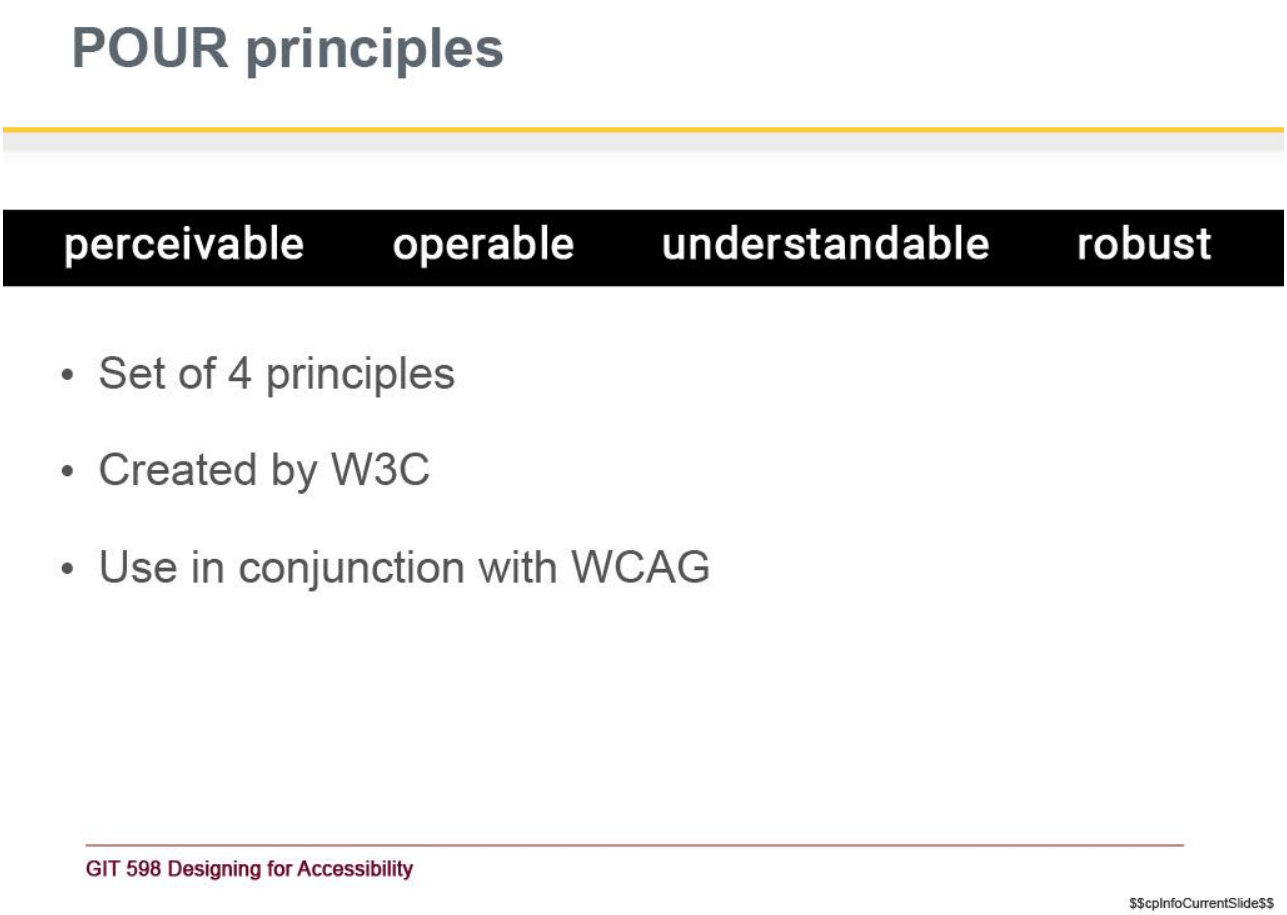
Slide 1 - Designing Accessible Media Part 2: POUR + WCAG

Hello, and welcome to the second part of the designing accessible media lecture.

In the first part, we discuss tips for creating cross-media products. In the second part, we'll talk about the principles, guidelines, and criteria you can use to make sure what you've created is accessible. You'll be using these for assignments five and for the audit in assignment six.

Let's start with the principles.

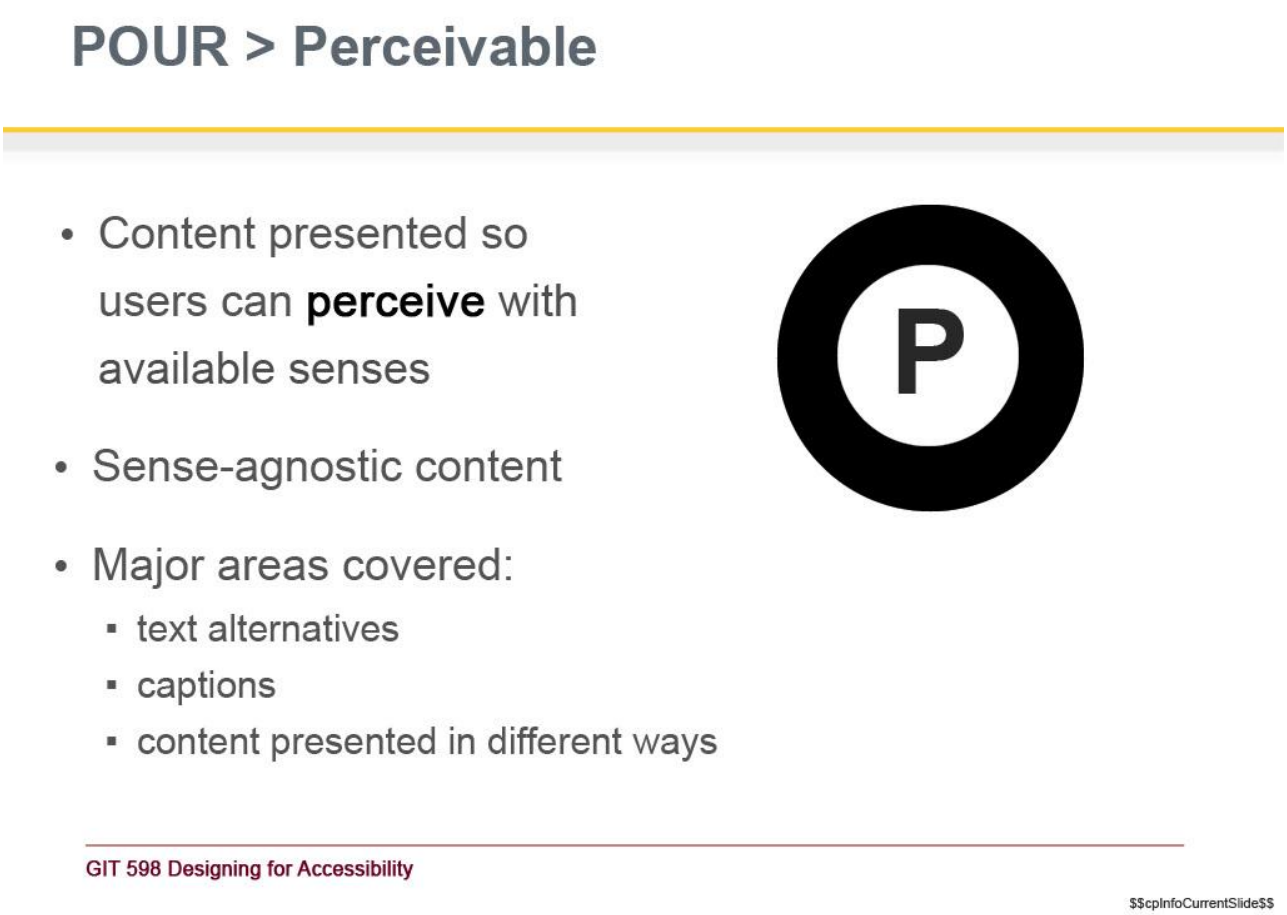
Slide 2 - POUR principles



Remember these? The POUR principles were briefly discussed in the UX and accessibility principles lecture in module one. These principles were created by the WC3, the same group that created the Web Content Accessibility Guidelines, or WCAG. As a matter of fact, WCAG is built around those four core principles. They're meant to be used together, and that's what you'll be doing in the next two assignments.

We'll go more in-depth into the principles now.

Slide 3 - POUR > Perceivable

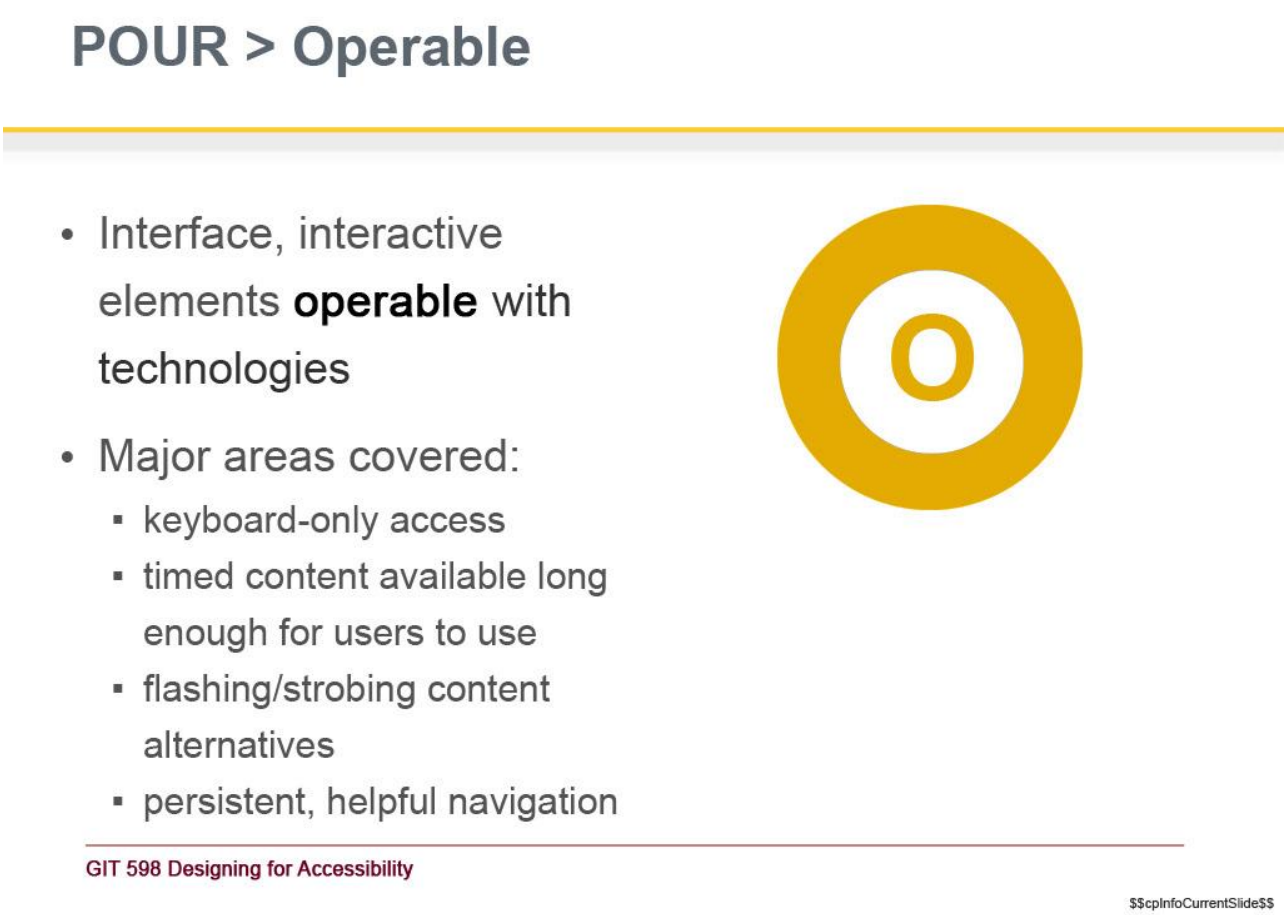


The idea behind perceivable is that the content should be perceivable using more than one sense, or in other words, it can be perceived regardless of any specific sense. For example, images that have meaningful alt text to describe their content for screen readers allow sighted users to see the image and those with visual impairments to hear the image described to them. If there was no alt text, people with visual impairments are excluded from knowing the meaning of the image.

The goal is to do your best to achieve what I'm calling sense-agnostic content. Images with alt text, videos with captions and transcripts, keyboard navigable calendar widgets... these transcend the need to be able to see or hear or use a mouse. There are alternatives to the assumed 'native' senses.

The major areas covered under perceivable are making sure there are text alternatives, making sure there are captions for videos or any motion graphics, and ensuring that the content is presented in different ways, such as what I discussed.

Slide 4 - POUR > Perceivable

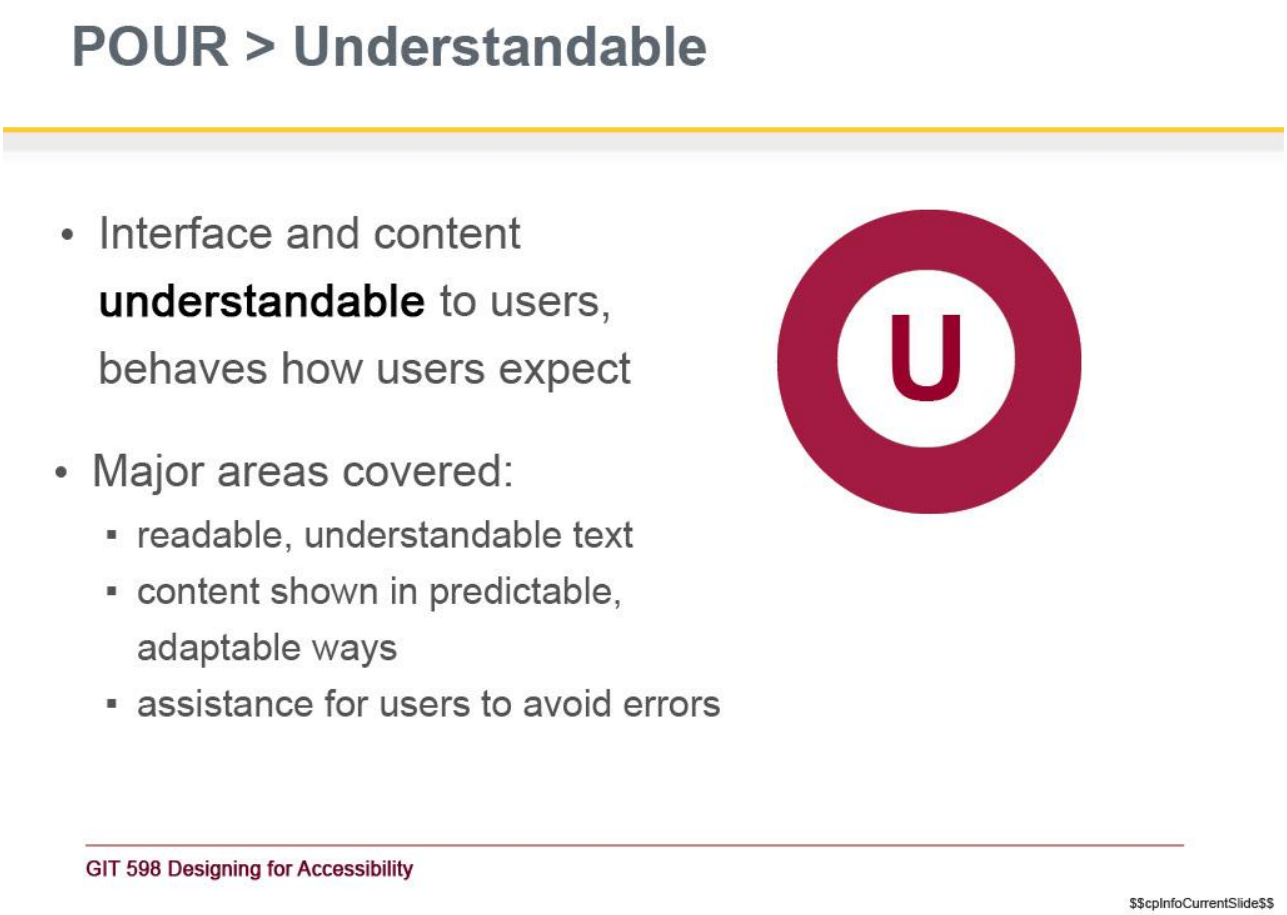


The operable principle in the POUR framework means making content adaptable. It ensures that all users can navigate and interact with digital content in various ways, especially those who cannot use traditional devices like a mouse. So this means operable with all technology, including assistive technologies.

To create an operable product, design it so that users can navigate, comprehend, and interact with the content successfully regardless of their device, disability, or the context.

The major areas covered under operable have to do with keyboard access, making sure that timed content is available on the screen long enough for users to be able to use it and understand it, alternatives for any flashing or strobing content for those who are prone to seizures, and having a persistent and helpful navigation.

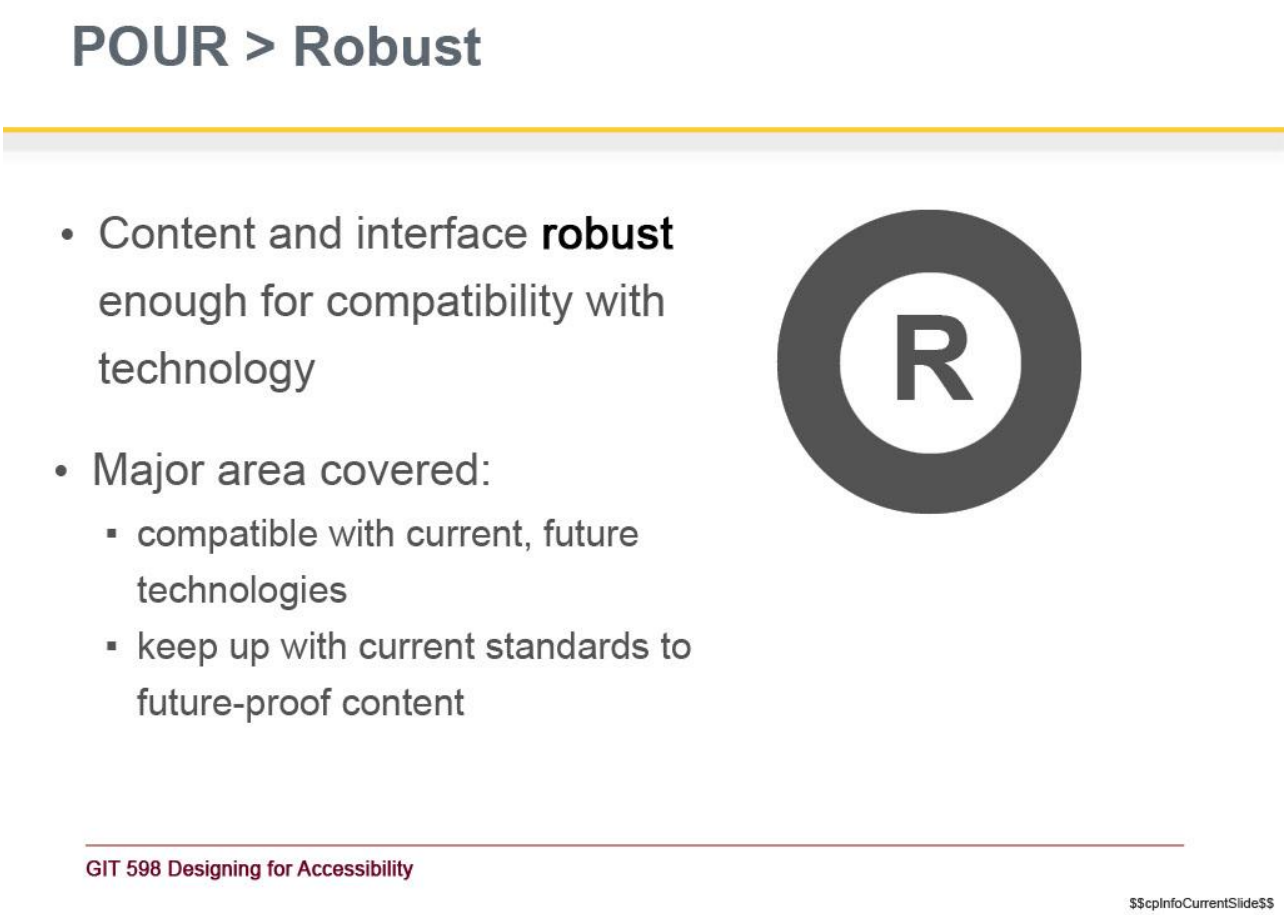
Slide 5 - POUR > Operable



Understandable focuses on users being able to easily comprehend information and interact with the interface predictably and consistently. In other words, the interface behaves how users expect it to behave.

For example, if users are accustomed to finding a navigation menu in a particular place on, let's say, the home page of a website. That menu should stay in the same place for the other pages on the website. This consistency allows for users to anticipate what will happen when they interact with different sections of the site.

Slide 6 - POUR > Perceivable



The major areas covered are making sure you have readable, understandable text; that the content is shown in predictable and adaptable ways; and that there is assistance available for users in case they run into an error: either a way for them to avoid it or a way for them to get around it.

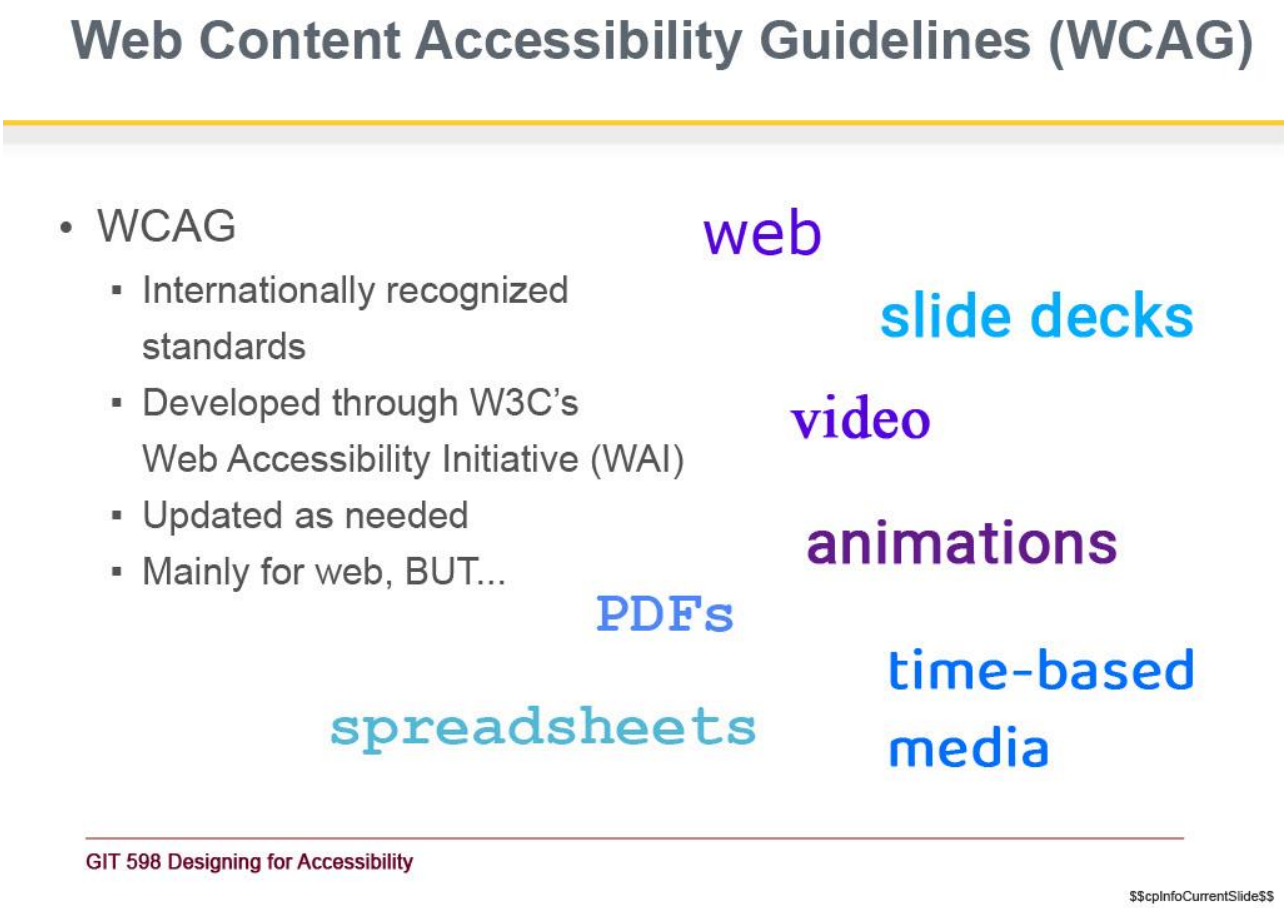
The robust principle emphasizes the use of technologies to enhance compatibility and maintainability of content. Create content that works well with the current and future tools, technologies, and user agents, such as screen readers, browsers, and other assistive technologies.

The goal is for users with disabilities to be able to access content now and in the future even as technology continues to evolve. The major areas covered are making sure that the content is flexible enough and robust enough to be compatible with different technologies and also to keep up with the current standards in order to future-proof the content.

I know it seems weird that you have to future-proof content. It's one of the best ways... but it's one of the best ways to make sure it meets today's standard. When those standards change, review the content and make adjustments then. You'll notice that each of the principles in the POUR principles have one thing in common: presenting information in alternative, flexible ways and making sure it's adaptable to any technology.

So how do we do this? Well, the web content accessibility guidelines and success criteria go a long way in helping us to accomplish this goal.

Slide 7 - Web Content Accessibility Guidelines



Content Accessibility Guidelines, or WCAG, are internationally recognized standards created to make web content more accessible to people with disabilities.

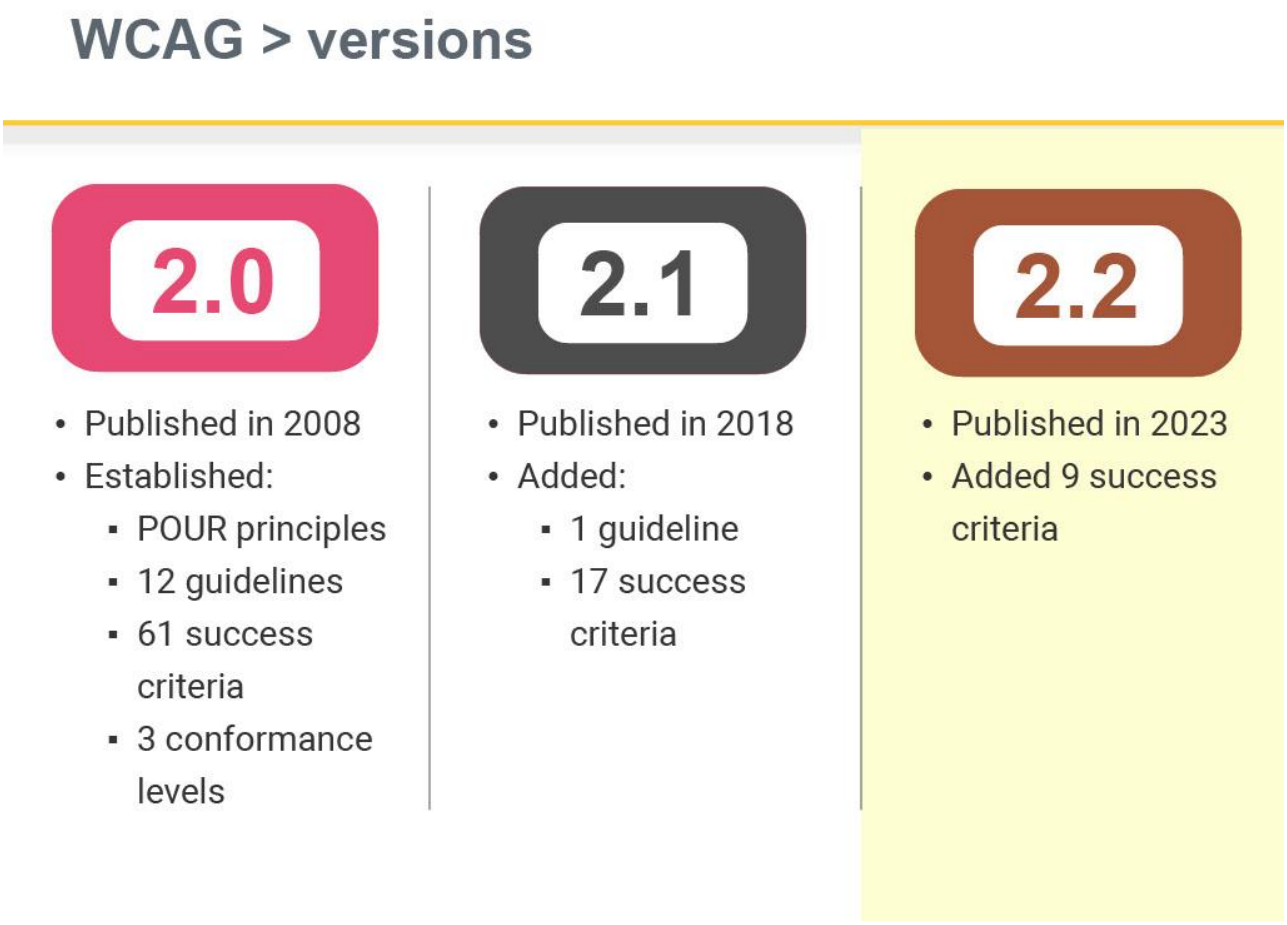
Realize that WCAG goes beyond the web. Anything that is presented digitally can be assessed through some of the WCAG guidelines and success criteria.

The guidelines were developed by the World Wide Web Consortium, W3C, through its web accessibility initiative. WCAG provides specific guidelines to help developers and designers create inclusive digital experiences.

W3Cs WAI initiative is a group of accessibility experts from around the world who consistently revisit the guidelines to check for any new technologies or other issues rising up that affect accessibility. This leads to new versions being released. Each version builds on the previous one, adding more guidelines to improve accessibility.

WCAG is mainly for websites, hence ‘web content in WCAG. However, as I mentioned before, these accessibility guidelines can be applied to myriad products, including PDFs, slide decks, spreadsheets, video, animation, time-based media, and more.

Slide 8 - Web Content Accessibility Guidelines



Long, long ago, in a galaxy far, far away... Just kidding. This was in nineteen ninety nine. There was the initial WCAG version, 1.0. It was a basic list of guidelines with checkpoints for designing for accessibility.

Web 2.0 replaced 1.0 in two thousand eight, and it significantly changed the process. The main change was to include several types of technologies, including assistive technologies. The guidelines are still part of the 2.0 update, but WCAG 2.0 introduces those four or POUR principles, and it also organized the guidelines under their respective principles. In addition, checkpoints were replaced with success criteria.

WCAG 2.0 established twelve guidelines and sixty one success criteria as well as the conformance levels we use today, which is level A, level double A, and level triple A.

And one important milestone, WCAG 2.0 became an ISO standard and is still widely used in many legal frameworks worldwide. ISO is the International Organization of Standardization. And according to their website, these standards cover, quote, almost all aspects of technology, management, and manufacturing, end quote.

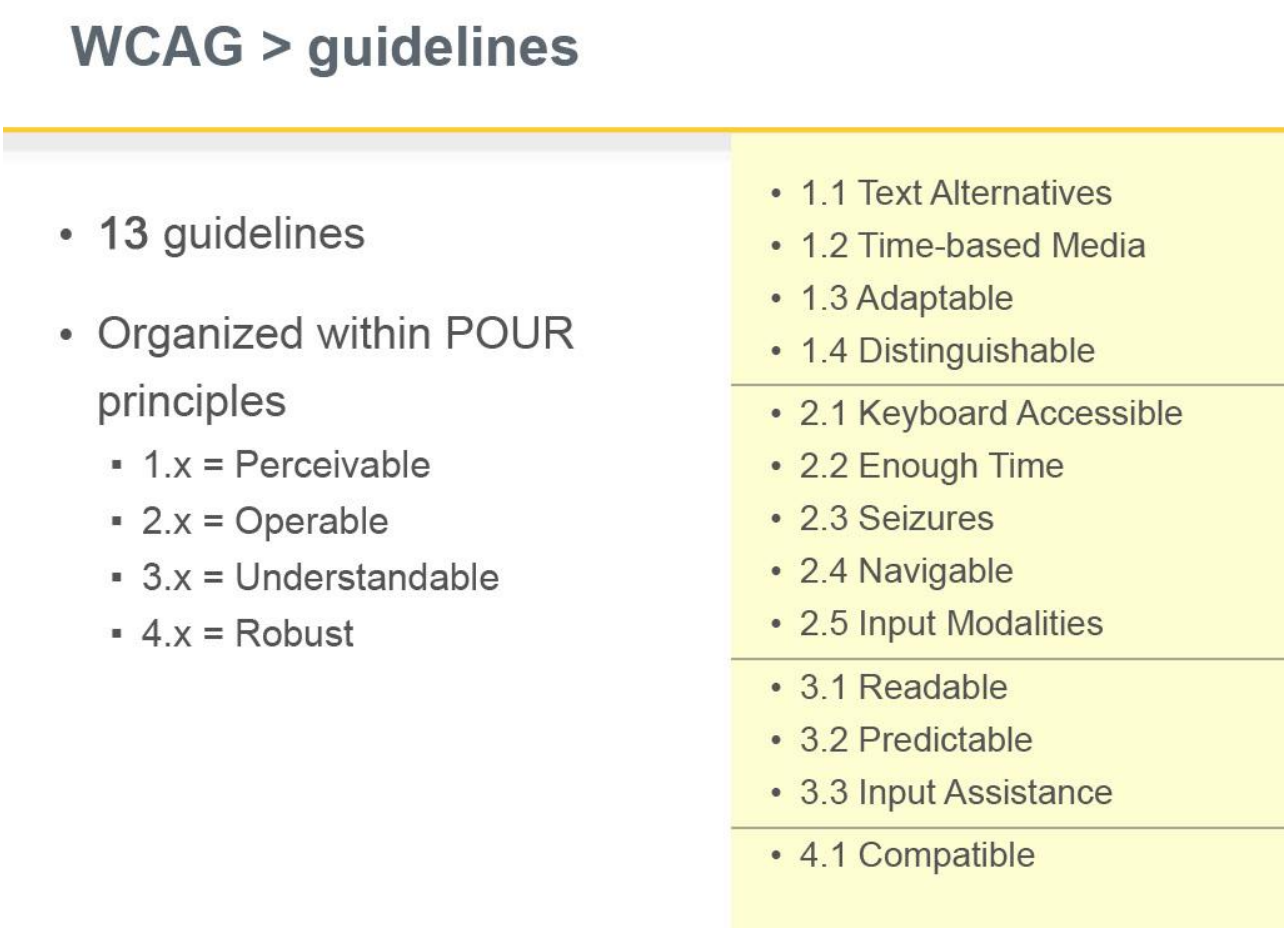
W3C's WAI group released version 2.1 in two thousand eighteen. Nothing was replaced in this version as each version within the 2... under WCAG 2 umbrella builds on the previous one. 2.1 added one guideline and seventeen success criteria. 2.1 point one also introduced accessibility for mobile and other touch-based interfaces, and provided success criteria for low vision and cognitive impairments.

WCAG 2.2 was released in December twenty twenty three, and it added nine success criteria. As of 2.2's release, WCAG has thirteen guidelines and eighty seven success criteria. This version further extends support to cognitive disabilities and makes usability improvements and offers a continued focus on mobile accessibility.

There is a WCAG 3.0 in the works. If you're interested in looking at the working drafts, this link is under optional reading on the module's reading page. Realize that it could be years before it goes live. So for now, 2.2 is the current version.

You're probably wondering what the difference is between guidelines and success criteria. I'm so glad you asked!

Slide 9 - WCAG > guidelines



As mentioned on the last slide, WCAG 2.2 has thirteen guidelines.

According to the W3C, these guidelines, quote, provide the basic goals that authors should be working toward in order to make their content more accessible to users with different disabilities, end quote.

The guidelines are organized under one of the four core principles. So any number starting with one is perceivable, two is operable, three is understandable, and four is robust.

So under perceivable, the guidelines are 1.1 text alternatives, 1.2 time-based media, 1.3 adaptable, and 1.4 distinguishable.

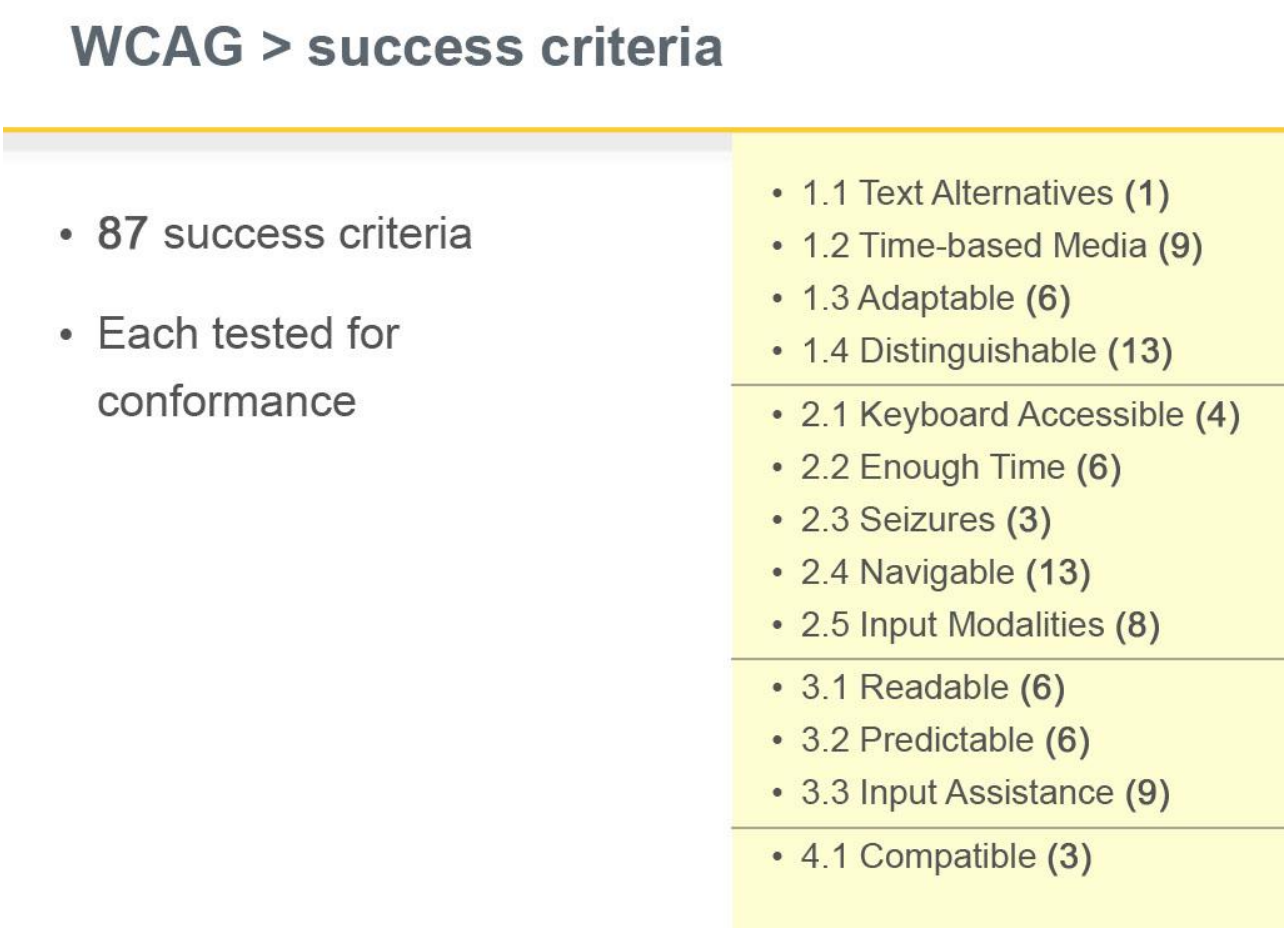
Under operable is 2.1 keyboard accessibility, 2.2 enough time, 2.3 seizures, 3.4 navigable, and 2.5 input modalities.

Under understandable is 3.1 readability, 3.2 predictable, and 3.3 user assistance.

And under robust is 4.1 compatible.

Realize that these guidelines are not testable. However, each of the success criteria are testable. Each guideline has at least one success criterion with most having multiple criteria.

Slide 10 - WCAG > success criteria



So we have eighty seven success criteria total, and each is tested for conformance. And I mentioned the level A, level double A, and level triple A.

On the right side of the slide is the guideline list. After each is the number of criteria within that guideline, and it's in parentheses. The criterion is tested for individual conformance. They're not tested as a group.

For perceivable, there are four guidelines and twenty nine success criteria.

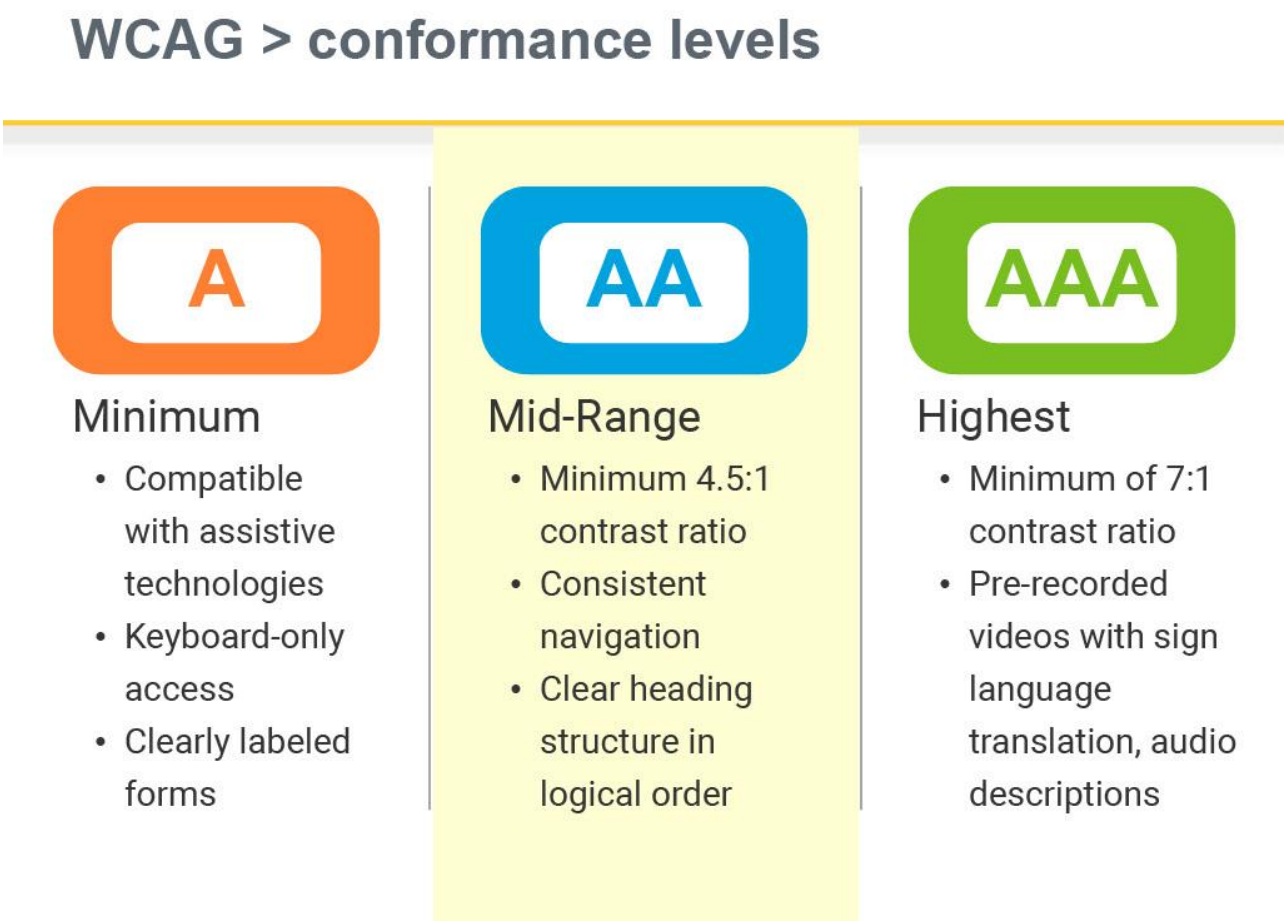
Operable has five guidelines with a total of thirty seven success criteria.

Understandable has three guidelines and twenty one criteria.

And finally, robust only has one guideline with three success criteria.

Remember that this is as of WCAG 2.2. I've read that 3.0 is going to concentrate more on that last guideline, robust, to provide more success criteria..

Slide 11 - Web Content Accessibility Guidelines



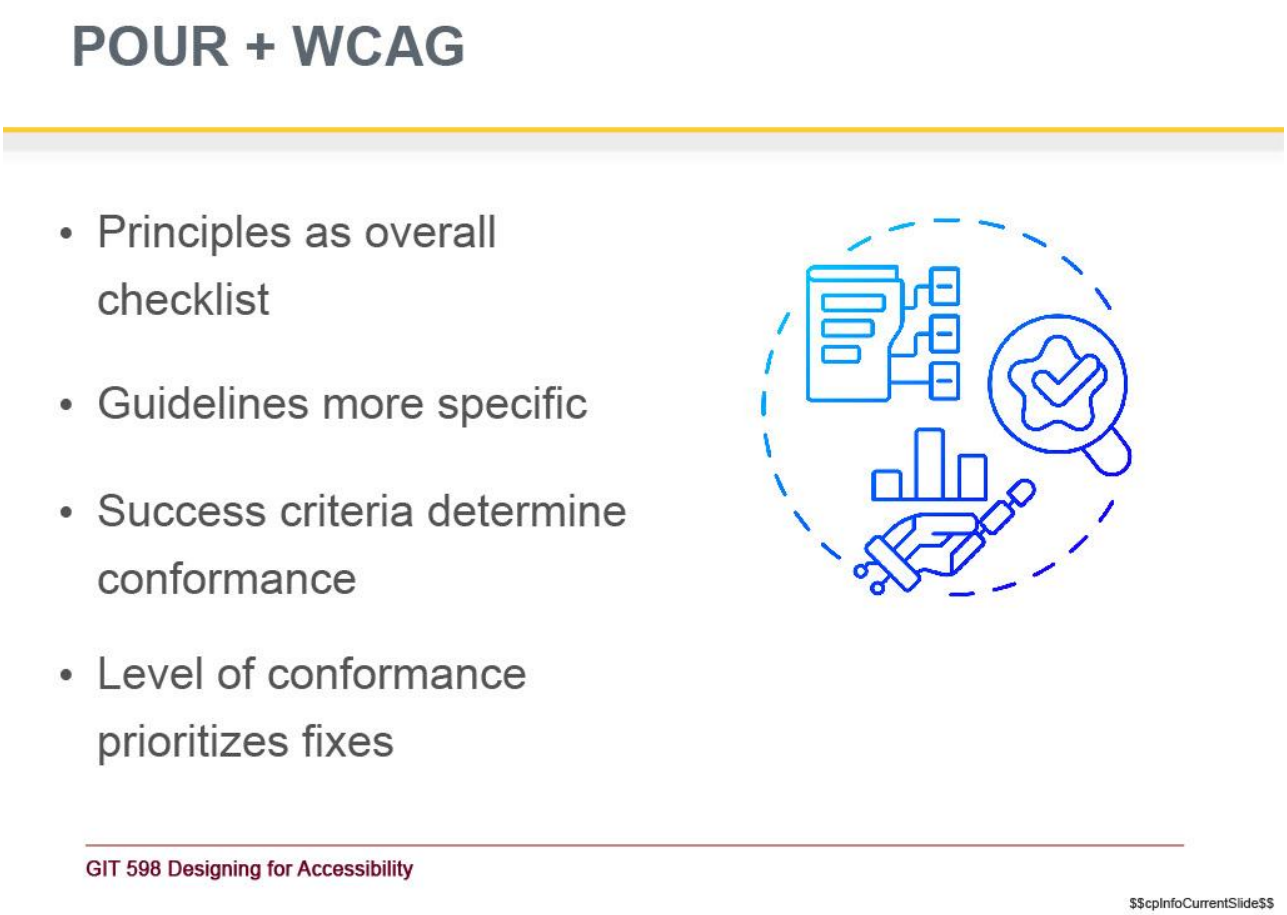
Speaking of conformance for success criteria, back in two thousand eight with WCAG 2.0, conformance levels were established as A, double A, and triple A. Technically, the three levels were established in 1.0, but they had very different meanings then.

What was established in 2.0 is what we know and use today. Level A is the most basic web accessibility features, including content being compatible with assistive technologies, keyboard-only access in place, and forms that are clearly labeled.

Level AA deals with the biggest and most common barriers for disability users. This is the one we'll be using in assignment five. Double A meets all of the a level and adds that minimum color contrast of 4.5:1, consistent navigation, and a clear heading structure that is laid out in a logical order.

Level triple A is the highest and most complex level of web accessibility. It meets A and double A and adds sign language translation and audio descriptions to prerecorded videos. It also raises the color contrast ratio to 7:1 minimum..

Slide 12 - POUR + WCAG



To summarize the POUR principles and WCAG working together, Think of it this way: The principles are overall... it's an overall checklist.

The guidelines get more specific.

The success criteria is what is tested, and it determines the conformance level.

And that level of conformance prioritizes problems, failures, and what fixes need to be done right away and what fixes can be done later.

Slide 13 - View part 3 of the lecture

Thanks for watching the second part of the designing accessible media lecture. There's one more part, so please check out part three, which is where I'm going to go much more in-depth about assignment five.