessibility checker doesn't mean it's a good decision.

JEREMY FELT: Yeah. And that's-- I think the key here is this is really where accessibility and usability come together because there's the legal requirements for accessibility, but then accessibility guidelines are very good for usability as well. So the more we exceed those, the better we do as a whole.

So this is one of the changes that's coming in the default template, I guess two weeks from now, provided by the spine, is by default in the past we had this kind of grayish text and this crimson. I haven't actually checked to see if that's a 3 to 1 contrast ratio. But I almost doubt that it is. But in the new version that's going to come out soon, we darkened the body text and then we add underlines there. So it's immediately obvious that there's some difference there. More than likely users are going to see that and realize that there is an action to be taken. Let's go back to this.

So yeah, that's a bad example. It passes WCAG 2.0 double A for some reason. And in fact, there's some discussion going on within the WCAG working group that in the 2.1 or maybe later standards, this will be changed because it's kind of like a loophole. You could look at this and say, well, we're compliant, everything's fine. They may bring it back so that you have to have some kind of visual indicator, like an underline or, like on WSU Insider, for our headline links we use a little link icon that just gives the user some additional verification that it's an action. And yeah, that's what's going to be like in WSU spine 2.0.

So our standard brand.wsu. crimson with an underline. And one of the other things to note is that accessibility wise, there's no need, if you have an underline, to have any kind of hover effect when you put your mouse over it. That's, I think, something I gather that we've just done as a design feature just to have a nice UI experience when you're doing it. But no additional visual indicator's needed if you have that underline.

And then same for headers. Once you leave this context of the paragraph text, the rules change quite a bit. So we use an underline here because it's still something that users recognize, but you don't absolutely need it because in things like navigation links, which I'll show you, and headers, users have come to expect that this should be clickable, or in context it seems like it would be clickable.

Still a good idea to indicate things like using an underline or using a link icon to let them know. But not completely necessary. Better example here. Similar navigation. WCAG has specifically said in navigation elements it's not necessary to have the same underlines because users know that in these tabbed interactions and in these navigation interactions, it's to be expected that they act like a menu or something.

And here's the additional visual indicator. So even though this technically doesn't need any kind of underlines because it's kind of a navigation, or like a filter so you could go view additional things, it's nice to let people know if you aren't going to have an obvious underline.

What else do I got? That's all I got for link text. Any questions on that?

STEPHEN LOCKER: Links are one of the biggest error areas we have at the university. We talked a little bit last month about making sure you have context with your links. And we'll probably have a workshop in the future that talks about links again and how to use them, how to have descriptive text and all that. But that's going to be a constant talk for us because whether it's the contrast issues that we put out there in the spine or other people have done themselves with a difference of color contrast and no underlines, or in the Click Heres-- which we have a ton of Click Heres across the university. If you guys remember last month, Click Here is not good.

AUDIENCE: If underlines are used for links, should they be utilized as a style indicator to emphasize text if it's not a link?

JEREMY FELT: No. Well, I think they can be. That's fine. Technically, accessibility-wise, you can use underlines on your text. But it's confusing from a usability standpoint because the user expects that underlined text is a link. So if you underlined text, very confusing. Confusing to me, at least.

STEPHEN LOCKER: And I'd say there's a design aspect there, too, if you're having a need to emphasize and underline in the body text that will inherit the color of the text itself, or maybe the link will inherit a different color, and so there could be some graphical difference between the two. But yeah, if they look the same, you have a usability issue.

All right. Any other thoughts, questions, comments? Yeah.

AUDIENCE: Just something with Student Affairs, something that we've been trying to take a good close look at, is link effects. So where it bolds it highlights when you hover over it. And we're actually trying to move more away from that because, specifically for our mobile users, hover effects don't do a darn thing. And our sites are getting upwards now of 40% mobile users. And so we're not spending time wasting coding that in and just going to underline. So that's something we're doing.

JEREMY FELT: Yeah. And that's a great point, especially usability wise because while technically, something without an underline might be good for accessibility, as a mobile user there is no hover state, no way to show any kind of additional things. So sure.

ALLEN JOHNS: It was brought up, are we going to end up with black and white sites? It doesn't hurt your mobile users if your desktop users have that little bit of extra. So we can make everything black and white and really simple. Or we can add a little bit of extra stuff other places to give a little bit of interest, as Steven uses the term, a little bit of candy on our sites.

We just don't want to do that at the expense of our users. But mobile users aren't going to think your site's lame because they don't get a hover effect. They'll know. But if you can add that and give a little bit of extra fun, if you want to call it that, on your desktop site, as a designer I'd encourage you to do that.

JEREMY FELT: And that's something we've been playing with quite a bit, trying to find that right underline effect. I think we're coming closer, I think, right? On Insider we have the black, darker text with the crimson underline. And then when you hover the text goes to a different crimson.

STEPHEN LOCKER: Any other questions? So I just wanted to say one thing, and this is something that we're working through ourselves. I just read-- I apologize, I don't remember where I saw this. But too often right now, web accessibility is a part of our process, is one of our steps of building a website. And what we really need to start doing is internalizing this, and it is how we build websites. So accessibility starts from the beginning. You're looking at the colors. You're not building the design and then going through and doing an accessibility check.

You're actually choosing colors that work, you're choosing images that work, you're thinking about the structure of your site, the content, all that from the beginning. So that way you're not-- there's a lot to learn here. There's a lot of things that we've done for a long time that have not helped a lot of people get web content. And so we've got to learn some new things and how we've made that difficult.

Once we get over that hump and think about how we're doing this in a day to day process in everything that we build, this gets easier. Now we go down different rabbit holes, like man, how can we do this better? But it's the same discussions we had before we were even thinking about it. We were like, how can we make this better? These are the same things we've always done.

So having that just be a part of the beginning of the process and not some sort of oh, dang, I got to check now for accessibility. Don't have that be a check off point somewhere in this checklist of things of building a website. That should be a part of quality assurance, absolutely, in any part of before you launch a site. But it needs to be a part of when you start the site.

And so I think that's just something that we all are working on internalizing ourselves. It takes a little bit of time because there's still a lot of stuff to learn. But I think as we continue to work together to learn this stuff, it becomes, hopefully, second nature. 2.1 will be released. WCAG 2.1 will released. We'll have to adjust some of our thinking based on that.

But we all work on the web because the web changes every day. It keeps our lives interesting. It's a fun place to be. And it's a place where everybody in the world gets a chance to see what you do. This is a neat thing. So just a little thing to keep in mind. Anything else?

Well, thank you very much for coming. Also folks online, thank you for joining us as well. And then I do not know what next month's workshop is. We have a few in the tank. But we will get that information out here in a couple of weeks. And we'll keep doing it.

And also, if anybody has a suggestion of a workshop, please-- and I know we use the word workshop really loosely here. These are more or less presentations with a couple of questions. But we do want to make sure that we kind of do that interactivity, or make sure that we're providing something that's helpful for everybody here, even if it's just general awareness.

So if you have any topics, please throw those out. We have a contact form on our website as well. We do know that links will be something we talk more about in the future. We'll get talking about text again and content architecture more in the future. And we'll just start hitting on all those things as we continue to go.

But anything, please let us know. And thanks for coming out.

Oh, one last thing. Yes, thank you. If you want to go, you can go. But every Friday we've been doing this. And I say this-- we have not missed one of these, except for on holidays, for-- I think

we're almost four years, probably getting close to four years of open labs every Friday 9:30 to 11:30 in IT Building Room 2025.

Just come out. Sometimes it can be a little bit Word Pressy, but talk about anything. We're going to be there to talk about any issues, topics you have about the web. It's there. It's a good time to just chat about whatever is going on. So please join us.

And we go to lunch after that. So if anybody wants to join us for a beer or drink down at Zoe's after this every Friday, please do. That's always a lot of fun.

Oh, and I have-- thank you. This is why-- we also are on Slack, so the web community on Slack. I think we're pushing almost 200 WSUers now on this channel, and so this is outstanding. What's great about this is you get to interact with everybody else in here, answer everybody else's questions. We'll try to answer questions in there that are posted as we can as well.

But it's just a nice community-building thing. It's a nice thing letting us all know that we're all in this thing together, we're all working on the web here together, and a place to communicate. We're really [? not that ?] good at email. We're pretty good at Slack comparatively. So-- direct quote. Have a good night.