<meta name="viewport" content="width=device-width; initial-scale=1.0; "\>Event ID:
1758167
Event Started: 6/15/2011 6:00:00 PM

-----

Please stand by for realtime captions. good afternoon, everyone. Will be beginning the webinar shortly. If you need technical assistance, call us at 202208 202-208-0668, or you can also reach us on 202208 202-208-6076, or via e-mail at webmanageruniversity@gsa.gov. Thanks. >> Hello, and welcome to the Web Manager University class with No FAIL , I'm Rachel, and I would does we are thrilled to have Angela here with us today. Angela is a senior accessibility specialist, and she is our 508 guru for how to.gov and USA.gov. She has worked in the field of exams -- accessibility for over 13 years creating select solutions for social media applications, software, videos, blogs, and more. She's an advocate of web standards, and she contributes a lot of content to how to.gov, on accessibility issues. She also is a frequent speaker about web design standards, and her current mission is to teach the importance of accessibility for all users to encourage clear, effective medication and train developers to build websites and software for the pimples of inclusive design. I just want to mention that this is sort of a continuation of Angela's presentation at a conference last March. Angela had a breakout session where she started to give similar presentations, and there was such a great discussion and dialogue about purpose but in the room that she didn't have time to go all through your slides at that session, so we are thrilled now to have enough time for Angela to go through her whole entire slide act and give us some great information about accessibility and how we can all do a better job of Mick ensure our web products are accessible to all. That you, Angela. >> All right, thanks so much, Richard. Thank -- thanks for coming out. I'm really excited to be doing this webinar, and I know that we have sometimes slated at the end for questions, but what I'll do is break every now and then and ask if you all have any questions, please submit them, because if you don't, I'm going to start singing and your ears will burn. So let's get started. I think accessibility is a really important issue, obviously. But I find that it is also very political. And I think it is time that we stop putting so much politics into it, and think about the needs of our users. That is basically what you are doing when you are testing things needs of our users. That is basically what you are doing when you are testing things for the users. And making sure that they are accessible to them. So sometimes if we can break away from our companies or agencies, guidelines as far as using a particular technology that may not be accessible, sometimes, if you can work with your developers from the beginning, that would be great. So let's get into it. Let's talk about why so many accessibility plans fail. >> Angela, could and truck you for a moment? Are we supposed to be seeing your slides are now? >> Yes to >> We actually don't see your slides. We see the BBC news home. >> That's interesting. Let me try something. How about now? >> Yes, perfect. >> Okay, great. Thanks. I think one of the top reasons that accessibility plans and testing fail is that people think that if you test 21 tool, in particular, and you just run that tool and you do nothing else, well, then it is accessible, because it didn't find anything or it looks fine to me, but that is the biggest set up for failure, because there is not one thing that is going to get you to and accessible products. There is no one and on check. So I also like this quote by Jim Thatcher. He says that no tool exists that you can run against your website to assert that it is accessible or it complies with section 508 standards or the web content accessibility guidelines, no matter what. So when a site says that it is conforming with section 508 or WCAG, it just means it's past the tools test. So you don't want to rely on that. You want to test it thoroughly for yourself to know that it is truly accessible. I think another reason why testing plans fail is that people will run it through JAWS, and say, well, I tested it in JAWS. It's okay. We didn't see any problems. It's accessible, right? Well, what a screen the user may need for accessibility is often different from what perhaps a user who is deaf will need. There's a lot of different needs there among disability types and audience groups. So here are some resources here about testing with screen readers and perhaps why

you may want to reconsider testing with a screen reader or testing only with a screen reader. And we'll talk a little bit more about that later on. Another thing I've seen happen is that people will focus on one section of section 508, and they will think that, well, I checked it against 1194.22, which is the basic for Internet and intranet information and applications. And they figure that if I've met those standards or I've checked those standards, that it is successful. That is not necessarily true, because you may have a multimedia project, and you'll have to check it against 1194.24, which is video and multimedia. So we tend to get tunnel vision when it comes to be standards. And we don't always figure out what we need to look at the big picture. So that's another reason for failure. One more issue is that we'll often sort -- source a product out of house, and we will put a product to a vendor, and they will take it and run with it and develop it, but it may be that in the statement of work, we didn't put in their that the agency is actually the people who need to check and see if it meets the guidelines. We'll rely on the vendor to do the testing. Well, you can't always do that, because they may not have the same understanding of the standards that you do. So it's really important to put it into your statement of work that it's the agency was going to determine if the product or software as a service is truly accessible and if it needs to be section 508 standards or WCAG standards that you want, and there is nothing wrong with 508 standards or WCAG standards that you want, and there is nothing wrong with taking control of your project and saying, this is what I require. And I think agencies especially need to feel empowered to do that. It is okay. You are doing the right thing if you put that into the statement of work. And another thing is that we'll rely on the vendors' voluntary product accessibility template, which is VPAT, and if that says it's accessible, it must be. But often again, the vendors do not understand the standards as well as you will, so you have to do due diligence and test for yourself. All right. Now, when it comes to setting up your plan, there are a few things that you want to consider People always say, well, Angela, is this 508 a few things that you want to consider. People always say, well, Angela, is this 508 compliance? Well, that's kind of a hard question to answer sometimes, because what someone else it may deem compliant may be different from what I think. So it's a Someone erse it may deem compirant may be different from what I think. So it is a little bit subjective, I think. So if you determine if your product can be used, can it be used by a person who is aging? Can be used by a person who needs to navigate by keyboard or with a had warned -- head wand or with a screen reader? Does it work with those tools? That is for you to test. Now, I know a lot of people in the accessibility community say, well, don't worry about a checklist. I have to say that I tend to agree with that, because a checklist doesn't mean that it's accessible. However, use that checklist to give you the steps to check. I mean, because you can forget something very easily. If you are going against -- going with something that's giving you some steps, you'll have structure to your testing, and that's fine. But also don't assume that that checklist is going to ensure accessibility. It's up to you to test. >> Now, before you get started, you'll also want to understand what you're users need, and I forget mentioned that earlier, that what a person who is blind, what they need may be different from what a person who is hard of hearing or someone who has cognitive impairment. So you get to understand what these different audio -audience groups needs and need for each disability types. I think that's going to help you plan and say, okay, well, yes, I need to check this with my keyboard. Yes, I need to make sure that what I turn off my images that the information is still there. If I'm not looking at things with color that this is still readable. So it is things like that. Once you get a good feel for what your audience needs, then you can't really formulate a good testing plan that is going to cover all of those needs, and there is some resources down there. ECD links, and be sure to take a look at those. -- You see the links. Now, one of the things that gets to me -- I'm not saying this about my current work situation, but even some of my freelance clients and prior work experiences -- they say, well, Angela, can you test this and get back and prior work experiences -- they say, well, Angela, can you test this and get back to me in about a half hour and make sure that it is accessible? Are you kidding me? Is this a joke? Am I on candid camera? No. You can't test something and just say bam, it's accessible. You can't wait until the last minute at the end of your project and test it, because you're going to be screaming, and everybody in the world is going to hear that screen. Because I no. I've made that screen before. --scream. If you can, it's really helpful to test the project incrementally. Now, I know some of us don't have that luxury. I'm not judging you. Don't worry. This is a safe place. I'm not going to judge you at all. I understand that maybe you are not safe place. I'm not going to judge you at all. I understand that maybe you are not given that opportunity. It may end up on your desk, like I said, 15 minutes before

it is about to launch. Well, see if you can avoid that in the future. Talk to your developers, talk to the project managers. Make sure that they know that you want to be included in testing along the way. If you can work with them to set up the requirements of a project so it's not falling on you at the end. And it's so much easier to build things accessibly, rather than to retrofit them. So if you can keep that in mind, that will be helpful. Okay. >> Now, your mission, should you choose to accept. Be thorough. Don't worry about it. Be overly cautious. Test it. Be valid. Do it all. Do all that you can, all that you have time for, all that you have resources for. Be ruthless, because, listen, if you have time for, all that you have resources for. Be ruthless, because, listen, if something is inaccessible and you've tested it, it's going to come back and haunt you, because you are going to be the person that they come to and say, well, Angela, I thought you tested this. I thought you said that it was accessible. I thought you said it was okay. Document your testing. We'll talk about that later on too. But I think you really have to protect yourself and make sure that you are doing all you can, that you are not going to bring anything on your agencies had or your companies had -- company's head or on your own head. And remember it is all about your users needs. Some -- so many companies will try to push their visits practices on their users, but that doesn't always work. How many people are you doing an injustice to by disclosing them from getting the information that your agency or that -- or that your company puts out? When it comes down to a government agency, well, we are your company puts out? When it comes down to a government agency, well, we are helping our taxpayers. We are helping our citizens, and they have the right to this information that we are publishing. How many people are going to come out and say, no, you can't have this information? Think about it in those terms. All right. >> Now, the next thing is a hit controversial. Okay. And I'm going to speak carefully, but I think you'll understand what I'm saying. You have to understand that the web is so different from when the dinosaurs roamed the earth and I was out there with my club like Fred\_Flintstone and Wilma Flintstone, and I was looking at things and we were using tables for layouts, and we were using animated ships, because that was so cool. The web is so different now. There is so much richness of content. There are so many things that we can do quickly and easily, and so many ways to share information. But the standards are still, you know, they are a bit outdated. And there's no finger-pointing or laying blame here. It's just the fact that it takes time to revise the standards. Sole you'll have to decide what standards you're going to check against, because section 508 is being refreshed, and it's going to refreshed with WCAG 2.0. Am I going to check only against 508 standards? Or am I going to go ahead and check against WCAG 2.0 right now because I can ship save my agency money by applying those standards to my project? So think about that, because you will have to retrofit your project down the road when section 508 is refreshed. Is it cheaper to do that now, or is it okay to wait until later? No judgment again. This is a safe place. >> All right. So you made WCAG, if you try to go with WCAG 2.0. You are allowed to set those standards. And the more you work with your management and your developers and the designers, the more you can ensure -- and just think about your users to gain. All right. We are going to see some testing in action here. And this is what we want to get to at the conference. So those of you all who endured the introduction here, thank you for sticking with me, and those who just saw it for the first time, all right. Let's get started. Now, I just want to say this. There's no judgment here. I'm not trying to disrespect anyone. This is for education, okay? This is just so you can see the common pitfalls that many sites fall into, and we're not pointing any fingers. We're just showing how you can test these things. And even perhaps I can fix these things this is Eric Hamilton so let's take a look at a website. Now, again, when dinosaurs were roaming the earth -- I used to go to web monkey and learn really neat things. I think if your site is giving instruction to developers and designers, it is really important to follow web standards and to stay developers and designers, it is rearry important to forlow web standards and to stay current with the times and use what is accessible, even on your site, because you don't know who your audience is, you don't know who's using what. Let's take a look at how web monkey fares. So we want to test this code, and one of the things that we can use is the Web developers toolbar. You'll see I have a few toolbars appear at the top. I'm going to go to tools here, and I'm going to validate my code, because when I do that it's going to tell me how much, I'm going to find a whole lot of errors -- because the depending on the types of errors that I find, it's just going to cause me too many problems. So the Web developers toolbar is one of those free to cause me too many problems. So the Web developers toolbar is one of those free resources. You may not have admin rights, so we'll talk about that too. I'm looking

at the code here, and I'm seeing a lot of things. Wow, I really don't like this now, and I'm seeing things. I'm seeing multiple IDs and things like that. >> You can also validate your SCC in the same section, the tools section, and like you said, that's just so you can get a feel for what the project looks like at the beginning. Now, understand that when something validates, that doesn't mean that is accessible. That's not what I'm implying here at all. I just mean that it's going to be difficult to work with that code, and make sure that it doesn't interfere with some of the technologies, because some of them like to choke on the code, so you must be careful with that. Okay. So you all are going to hate me now, because I'm must be careful with that. Okay. So you all are going to hate me now, because I'm going to tell you to review the code. Who wants to read the code? Nobody. But please do it. Please take a look at it. If you don't, if you're not familiar with HTML or HTML 5 or whatever your developers may be using, for your web projects, go ahead and learn it in your nonexistent spare time. I have some resources down here at the bottom where you can go and learn more. But please, please, please, sometimes that's the only way you're going to find an error. So I'm actually going to use the Web developer toolbar again, and I'm going to view the source of my document. And read it, because I need a little I do reading, and maybe I'm a little tired, so it may be a good idea to look at code so that I might fall cyclically. Here we go. -- quickly. We are just scrolling through here. There are just so many things that you can find We are just scrolling through here. There are just so many things that you can find that may not be conducive to accessibility. So it is a good idea to go ahead and look their. I'm trying to find something in particular that I saw earlier, so bear with me for a second. Well, I can't find it now. Of course, that happens when you are in the webinar, but when you look at the code, you'll find things perhaps that will make your project inaccessible. It could be something in the forms or the images or something like that. All right. Now, there are many automated tools out there, and this will help you actually doing the code -- during the cold review stage because they can find things quickly when you are scrolling through the col stage, because they can find things quickly. When you are scrolling through the cold like I was, that you may not see right away. So I encourage you to go ahead and do some automated testing, and let's look at a few things. I'm going to open up this again. I am going to run the wave toolbar on it. And let's see what comes up here. Oh, my. Look at that. All of these icons are representing errors, the icons. They remind me of diving flags. So if you think of diving flags, then you will find -- it is helpful to disable these styles so that I can see the errors even better. So this error is telling you that this image is a link, and it is missing the tax. That is going to be a problem, because users won't know what the link goes to, because there's nothing there in the alt text to direct them. Those of the types of things there's nothing there in the alt text to direct them. Those of the types of things that you will find. On the web monkey site. There's a lot of their. Let's see if there's something us to show you all. -- there. More images. All right. Well, it looks like -- a half. -- aha. It looks like there is a problem with the forms down here. And it is just the combo box, the drop-down box. They don't have a label, a text label associated with it, so that's one thing that you'll find with the wave toolbar that's really helpful. One of the many errors I should say, that you'll find. Not a whole lot on this page, aside from the images and the forms, it looks like. It looks like the headings are out of order. I think our users will pretty much know what digg and stumble upon and Facebook -- so this is why it's important for you to review things manually or not. I'm going to reset my page here All for you to review things manually or not. I'm going to reset my page here. All right. I also would like to show you DQ's Fire Eyes. And I know those of you who were on the accessibility conference call, we just had a demo by Karl Rove -- Grove on Fire Eyes. And we were not able to see it during the demo, but I wanted to show you all here some things you can look at. So if you have Fire Eyes running in your Fire Bug interface here, -- okay, yes, I know. I have trouble with my registration for some reason, so that's why it is giving me that error. I just asked it to analyze that page and show me what is going on. And it found 191 issues. Wow. So I'm going to open up the tab that deals specifically with web monkey, because it obviously found some problems with the Twitter buttons. So I can scroll through and find the errors this way. So it meant does mention some things with empty link tags, and again, the label is emissions -- missing on the drop-down boxes. There's lots of issues that it has found here, and that's good. That's going to help you get to it quickly. Those of the types of things you can find in their. -- there. And there's one other tool, and I know that some people in the accessibility community feel strongly about it, one way or the other, but let's look at it. And that is the IC tab functional accessibility value or. You can run a report -- let me close that window -- boobs -- oops. I think my screen disappeared from you all.

>> We see it now, Angela, thanks. >> All right. Thank you. Now I can run the IC2 report using the toolbars here, or I can go to the site, and it looks like running this tool is what is causing my screen sharing to pause. I will bring it back up when the tools is done running, if you'll bear with me. And it's taking a long time. Okay. So maybe I don't want to run this tool right now. It looks like it looks like I may even be locked out, which is what I was fearing. Okay. All right. So I'm locked up. Just bear with me for a second. >> Angela, if you just close the browser, that might help.
>> Yeah. I can't even do that right now. >> Looks like you might be able to now. >> No. Clicking on the -- okay. Here we go. Okay. It really doesn't like that, so I'm not going to use that. Is just conflicting with the webinar software. So that will be something that you can look at on your own, then. Now let's go back -- okay. Now, I'm not going to run through every test, because we'd be sitting here all day with me showing you and explaining each one to you, but I will show you a few -let's look at -->> Angela,? >> Yes? >> We have several questions or take questions a little while? >> Sure. Let's take some questions now. So you all don't have to hear me read. >> Could you just -- could you just clarify what VPAT is?
>> Yes. It's the voluntary product accessibility template, and it is a document that
people can fill out about their product, and they'll check off and explain whether
the Robert meet section 508 standards. I know lots of government agencies refer to that. Some require that, when they are asking for -- a big project. That's a time when a vendor can explain the accessibility work that they've done, and I think that's a good place to start to get information about the products. You can delve into it Ieper with the vendor. -- deeper >> Another question regarding accessibility of links. They have a CMS that can add the title of information for alt text, but -- it can be exactly what the user pointed to for instance, instead of a link named PDF, the link should be customer policy PDF ergo the question is should they also provide the alt text for the CMS? >> Are you saying this is a graphical link, or is it just a text link? >> I'll have them clarify the question. I move onto the next one and get clarification on that. >> This person has a question on how do they test a flash website with these tools? The FAIL, -- webmonkey, Fire Eyes? >>, A when you have a flash website, there's going to be a number of things you need to look at. If the website was done completely in flash, it will be completely different than if certain parts of it were done in flash. Sometimes people use flash to develop the navigation of the site, and there is so much information there to be covered with that. I can provide you with some guidelines, because there are things like keyboard navigation that you will want to check. There are things like focus that you'll want to make sure that a user has on-screen focus on any element that they are navigating to. So perhaps I can -- if you send your name and your e-mail, I can give you some guidelines as far as that. It and you -- if anybody else is interested, then I can even update the slides here, because I did not go into great detail about flash. And there is a lot of information on it, and I probably have some resources at the end. I can give you some more information. That would be helpful for testing. >> Thanks, Angela. As a writer to everyone, I will be sending out the slides as well as the links to different sites Angela mentioned. We do have a lot of questions, and so I know you're willing to provide your e-mail address if people have was is beyond today's webinar, right?
>> Sure. Actually, I have that in my slides. >> Perfect. Why don't we take a couple more questions, and then we'll move on. You can continue with your presentation. But to clarify, the first question that I asked Tom a the person is referring to text links. >> And the whole question was providing the name of the PDF and then PDF? Is that it? >> Yes. >> I think that is more helpful than just saying PDF, if that was the question, if I'm recalling correctly. Because that way, the user not only did knows the Page 5

destination, but they can also make a choice as to whether they want to download a PDF, because they may be on a device where they don't have a lot of space, or they don't have the time, because they may have a slow connection, so it's really helpful to provide that information right in the link. And I know there was something that was asked about about the CMS, and I cannot River, so forgive me. >> Thanks, Angela. This person knows -- noticed you are using Firefox for your browser. Are these tools available for IE? many agencies only have IE as the approved browser.

>> I understand that completely. There are some tools that I have put in the resources section of my slides that are specifically for IE. I have to be honest, I don't use IE for testing. I just find that for what I need, it is much easier with Firefox to have those tools available. And I know it is difficult for government employees to get admin rights or the ability to add that. If you can make a case to your supervisor that you're going to be saving your agency a lot of money -- you're by using these free tools and not buying a very expensive product, perhaps they'll be willing to let you get these tools. If you can ask them for them in one fell swoop, these are the items that I need. It may be easier for you to get approval, rather than to go back again and again and again to get permission for them. So perhaps that will help you make a good case for it, that you're going to be saving money and time. They may be willing to work with you, but I understand that problem, because I know a lot of agencies have those machines locked down, and there's nothing those people have been able to be able those people have been able to do about it for a long time.

>> Thanks, Angela. Why don't you go ahead and continue, and we'll still be taking questions to the webinar. As a reminder, you can type your questions in the chat box. If we don't get to everyone's questions, Angela will provide her contact information. Ahead, Angela.

>> Great. Thanks. i wanted to show you the color contrast testing options, and there's a lot of good ones out there. Let's go over to webing, they have a color contrast check or. Also -- webAIM -- some of these tools you can use to check your site. You can either input the code directly into the tools online, you can run webAIM tool online so you don't have to run -- download anything. This is another tool that you can use online. I think in my slides, I've tried to make a note of where the tools are available for download or if they are available online. So here is another wonderful tool. This will show you what the text that you are testing looks like. It will show you the contrast. It will show you the contrast ratio. And we just input the colors, and a lot of what I'm seeing is people will use a dark color on top of another dark color on the website. And it's unreadable. So those are the types of things you can test. And it is also helpful for me -- I use colorzilla to extract colors from a website sometimes. If I click on my colors, I drop it down here in the left-hand corner of my screen, it will show me what the color -- what the RGB value or the hex value of the color is vF1722, -- bf1722, and I can put that in up here and see that it is on a white background -- all right. So this has really -- it actually does have really good contrast ratio. It is failing WCAG AAA guidelines, but because this is large text right here, it is passing fully. So you have to take those things it into consideration. So it also gives an explanation for large text, what's required for large text, and normal sized text and what WCAG 2.0 considers those text sizes. So that is one color contrast tool. Also, the Juicy Studio's color contrast analyzer is available in the Juicy toolbar, and I can click on that, and it will show me what is passing and failing. Again, this is one area where you're going to want to say -- want to check specifically where these colors are falling. Again, it is an example of where you'd have to do a man

skip links visible when a page loads, but they'll give it focus when a user tabs to skip links visible when a page loads, but they if give it focus when a user tabs to it or if they navigate to it by voice or however. It will become visible. So those are the types of things you want to look out for. We know that there is a bug with skip links, and you can read more about Jim Thatcher's take on that. Sometimes skip links don't work, and there is some really good information for how to sidestep that of. -- bug. Again, I'm not going to go through everything, because we'll be here all day. As much as I would love to, I know you have other things that you have to get to, so I'm just going to go through a few of the slides and bypass them. You'll want to look at styles, and I think this is one place where the wave toolbar is excellent. It helps me to look at styles. And see if they are working. Meaning I can disable them. And see if the site is reachable. I didn't say that very clearly. I'm sorry. See if the site is readable without styles being activated, because we know that sometimes users have their own styles defined in their browser, and we don't want to do anything to override them. So this helps me -- if a user has styles turned off, because often a particular -- particularly with colors and contrast, it's easier for them to read with a high contrast setting on the browser or whatever else, so you can check it there and see if the site is readable without -- if there's anything that's showing that shouldn't be showing, you'll want to watch out for that. And this is just a good way to check. All right. We all know about having alt text on images, so I'm not going to go through that. Scripting, there things you want to watch out for. One thing I'll mention about scripting is that a lot of people believe that if you are using JavaScript that it automatically makes your site or your project and accessible, and that's not actually true. What is required in section 508 is that your scripting has to work with assistive technologies. So those -- there is some event handlers that you'll want to avoid and some methods that you'll want to avoid. Those are the types of things you'll need to test for. I that you'll want to avoid. Those are the types of things you'll need to test for. I think it's a good idea to turn off scripting so that you can see with users who may be using a different device, what they're going to see, if they don't have JavaScript support on their device. Believe it or not, there are a lot of people who don't. On my not so smart phone, I don't have JavaScript activated, so I'm not going to get all the bells and whistles that everyone else will get. So it is good to know what your users are going to face when they are on your site. One thing that is difficult to test, I think, is screen flashing, because there isn't much guidance out there on it. It just says don't let it flash above a certain grade. Most people out there on it. It just says, don't let it flash above a certain grade. Most people are like, what does that mean? Well, the trade center -- Trace Center has a tool that you can download. It's not available online. What you actually do is do a recording of your project when that element is being activated so that you can test it and see if it's accessible. I'm sorry. If it's causing too many screen flashes or if it may appear to be flashing, it actually may be a graphic that has lots of bold color in it so that it will appear like it's jumping out at you. And this is really important, and it's often overlooked, but I don't think people understand that people can actually have seizures when they encounter this type of concept. So it's important to watch out for that. Multimedia, this is also where flash videos would come into play. And again, I have some resources about that, and I'll be sure to make sure that everybody gets that. There are different requirements as far as video and audio tracks and having captions and things like that. And we also want to make sure that videos and multimedia players are accessible to the keyboard. I know a lot of people are building those types of things in-house, or they are pointing people to YouTube. And people have trouble sometimes using YouTube with their assistive technology. So it's all possible, please provide that content elsewhere in an accessible manner. There are a number of accessible media players out there, so you can get that information to your users. Okay. Tables, things like that. Just trying to get through this. Again, this would be like does read like a really long checklist, so I can go through everything today, because we'd be here for a long time. But I've put in some information for you so that you can check against --these are the things that you want to watch out for. Let's look at forms, though. Now, one of the things that we did see with web monkey was that they didn't have text associated with the label tag, and that's probably one of the most common things that I see on the site. That is missing. People don't associate text with a form element, meaning a search box or a radio button or a drop-down box. Or a text area box. Things of that type of nature. And it's really important to have a text label with it for several reasons. One is so that a user who is visually impaired will know what text corresponds with which button, or which form element. And also,

it serves to help people who may have trouble with dexterity, so if they're using their mouse to navigate, it's easier to click on the text instead of clicking into a radio button. And those are the types of things we need to watch out for that we're not doing people a disservice by not including these really important, easy to attributes. -- easy to add. Tags, not attributes. Now, I've included some information on pop-ups. Again, I'm not judging you. I know that people use them. People have strong feelings about whether or not they are accessible. It may not be your call, so just be on the lookout for that type of thing. Okay. There are many different resolutions that you'll want to check out. And you can do that using the Web developer toolbar. Let's look at that really quick, please. Okay. So I can use the resize function, and I can resize my window or not, actually, because it looks like it's interfering with the webinar software. I'm sorry. But you'll know how to do that. So there were a lot of things that you can explore in each of these toolbars and with the online tools. And you can find some things that we just don't have time to go over today. But I guess, looking at these tools, you can decide what's going to work best for you, and in your situation. If you need a tool that's more of an enterprise solution or a tool where you can test templates that you're developing or a standalone product, standalone piece of software. So it's those types of things that you'll need to decide at the beginning of your project or your testing project to see what's going to work best for you. Now, there is one thing I want to share. And as a friend texted me a few minutes ago, no, I'm not going to be playing any music for you all. But I do want you to see the types of things that you're going to run into on some sites. And actually, I am missing part of my window. Okay. Here we go. Sorry about that, folks. I didn't realize that some of the things -- some of the tools that I'm using would conflict with the webinar software. I apologize. None of us knew that this would happen. So I'm going to look at YouTube and Fire Eyes, if it allows me to -- okay. Now, one of the things I want to check that I was talking about is if there is a clear on-screen focus. And people who are navigating via keyboard need to be able to see if there is clear focus on screen when they are going through navigable elements -- navigable elements. And often people will take that away using CSS or some sort of scripting. We need to see where those problems are so that we can ask our developers to fix that. And its interest-rate -- interesting in YouTube where the focus is missing. So in Fire Eyes, I can go to the focus button and click on that. Okay. Let me try this again. Okay. All right. It is analyzing the element of the page to make sure that each element, each navigable elements has focus, and it's making -- it's telling me that it found 28 issues. And then it will give me a list of those problems that it found here, and 28 issues. And then it will give me a list of those problems that it found here, and it tells me where focus may be lacking. So those are the types of things you'll need to be on the lookout for. This is true on video players, but also on other flash-based projects so that you can check it that way too. All right. So we just went through the keyboard navigation, and I want to just show you a way to check the page zoom, because we know that some people have to use a screen magnifier, but we don't necessarily want to check it that way. There is another way to do that. We can use Opera, actually, to see what his site looks like when it has been zoomed. And here is a site that uses a lot of graphical elements, and a lot of these elements. here is a site that uses a lot of graphical elements, and a lot of these elements, these brackets have text to them, so the text is actually part of the graphic is what I'm trying to say. So that when a user magnifies the page, it may be very pixelated. So it's a best practice to not make text a part of a graphic, but to layer it over the background, using CSS, the layer it over the background of that element. Making it work that way. So sometimes if you can suggest that to your developers and your designers -- you can see what this will look like when it is magnified to a certain degree, and you can see that the graphics are pixelated. This is a good way to get an idea of what your users are going to encounter when they are using screen magnification software. This is difficult to read, for me. And I'm not saying that I have the eyes of a 20-year-old. Maybe I do, maybe I don't. But I have difficulty reading some text when it is magnified and often, actually I do have to magnify my screen with some websites. So this type of thing that I encounter when I need to look at a site and it is not always clear to me. Now, while we may be able to read the words on the screen here, a user with even less vision than I or you may have may have a more difficult time. There's more text down here, and it's even more pixelated, because it is put into the graphic. This is actually pretty unreadable. So these are the types of things you want to lookout for and share with your designers and developers. Okay. Link text. I think this is dealing with the question

earlier about the PDFs. You want to make sure that your link text make sense out of context. Again, it is really important to have your users understand the destination context. Again, it is really important to have your users understand the destination of the link. And it is critical to have your content developers to write the content clearly so that it will make sense when it's out of context, because people using screen readers will isolate their links so that they can quickly scan through each. So the more information you can put into a link without making it unwieldy, then that's -- so those are the things that you can suggest when you are performing your testing. Now, another area that's often overlooked is again, the content itself, not just the links, but the rest of the content on the page. We want to make sure that it's following plain language principles, and you can go to plainlanguage.gov to get some information about that. If content is not your specialty, if you're not really strong in grammar, perhaps you can pull someone else in and have them look at potential issues that people would face if they are dealing with certain impairments or if they have different needs. One thing that I see so often on the web is casual sentence structure, where people are not including a noun and a verb in sentences. So it can give sentences a very ambiguous meaning. So it's best to have your content reviewed by someone who's especially at -- specialty it is, and maybe you'll want to pull them into the testing process with you. Now, you'll also want to look at things cross browser, cross-platform. You'll want to look at things on mobile, and I had a mobile browser example set up here, and that's the Opera mobile, and it shows you how things will appear on the Opera browser. That's one item that you can use. There are other online tools that you can use that will help you see that you -- what your site is going to look like. Now, I have some tips and resources back here. We won't go through all the resources, obviously, but one thing I want to remind you all is to make sure that when you test, if at all possible, if you do have the time, test with real users. Conduct usability testing. And make sure that you are including people who have disabilities in that test group, because they're the ones that are some information about that. If content is not your specialty, if you're not really people who have disabilities in that test group, because they're the ones that are going to see it from a different perspective than what you have. You -->> Angela, I'm sorry. Could you go back to your slides? We are seeing the BBC News homepage and. -- again. >> I'm sorry. I don't know why it keeps jumping. Can you all see it now?
>> Yes, we can see it. Thank you.
>> Great. You'll want to make sure that people with different disabilities are being served, and they are going to see things differently than you do, because again, you know what your site is supposed to look like and how it's supposed to read. And you may think that it makes sense, but it may not. So it's really helpful to test with different people of different backgrounds. And there are many ways that you can recruit people. I know some folks have recruited people off of their social media channels, so that may be one way to look at it. And dev.Opera has some information on recruiting people, so take a look at that. Now, again, you want to protect herself. Document everything. Every test you perform. And keep a log of it all. I cannot tell you how much grief this will save you. And if you need some resources as far as law is to use, please write to me -- logs, and I will be glad to share with you some of the things that I've developed that I could not be without. For my testing. Because I are a project that I toget of five wears are 10 years testing. Because I can go back to a project that I tested five years ago, 10 years ago, and say, well, these were my findings. And those of you all who -- you may be receiving a freedom of information act request. And that has happened, where we'll

have to provide documentation on testing that we've done to make sure that something was accessible, or it may have been a business decision for another department or clients who decided that, okay, we know that this isn't accessible. We need to have all that document. You need to have that in writing. Please protect yourselves, sector agency. -- Protect your agency. And again, don't worry about asking a vendor or contractor for the documentation. Just do it. You have to make sure that this is done. And if someone is not forthcoming with their information, it kind of makes you wonder about that, if they are actually -- actually documenting these things. These are the types of things you can put into your statement of work, and be sure to ask for them. Be sure to follow up on it. It is okay. Now, one thing I hear all the time is, well, another agency did this, Angela, but, mom, so and so did it. I'm sorry, sweetie, but I'm not responsible for the other agencies. Just because they're doing it doesn't mean that it's accessible. So just because an agency is using something, another agency is using something, doesn't mean that it's accessible. That would be one of the first things that I and a few other people I know who work in accessible the -- excelled -- accessibility here, well so-and-so is using it. I'm not going to

say if so-and-so jumped off the Brooklyn Bridge, but I think I just did. If a vendor says their product is accessible, it doesn't necessarily mean that it is. It's up to you to test it. And share this information with your managers, that you all won't because with egg on your face when it comes down to it, because you purchased a product that you thought was accessible, but it really isn't. Do your due diligence testing. And see if you can do that before the product or service is purchased. And also, just because it works in one combination, it may work in IE using JAWS or it may work in Firefox using Dragon NaturallySpeaking, it doesn't necessarily mean that it is going to work in another, nation. It's just good to be aware of how it will vary from platform to flat -- platform and device to device. Just keep that in mind. You may not have time to do that type of assessment. But if you do, you can document that as well. So I have some tools here. Many of them available online. Some are not. Some are available for IE. And there are some enterprise solutions for you all to look at. I have some articles that will help you educate you. Just some really good information. And most of all, rock of the accessibility. Work it and do it. So does anyone have any questions now?

>> Yes, Angela. We have quite a few questions. As a reminder, we'll be sending Angela all of the questions we were able to answer, and then send them around to everybody. Wanted to actually first ask, there's been a question about mobile accessibility. Is there a difference when you're testing accessibility for mobile sites?

>> Well, if you are using a good web development standards, as far as a site on mobile, then I would say the requirements are almost the same. Now, in my slides, there are some tools here and techniques that are mentioned on the W3C site, so you can go there and find out if there are some other things that you'll want to consider with either your application or your website for mobile. >> Great. Thanks, Angela. And we had a question, on, how do you make the case to management that throw accessibility testing is worthwhile, although it's time-consuming?

>> That is a really good question. I think, depending on if you're coming from a government agency versus a private agency, there are different things to consider as far as business practices. However, it comes down to the same thing. It's ethically the right thing to do. And there's no other way that you can ensure accessibility than through your development practices and through your testing practices. So when you are -- when you are a product together, and you're discussing how long it will take for these types of things, I think it's critical to make the point there in the planning stages that you will need X. amount of time for testing, and no, we can't cut this short. Often, people will say, we can revisit it later on. Well, if you do that, just know that you're going to be costing yourselves more money to do it later than doing it right the first time. And some people are okay with that. Some people are not. It's just really important, I think, to keep the lines of communication open. And I say that because people are very passionate about accessibility, and some people. Because when it comes to testing a project, people will say, we've got to ask Angela. Oh no. We've got to bring Angela in. What is she going to say? You may get some of that, but it's really important to make -- maintain a good relationship with your managers and your developers and your designers, and work together. Try not to wait just until this project is due, but talk to them ahead of time, before projects, and see if you can build a good rapport with them and say, you know, I was thinking it would be a really good thing if we did X., Y., Z. as far as our accessibility testing. And one thing I do want to suggest to my government attendees is that maybe there is a way that we can network somehow and get help with our testing projects. That may be another thing that you can do, because I've learned that so many of you all don't have time or the resources for testing, but perhaps you can call someone and say, can you look at this for m

>> Thanks, Angela. A question came up about Captcha. What sources of accessible Captcha do you recommend? Are there any free once?

>> This is a really good question. The problem with Captcha is that there are several things that make it in accessible. You either have to be able to hear or to see, and there are people who are deaf blind. And naturally, what you do at Captcha, the picture and audio Captcha is going to be in accessible to them. So one thing I

know people do, and I'm not endorsing it, is that they'll use re-Captcha, and still that is just an audio and image based Captcha. Is better than just using an image based Captcha. But you know that you're still going to be alienating some of your users. If you are providing may be a question is the son hot or cold? I know people do things like that. Or what is 10+512? Sometimes people will do mass-based Captchas. But again, people with cognitive disabilities may have trouble with that. My question is, then, why are we putting the burden of spam prevention on our users? It's like -- somebody said this week, I think, it's like putting a lock on my store and saying, well if you can unlock this or if you can find the right combination, you can come in and shop. So there are other methods that we can use to control spam. So you may want to consider that. You may want to consider re-Captcha. You may want to consider a question type Captcha. But if at all possible try to get people to avoid using Captcha altogether. And there are some PHP methods, if you're in a PHP shop that you can use to lessen spam without a Captcha. >> Thanks, Angela. You are a wealth of knowledge. We appreciate that. A question that always seems to come up, especially in our web community is about accessibility of PDF files. This person had a question about, if you had any advice for ensuring the stability of PDF files? >> Yes, I do. -- accessability. There are different types of PDFs. One is a scanned PDF, where you're actually using a scanner to scan a document and making a PDF off of that. And there's also a method of developing a PDF from a document, sort of like Word or PowerPoint, even. So depending on the message you're using, there are different requirements. Adobe has a really good sort of flyer, a little cheat sheet to help you develop your Word document so that they will be output in a more accessible manner so that once you get the -- get the PDF made, once you get to Adobe Acrobat, you can tweak it there. But the changes you'll need to make or and not -- a lot less than if you didn't follow those steps when you're in the word document. So I can -- I think I may have linked to it in here, but I may not have. I will make sure that I put that in there, so it will get sent out. Also, for a scanned PDF, there are some things that you'll have to do within Adobe Acrobat, and it's not really time intensive as far as the little tweaks that you'll have to make, but checking it may be a little bit longer than what you may think. It may take a few hours, depending on the size of the document. And I can actually put in some resources for that too. [Indiscernible -- multiple speakers] Thanks, Angela. That might be a whole other webinar topic. We have time for a couple more questions before we wrap up. This person, are accessible Darst accessibility issues related to a specific browser? Was something accessible in IE still be accessible in Firefox, Opera, et cetera? >> It's a great question, and the answer is no. Some people are saying, what? What is she talking about? Of course it's going to be accessible. Unfortunately, that's not true. We know that in some cases that there our thoughts with Flash and Firefox. Or I've encountered times where things will work in IE or don't work in Firefox, but they won't work in IE. So no. If you can, in your testing, if you can test with different combinations, it's just good to have that information. Now, it's up to you different combinations, it's just good to have that information. Now, it's up to you and your company or your agency to determine if that's okay. I think if you're using good development practices, you'll find less of that. But I know that when we are using certain products that we'll run into problems where the developers of those products didn't think about different browsers and different platforms, so they're not going to work. And when you throw in an assistive technology on top of that, it's going to be really rough. So unfortunately, the answer is no. You have to test to see where the problems may come into play. Thanks for asking that. >> Great. Thanks, Angela. And as I mentioned, we have a ton of questions. I think we're going to stop here, because we will have you answer all of the outstanding we're going to stop here, because we will have you answer all of the outstanding questions. I'll send those in an e-mail. And as a reminder, we will be sending the PowerPoint slides, the transcript, and a link to the recording of today's webinar, so feel free to pass it along to college who didn't have a chance to participate today. And as are minor, thank you so much, Angela. We really appreciate your time and your knowledge. This is a hot topic in the community. I'm sure you'll get lots of questions. >> Thank you. >> I did want to mention that we do have on other webinar tomorrow. It's a monthly

forum call, and we are going to be having a special guest from the federal -federal register talking tomorrow at 11 AM, and a link with -- was sent to the 1758167.txt listserv, so hopefully you all can join us. Thank you for attending. If you have any other questions, please feel free to manage -- message of us at webmanageruniversity@gsa.gov. Have a great afternoon.