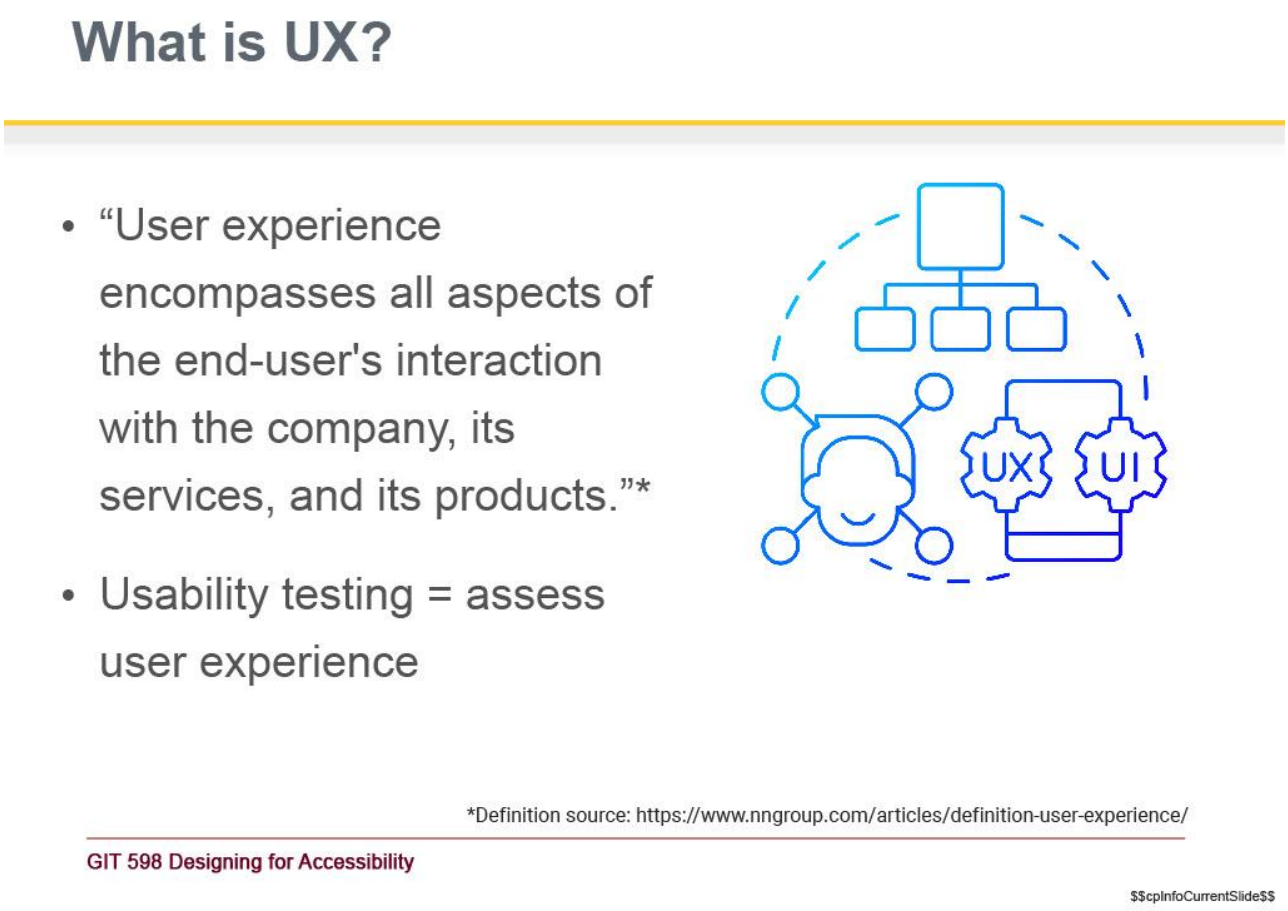
Slide 1 - UX & Accessibility Principles

Welcome to the User Experience and Accessibility Principles lecture.

User experience, or UX for short, and accessibility have a symbiotic relationship. A strong UX enhances accessibility, and accessible design improves the user experience for everyone.

This lecture covers principles that work for both UX and accessibility to improve overall usability, foster inclusivity by eliminating barriers, and enhance user engagement and satisfaction.

Slide 2 - What is UX?

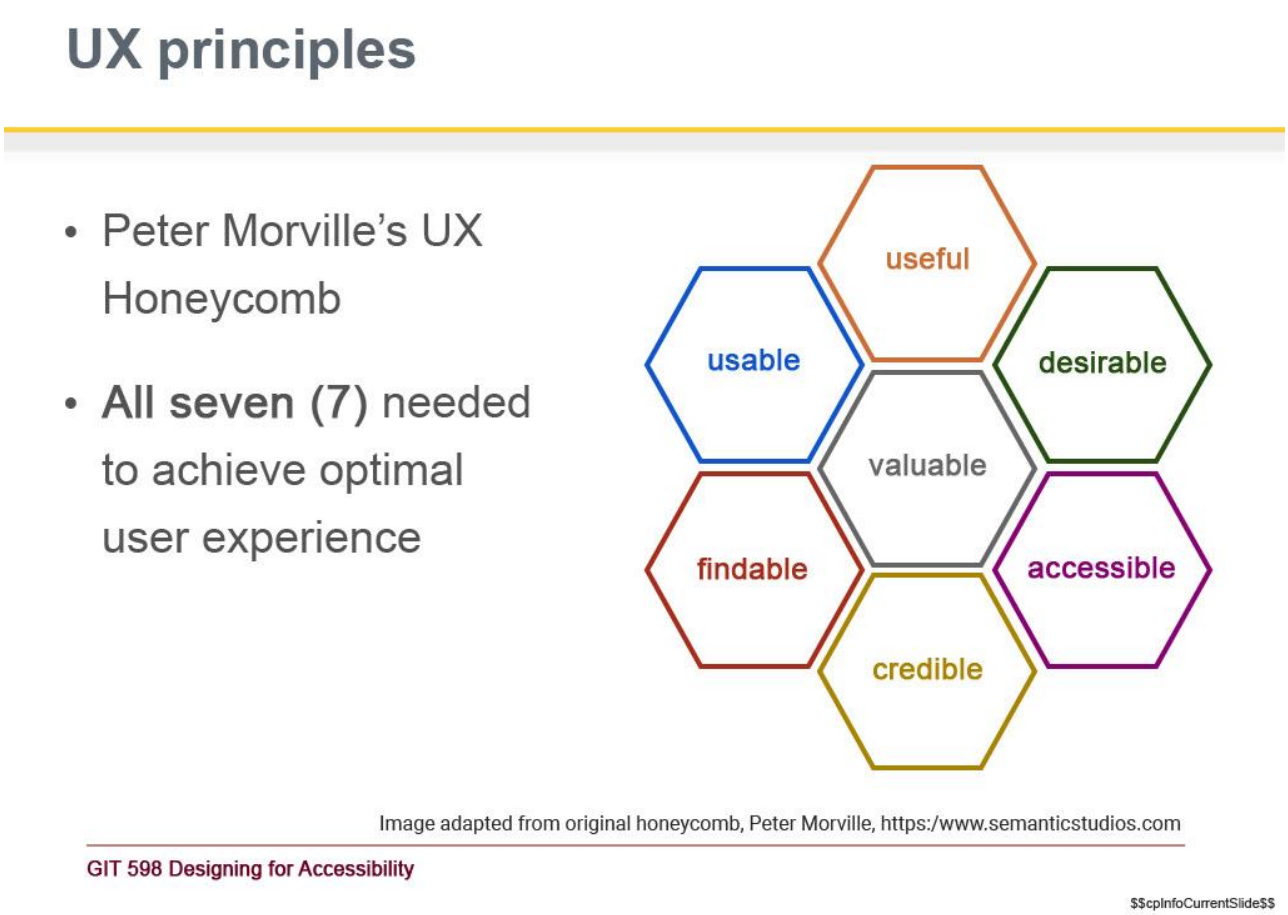


For those not familiar with user experience, a good definition is from the Nielsen Norman Group. And they say: User experience encompasses all aspects of the end user's interaction with the company, its services, and its products.

The goal is the optimal user experience, and the only way to reach that goal is to perform testing.

Usability testing is assessing the user experience, discovering gaps or fails, and devising solutions to fix those issues.

Slide 3 - UX principles



Over the years, numerous people have had numerous ideas as to what the driving principles are for user experience. The biggest names in UX have their own versions. Jacob Nielsen, Don Norman, Bruce Tognazzini and several others.

For this course, we're going to go with another big name: Peter Morville. He's a pioneer in the information architecture field as well as UX. He and Louis Rosenfeld wrote one of the penultimate books on information architecture.

In 2004, Morville created the UX Honeycomb framework. The Honeycomb has seven attributes for user experience design: useful, usable, findable, credible, accessible, desirable, and valuable.

On the right side of the slide, each attribute has its own hexagon, and the seven fit together to form the honeycomb.

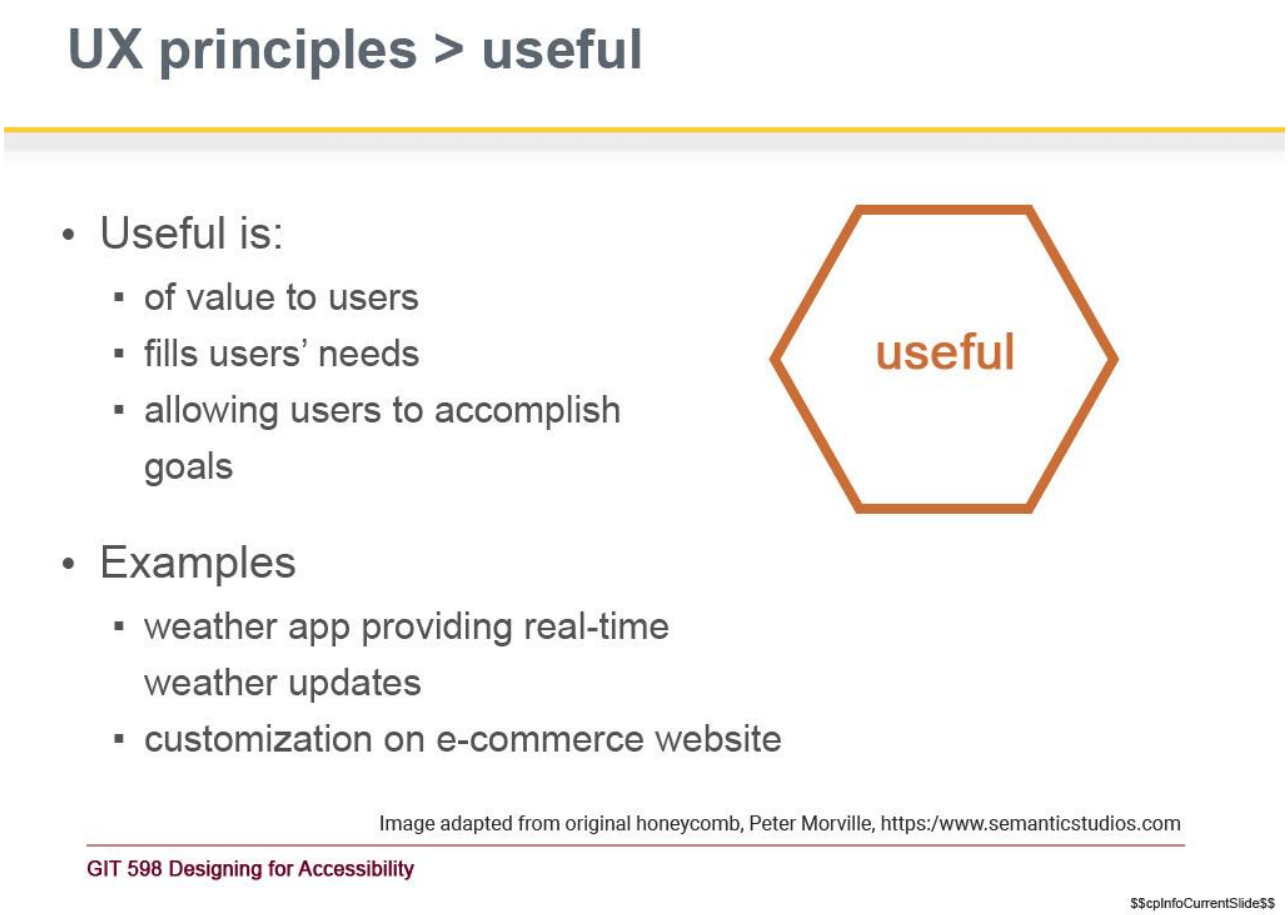
Morville originally created this with websites in mind, but it fits well for most products that have a user experience. In other words, products that end users will interact with.

You may know why I favor these principles because it mentions and mentions an important word, accessible. But I also think the honeycomb focuses on the core attributes for designing products, and they're all connected.

Without one, the honeycomb leaves a hole, which leaves a hole in the user experience. All seven of these are needed in order to achieve the main goal, which is the optimal user experience.

Let's go a bit more in-depth into each hexagon and its attribute.

Slide 4 - UX principles > useful



We'll start with the orange outline hexagon of useful, which you can see on the right side of the slide. Useful means a product is of value to users.

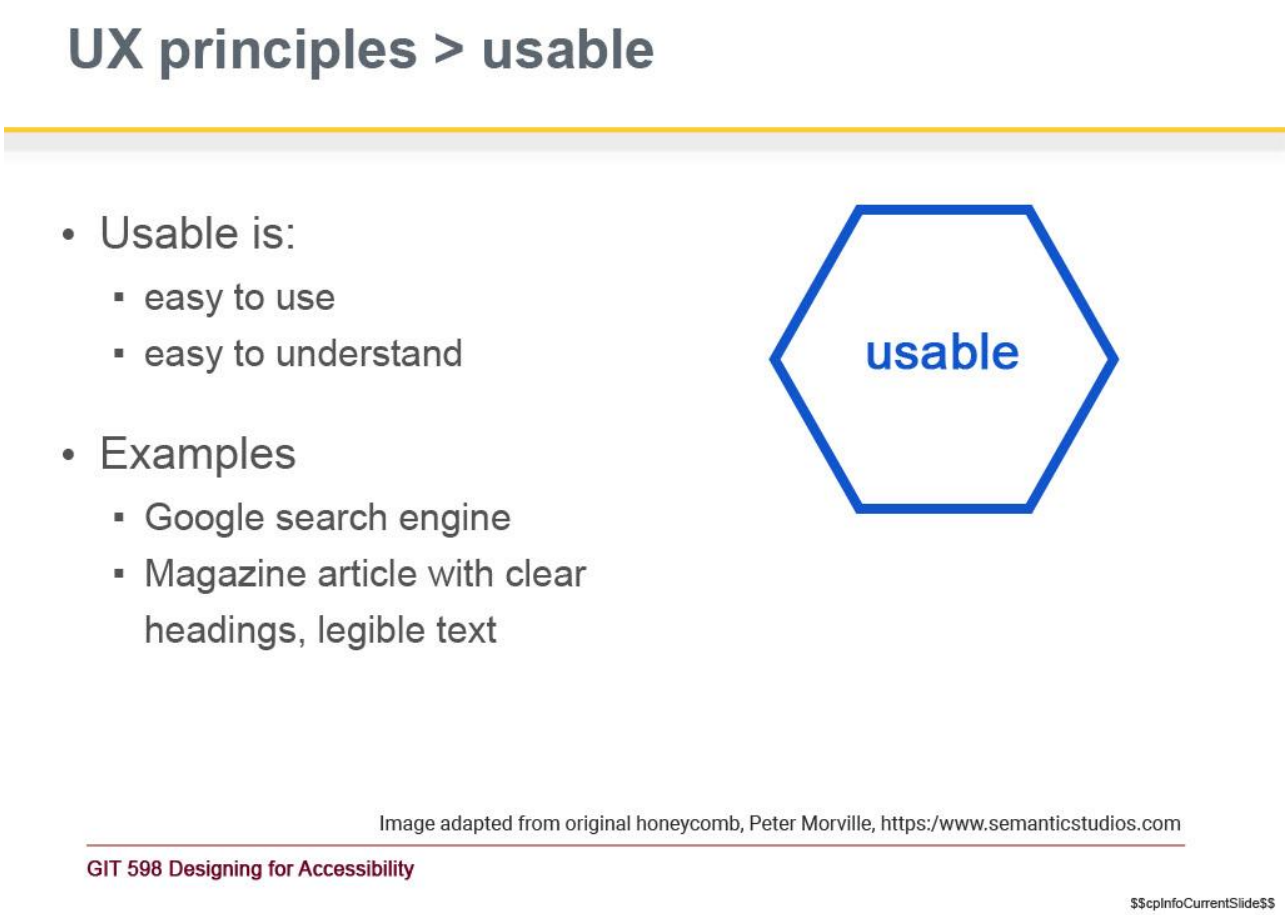
Does it fill a need? Does it help a user solve a problem? A product can look great and work great, but if it isn't useful to the user, why would they buy it or use it?

An example of this is a weather app, which provides real time weather updates. The information it provides is useful to anyone who is planning outdoor activities or if there is going to be snow.

Another example is being able to customize your experience on ecommerce websites such as Amazon or eBay.

Customization not only allows you to save your personal and payment information, but it also provides product suggestions based on your past researches.

Slide 5 - UX principles > usable



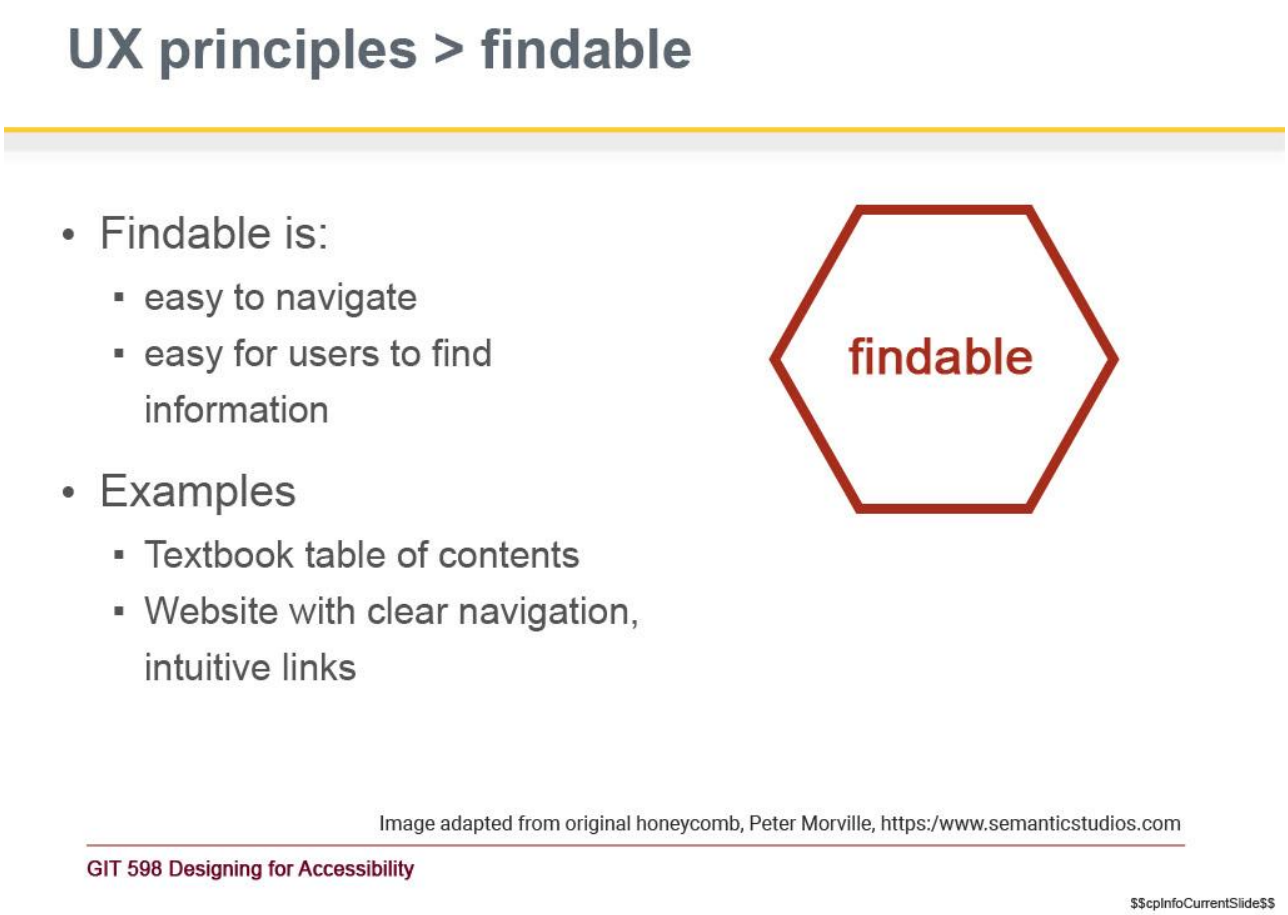
Another attribute is usable, shown in the blue outline hexagon on the right side of the slide. Usable means the product is easy to use and the information is easy to understand. Users should be able to easily accomplish their goals with little to no frustration.

One example is Google's interface. It's clear, uncluttered, and makes it obvious what you're supposed to do: click in the box and start searching.

Yahoo used to be comparable, but now it shows news stories, advertisements, and other elements users may not want.

Another example is a magazine article that has a clear hierarchy with obvious headings and also has readable text in a readable font. Font choices are appropriate for the content, and font sizes also are appropriate for the content.

Slide 6 - UX principles > findable



Findability, in the dark orange outline hexagon on the right side of the slide, means that a product is easy to navigate and easy for users to find information.

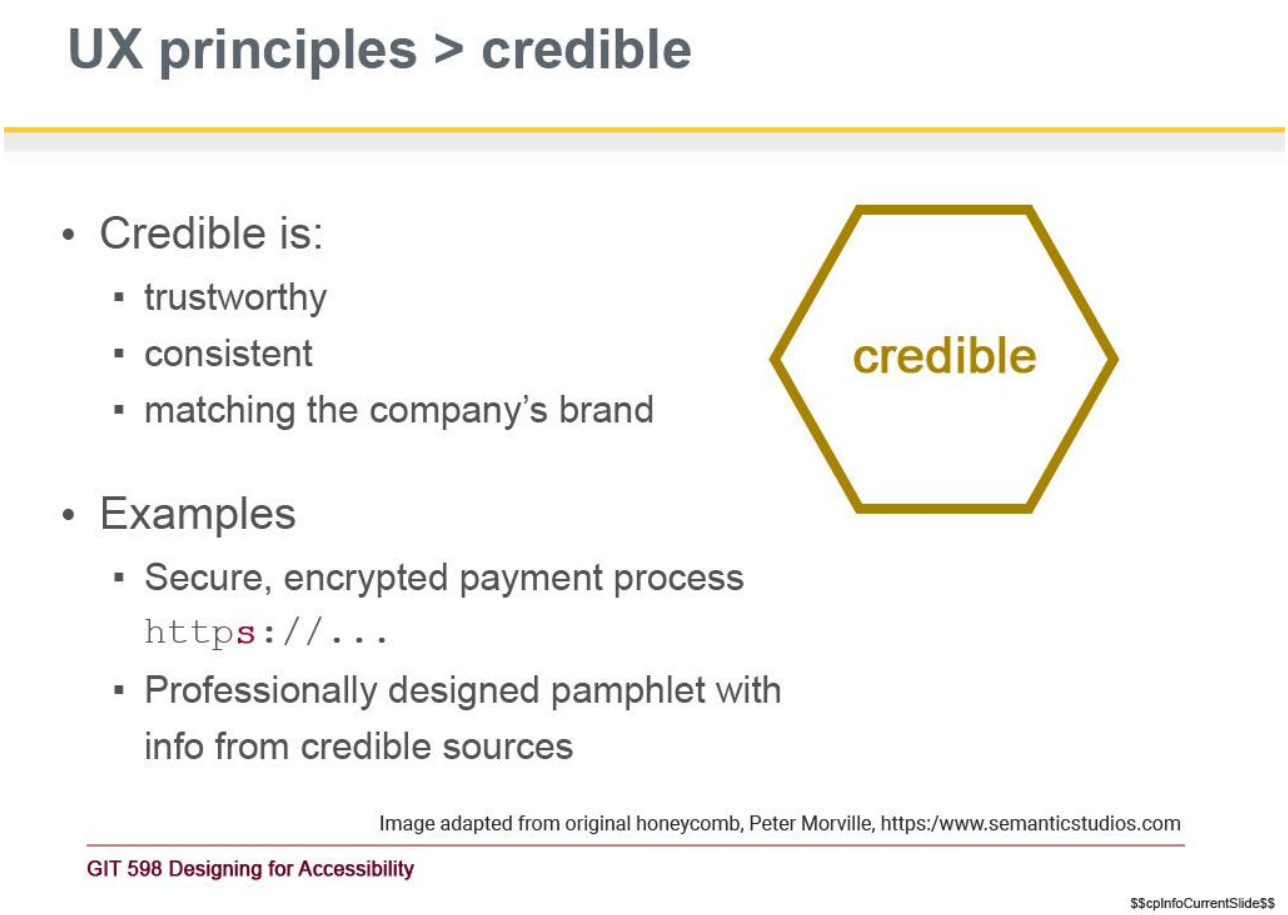
That sounds like usable, but it's more based on users being able to find what they're looking for. Much of that is related to functionality.

Does the product function in a way that users can easily navigate to the information or services they need?

A good example for print products is a table of contents or an index in a textbook. Both of our textbooks for this class have a table of contents and an index, which makes finding topics easier.

An example for digital products is any website with obvious navigation, with tabs or links worded intuitively. If you want to find what products are offered on the site, there would be a navigation link titled Products or something similar.

Slide 7 - UX principles > credible



In the gold outline hexagon is credible.

Credibility is everything to a company. If you seem untrustworthy, people are not going to buy your products. Realize that trustworthiness is tied to consistent design and hierarchy.

For example, a chaotically designed website can put users on alert. If you don't take the time to create a consistent design, what other corners are you cutting?

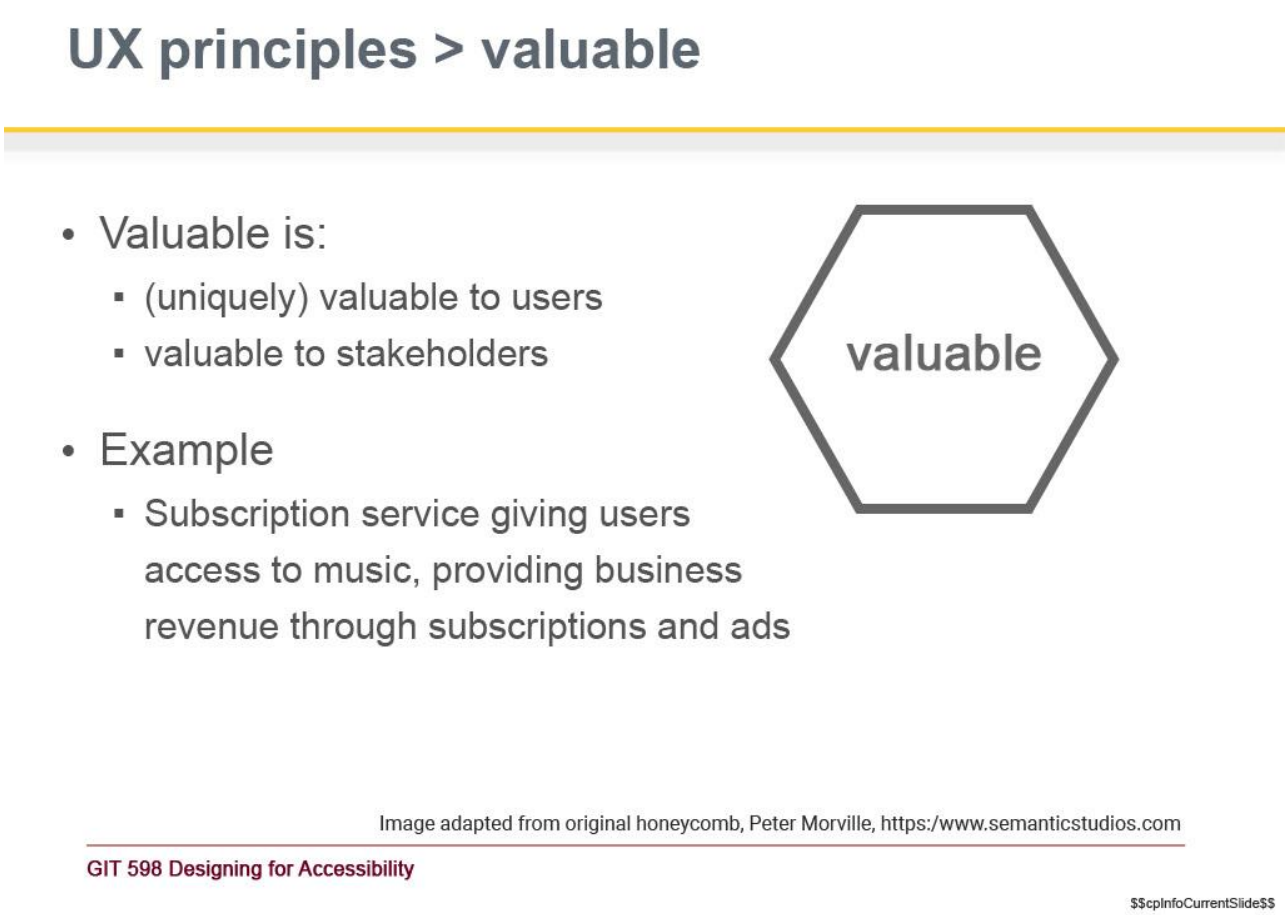
One major example for websites is having a secure payment method. An s after HTTP in an ecommerce web address or URL, which is in the location bar of the browser, means they've made steps to ensure a secure transaction. If it doesn't start with https, it's not a secure encrypted process.

Users have come to expect this, and when they don t see it, they don’t trust the site. That affects their perceptions of the business as well.

Another example is a professionally designed pamphlet that has information from known credible sources.

For example, when I visited my orthopedic doctor before my knee replacement surgery, he had a pamphlet that showed the steps about my surgery and what to expect after.

Slide 8 - UX principles > valuable

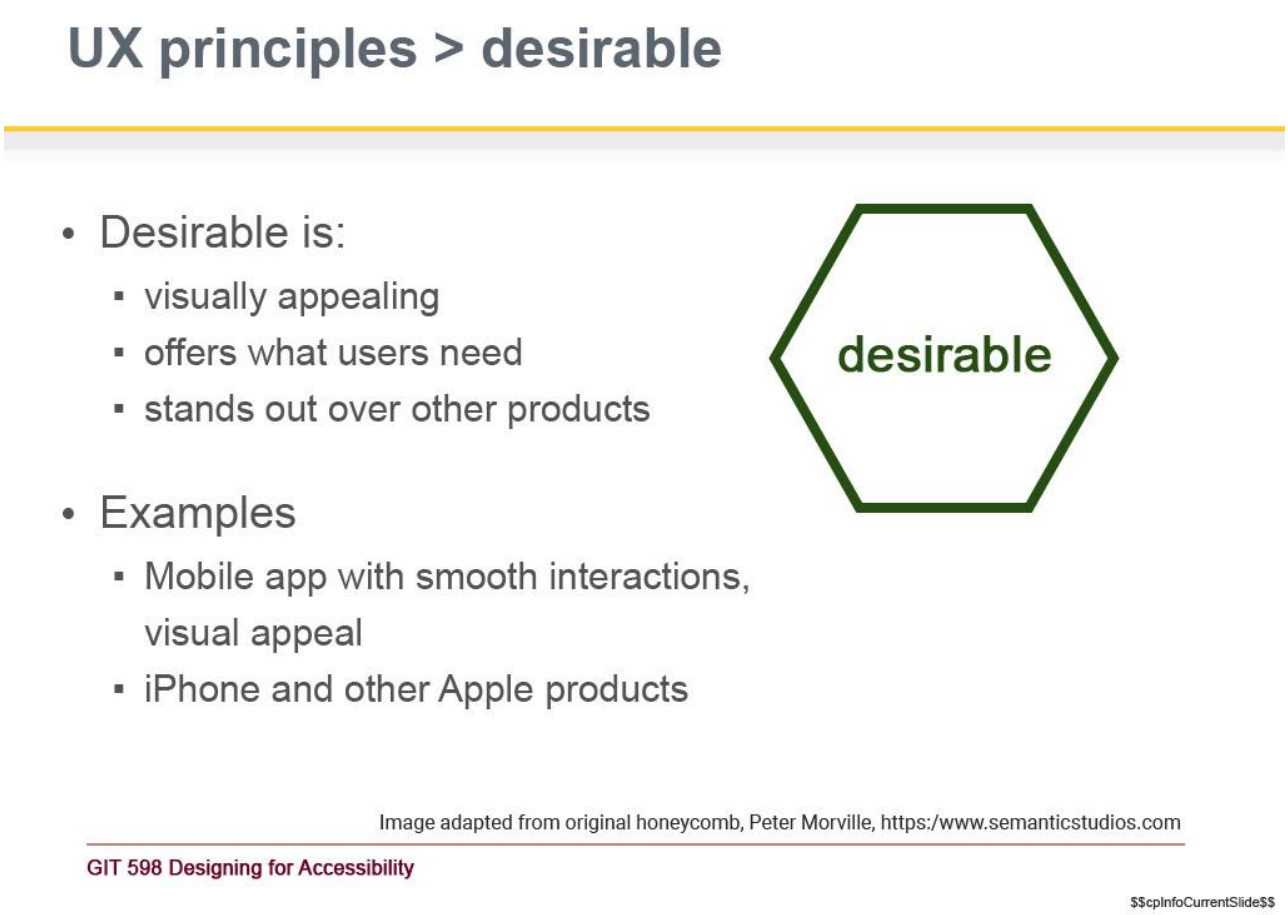


The gray hexagon on the right side of the screen shows the word valuable. Valuable is for users and for businesses.

If you're a business owner, the product must provide value to users, which in turn will provide value to the business.

An example is a subscription service, such as SiriusXM or Apple Music. Users subscribe to the service to gain access to thousands of songs and podcasts. The service, in turn, makes money through those subscriptions and also through advertisers.

Slide 9 - UX principles > desirable



On the right side of the slide, the dark green outline hexagon says desirable. While products have to be useful and usable, people have to want them.

There needs to be a visual appeal, a reason why this product can meet their needs. What makes this product better than another?

One example would be a mobile app that has smooth, interactions and not only is visually appealing but works.

My best friend uses Duolingo and she sings its praises. She's learning Spanish and tried some other apps, all of which didn't work nearly as well as Duolingo has. As mentioned, the product has to stand out above the others to win over users.

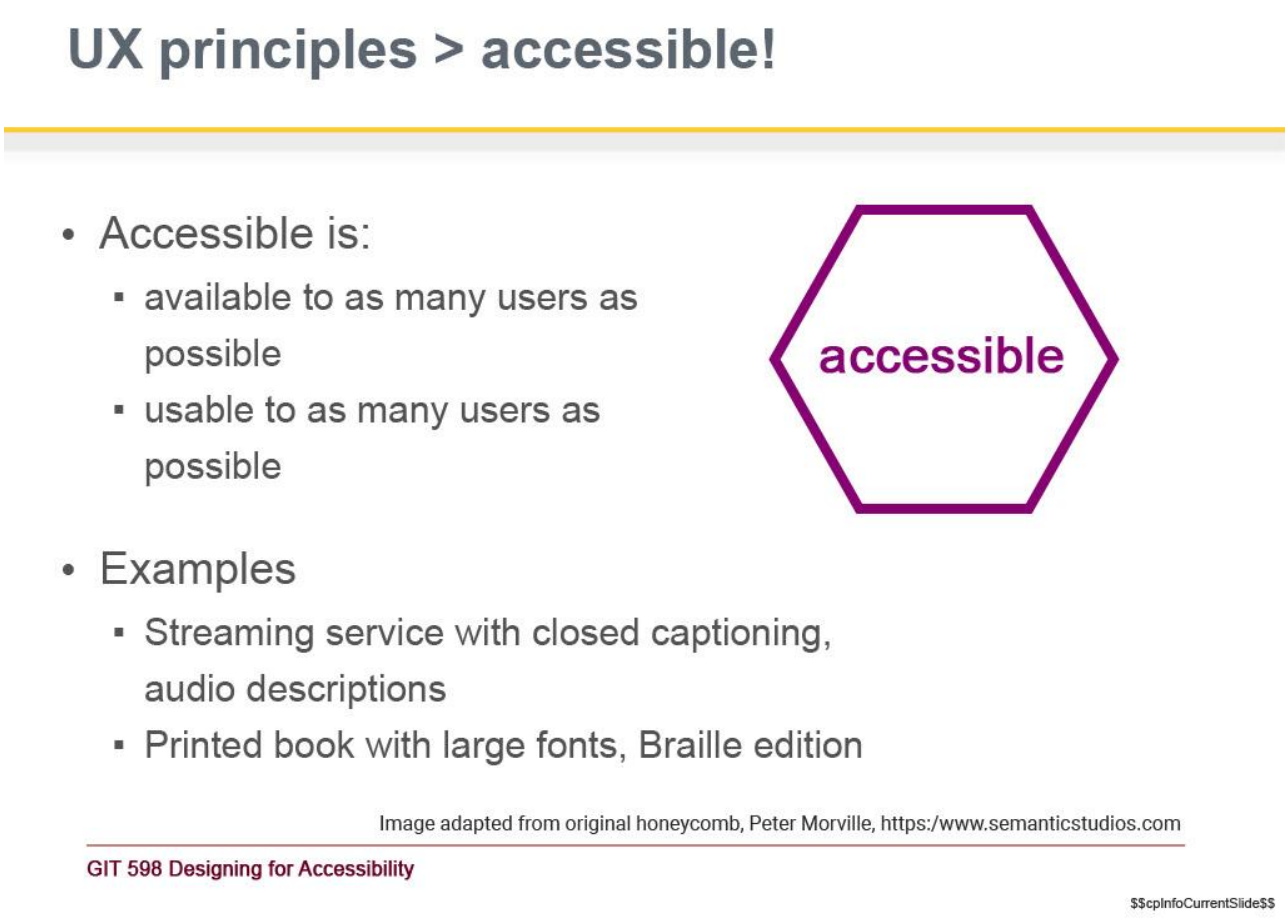
The second example I have might be a little controversial.

Now, I know there's a debate about iPhones. Some people love them, some people hate them. Regardless, Apple products are known for their sleek design and easy functionality.

When a new iPhone is released, lines form at every Apple store because people must have the newest.

Steve Jobs, one of the founders of Apple, stated in the 1980s that he didn't want Apple to just produce technology. He wanted it to create an experience, and it certainly has.

Slide 10 - UX principles > accessible

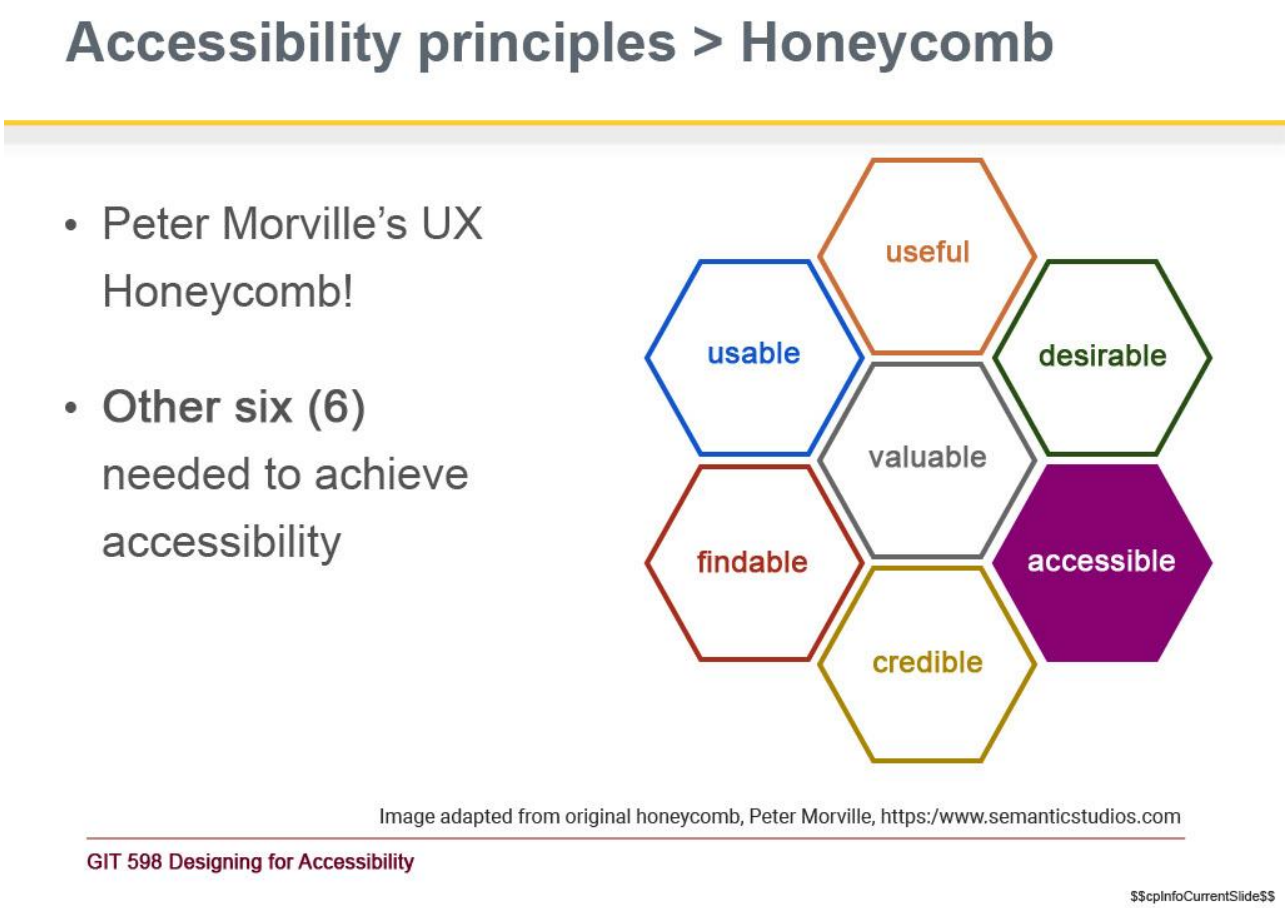


And last but certainly not least is accessible, as shown in the purple outline hexagon on the right side of the screen. The goal of making a product accessible involves making it available to as many people as possible and making it usable to as many people as possible.

We've already covered the types of disabilities and examples of good accessibility.
A few more include making sure videos have closed captioning, and that includes streaming services.

Also, if we think about textbooks, are there large font versions, Braille editions?
If there are videos in class, do they have closed captioning? Do they have transcripts? Do they need audio descriptions and, if yes, they need to be there.

Slide 11 - Accessibility principles > Honeycomb



We've covered the UX principles, so now let's move on to the accessibility principles.

Wait! This looks really familiar!

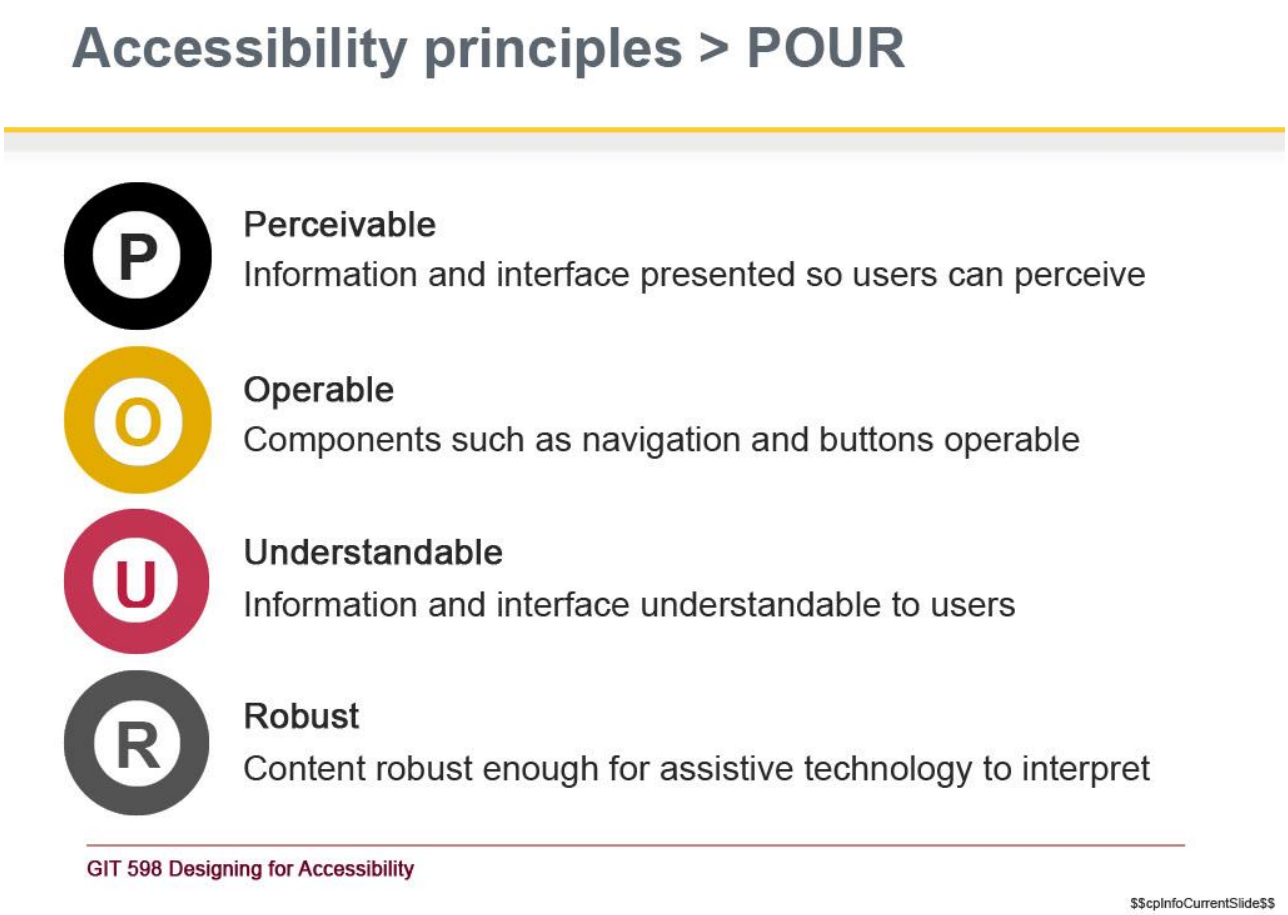
That's because the UX Honeycomb still works. You'll notice the text 'accessible' is now white text on a dark magenta background, though if you are red or green colorblind, it will appear as dark gray.

Highlighting this shows that although we're still looking for an optimal user experience, accessibility is the main goal. But accessible can't work by itself.
The other six components must be there in order to have an accessible product. For example, with useful, if you have a video with no closed captioning or transcripts, is this useful to someone who is Deaf, hard of hearing, or deaf-blind? Is it usable?

Another example: If you have a video that does have closed captioning, but the captioning software missed or misinterpreted many of the words, is this credible, valuable, desirable, useful, usable? The answer is no to all of those.

You'll be working with the Honeycomb throughout the course and especially in module three.

Slide 12 - Accessibility principles > POUR



In future modules, we'll work with the tried and true accessibility principles called POUR, or Perceivable, Operable, Understandable, and Robust.

Although the POUR principles are usually related only to websites, they work for any cross media product that has a digital interface.

For example, you could design a pamphlet about a new program at ASU. Chances are very good that it will have a printed version but also would have a digital version, such as a PDF.

Perceivable is ensuring that information and the interface itself is presented in a way that users can use one or more of their senses to perceive it.

Alt text is a great example of this. Only sighted users can see an image. Those who are blind or have low vision cannot. So having descriptive alt text enables screen readers to include all users.

Operable means any user can interact with elements, such as navigation or form fields, regardless of their physical abilities. One example is to avoid using flashing or blinking content, which can trigger seizures in some users with cognitive disabilities.

Understandable means the content, interface, and other elements are clearly understandable and behave in ways users expect them to behave.

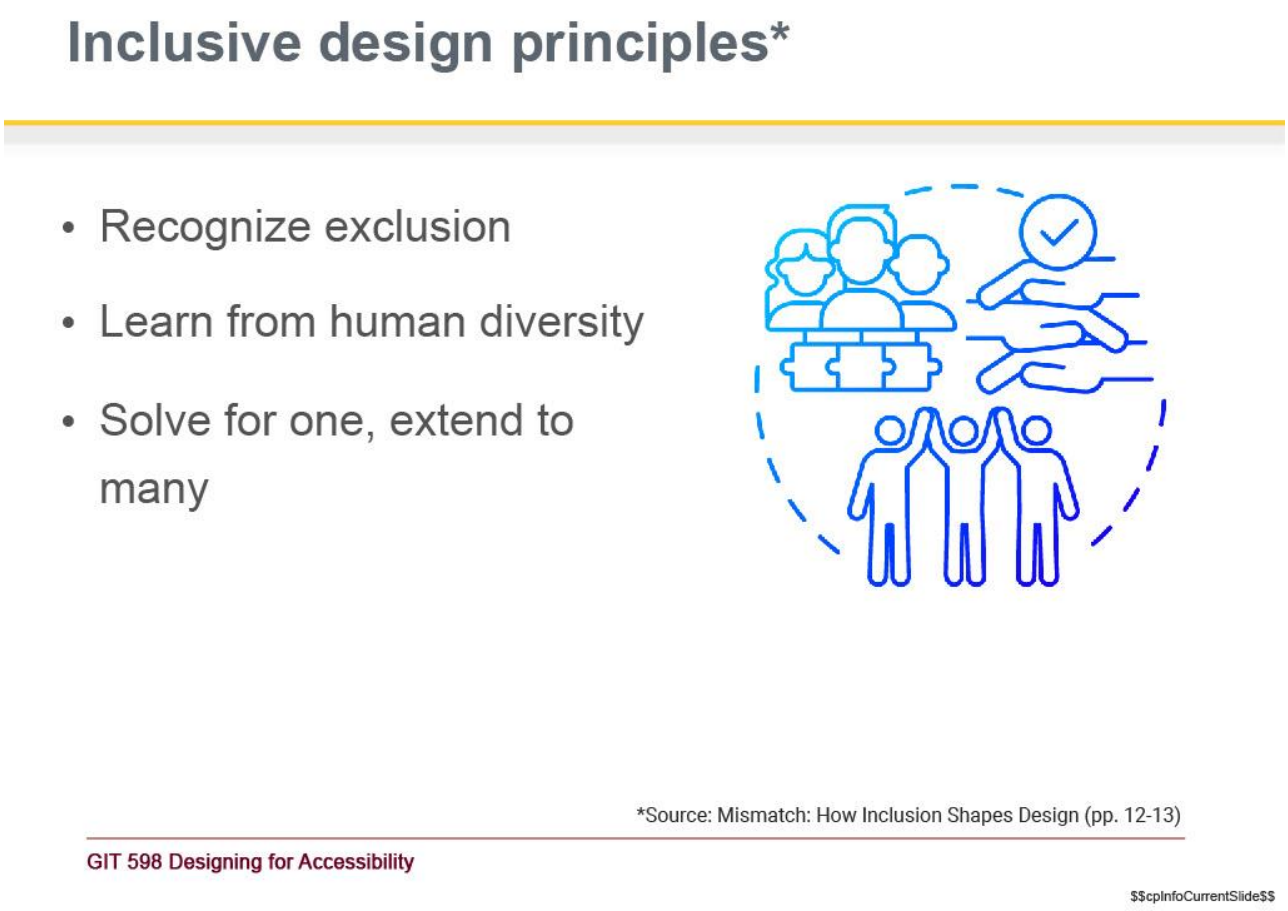
A great example of this is with online forms. Each form field should have a label, and instructions for that form should be worded clearly.

And finally, robust. This is ensuring the content not only can work with current technology but also with future technology. This includes assistive technologies such as screen readers.

For those who build websites, an obvious example is making your site responsive so that the content adapts to the different devices, such as smartphones, tablets, and desktops or laptops.

We'll dive deeper into the POUR principles in module four, when you'll be implementing them in an assessment.

Slide 13 - Inclusive design principles



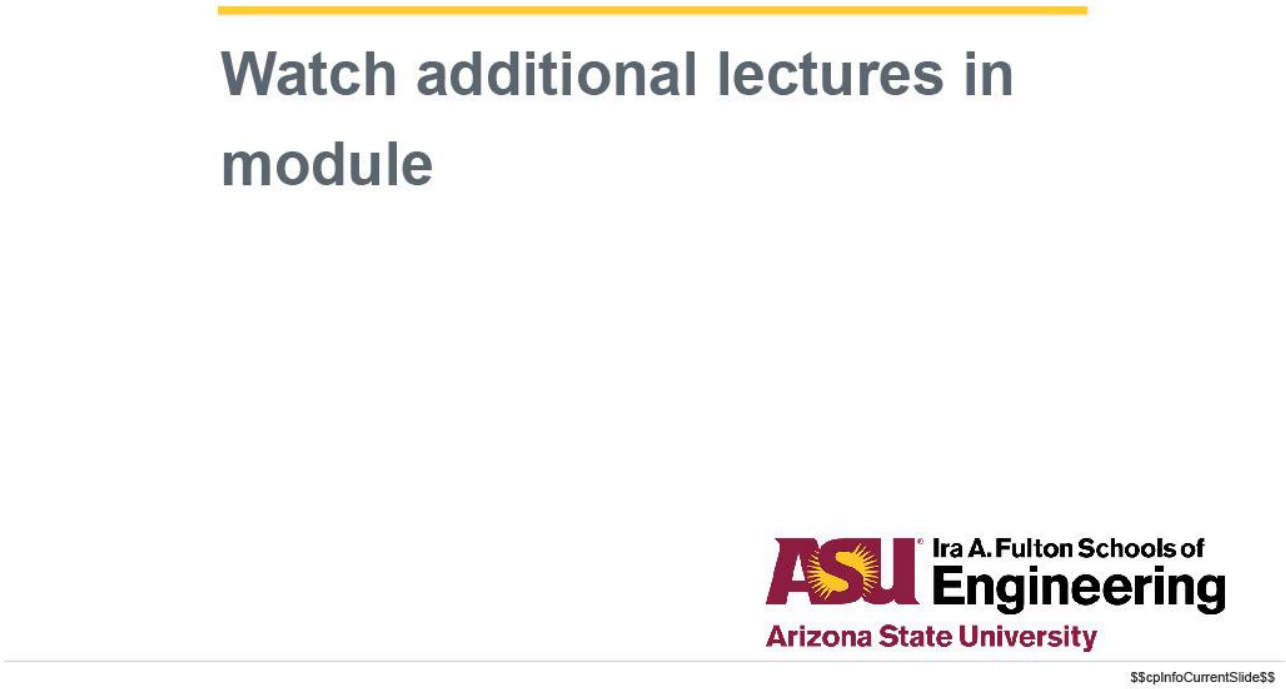
Kat Holmes, as well as others, gives us three principles to keep in mind when designing for inclusion, and these are to recognize exclusion, learn from human diversity, and realize that your solution for one can extend to many.

Being able to recognize exclusion is a large part of becoming an inclusive designer. That's one of the main goals I have for this course, giving you the tools to find where exclusion is happening and also giving you the tools to build solutions.

Design doesn't happen in a vacuum. What you design has an audience. Involve that audience whenever you can because solutions come from us as designers learning from human diversity.

If you know how people with disabilities, or even those without, adapt to product usage, you can minimize those adaptations by coming up with solutions. Or, in other words, remove or at least reduce barriers to participation.

Slide 14 - Watch additional lectures in module



That’s the end of this lecture. Please watch the additional lectures in this module. Thanks for watching!