




A COLLECTIVE  
 **VISION**  
FOR DENVER

A line drawing of a person's head in profile, facing right. Above the head, several small square icons are floating, connected by wavy lines. The icons include a question mark, a heart, a lightbulb, a gear, a sun, and a person with a heart.

# IMAGINE 2020 Speaker Series

## Part 1: Web Accessibility 101



## The IMAGINE 2020 Speaker Series is intended to:

- 1 Continue the conversations that began with IMAGINE 2020
- 2 Keep the Cultural Plan at the forefront of our thinking as a community
- 3 Inspire implementation by all of our cultural partners
- 4 Find opportunities for professional development to learn and grow collectively



## Share Your Experience With Us!

Post pictures, quotes or thoughts about this workshop using **#IMAGINE2020**



@denverarts



@denverarts



@denverartsvenues



## Coming Up

### **How to be an AntiRacist Organization**

August 3 | 1 p.m. – 2:30 p.m. MST | Register Online

### **Part 2: Keeping Your Website Accessible**

August 4 | 10 a.m. – 12 p.m. MST | Register Online



# OUR COLLECTIVE VISION



## 1 INTEGRATION

Increasing Art, Culture & Creativity in Daily Life

## 2 AMPLIFICATION

Amplifying Arts, Culture & Creativity to Residents & the World

## 3 ACCESSIBILITY

Achieving Access & Inclusivity to Arts, Culture & Creativity

## 4 LIFELONG LEARNING

Filling Our Lifetimes with Learning

## 5 LOCAL TALENT

Building Careers & Businesses by Nurturing Local Talent

## 6 ECONOMIC VITALITY

Fueling Our Economic Engine

## 7 COLLECTIVE LEADERSHIP

Leading Cultural Development to 2020 and Beyond



# Fen Slattery Clique Studios

# CLIQUE

## Web Accessibility 101

# Hi, I'm Fen Slattery!

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they/them

Accessibility Lead @ Clique Studios

IAAP member, CPACC certified

Co-org of A11yChi





# Agenda

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1. What is accessibility?
2. What is disability?
3. How do people with disabilities use the web?
4. Why would you make a website accessible?
5. How do we know if a website is accessible?

# Who are you?



Let's use the chat and poll features we have.  
Check out the “Chat” sidebar to the right!

ANSWER VIA POLL

# What is your role?

ANSWER VIA POLL

**Have you built  
something with  
accessibility in mind?**

ANSWER IN CHAT

**What comes to mind  
when you think  
about accessibility?**

# Agenda


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- 1. What is accessibility?
- 2. What is disability?
- 3. How do people with disabilities use the web?
- 4. Why would you make a website accessible?
- 5. How do we know if a website is accessible?

ACCESSIBILITY 101


# What is accessibility?





Accessibility is the design of products, environments, or services for people with disabilities.






Accessibility is the removal of barriers that prevent access to or interaction with a service.




# Accessibility is about inclusion.

What is accessibility?




Web accessibility is applying the principles and methodology of accessibility to the Internet!

What is accessibility?



Unfortunately, accessibility is  
rarely a priority in digital work.


What is accessibility?



As of Feb 2020 98.1% of the one million most popular websites had significant accessibility failures on their homepage!


Source: <https://webaim.org/projects/million/>

What is accessibility?



Lawsuits against inaccessible website are becoming more and more common.

What is accessibility?



# How do we break this trend of inaccessible websites?

What is accessibility?



ANSWER IN CHAT

**What questions do you  
have about  
accessibility?**



# Agenda

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1. What is accessibility?

→ 2. What is disability?

3. How do people with disabilities use the web?

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ACCESSIBILITY 101

# What is disability?

# The Numbers



26% of people have a disability.  
10% of people have a disability  
that significantly impacts how we  
use technology.

# The Numbers



Disability is more common in some populations, for example:

What is disability?

# The Numbers



2 in 5 adults 65 years or older  
have a disability in the US.

Source: CDC 2019 data.

What is disability?

# The Numbers



2 in 5 Non-Hispanic American  
Indians / Alaskan Natives have a  
disability.

Source: CDC 2019 data.

What is disability?

# Disability & Marginalization



And disability is a significant axis of marginalization, especially in the US. For example:

What is disability?



# Disability & Marginalization



People with a disability are less likely to complete a bachelor's degree or higher.

Source: US Bureau of Labor Statistics, 2019 data.

What is disability?



# Disability & Marginalization



Regardless of educational attainment, unemployment rates for people with disabilities are significantly higher than for those without a disability.

Source: US Bureau of Labor Statistics, 2019 data.

What is disability?

# Disability & Marginalization



Disability intersects with race, especially in regards to unemployment.

Source: US Bureau of Labor Statistics, 2019 data.

What is disability?

# Disability & Marginalization



32% of workers with a disability are employed part-time, compared to 17% for those without a disability.

Source: US Bureau of Labor Statistics, 2019 data.

What is disability?


# Disability & Marginalization



And overall, 80% of people with a disability are not in the labor force, compared with 30% of people without a disability.

Source: US Bureau of Labor Statistics, 2019 data.

What is disability?



But these statistics seem to frame disability as an economic problem, and imply that one's value is in the work they provide to society. How else can we view disability?

# Models of Disability

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There are roughly a dozen common ways to model and understand disability, so let's highlight the viewpoints that are most common in web accessibility work.



# Models of Disability

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The medical model says that disability is a problem of the person, which has been caused by a trauma, disease, or other health condition. Under this model, one aims to “cure” disability, and health care is the solution.

# Models of Disability

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The social model of disability views disability as the friction between an individual and their environment, caused by social factors. Under this model, one aims to change social conditions such that individuals don't experience this friction, and thus aren't disabled.




# Models of Disability

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The identity model of disability agrees that disability is socially constructed, but also claims disability as a positive identity. Disability isn't something to be “solved”, rather that society is what needs to be “solved.”

ANSWER IN CHAT

**What questions do you  
have about disability  
and marginalization?**



Something we can take from the medical model,  
is the individual cause of disability.

What is disability?

# Types of disability

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Permanent - A condition you expect to have for the rest of your life. These can be congenital, or as a result of a condition or traumatic event. For example, having only one arm or being Autistic.

# Types of disability


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Temporary - A condition from which you expect to recover, such as an illness or injury. For example, a broken arm, or cognitive fog due to pneumonia.

# Types of disability

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Situational - A context impacts the way you interact with society, that isn't otherwise present. For example, being distracted, or holding a child with one arm.



Okay neat! But when are we going to talk about the different actual disabilities people have that affect how they use the web?

(Spoiler alert: right now.)



# Categories of disability

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**Visual**



**Auditory**



**Motor**



**Cognitive**



**Seizure**

What is disability?



ANSWER IN CHAT

**What questions do you  
have about disability?**


# Agenda

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ACCESSIBILITY 101

# How do people with disabilities use the web?

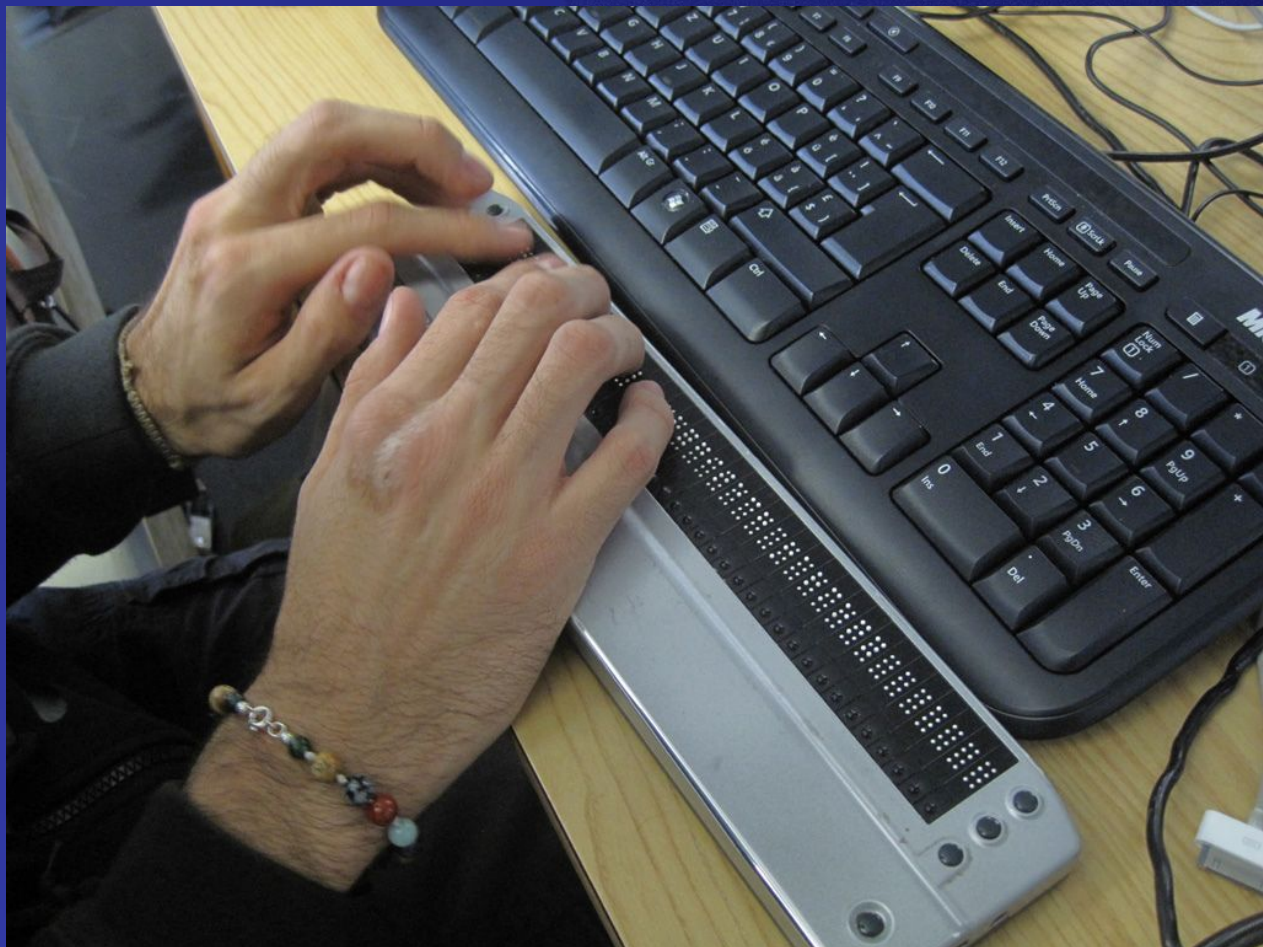


We use a huge variety of tech, and some of us don't use anything at all! Our proficiencies with assistive tech vary just as much as anyone else's. That is, don't assume that your disabled website visitors are pros!



Hardware assistive technology -  
magnifiers, large print and tactile  
keyboards, eye tracking systems,  
refreshable braille displays










# Your site needs to work with our hardware.

How do people with disabilities use the web?






# Software assistive technology - screen readers, magnifiers, speech recognition

How do people with disabilities use the web?



# Your site needs to work with our software.

How do people with disabilities use the web?




Changing settings, using other options -  
different fonts, text highlighting,  
keyboard only navigation, changing text  
spacing, high contrast mode, disabling  
motion


Aa Bb Cc Dd Ee  
Ff Gg Hh Ii Jj Kk  
Ll Mm Nn Oo Pp  
Qq Rr Ss Tt Uu  
Vv Ww Xx Yy Zz



Your site needs to respect and properly implement our settings.



Content itself - captions, content warnings, alternative text, transcripts, sign language



Your site needs content that  
meets our needs.

How do people with disabilities use the web?



ANSWER VIA CHAT

**What questions do you  
have about assistive  
technology?**




# Agenda

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ACCESSIBILITY 101


# Why make an accessible website?




There are plenty of reasons to build an accessible website. Some are stronger emotional arguments, and some are stronger financial arguments.



It's the right thing to do! We have  
an ethical duty to make our  
websites accessible.



Disability amplifies usability problems.  
Usability issues are far worse for people  
with disabilities, and small usability  
improvements can be a huge  
improvement for us.



Accessibility and usability correlate.  
Accessibility improvements benefit  
those with lower digital literacy,  
language learners, users of older  
technology.



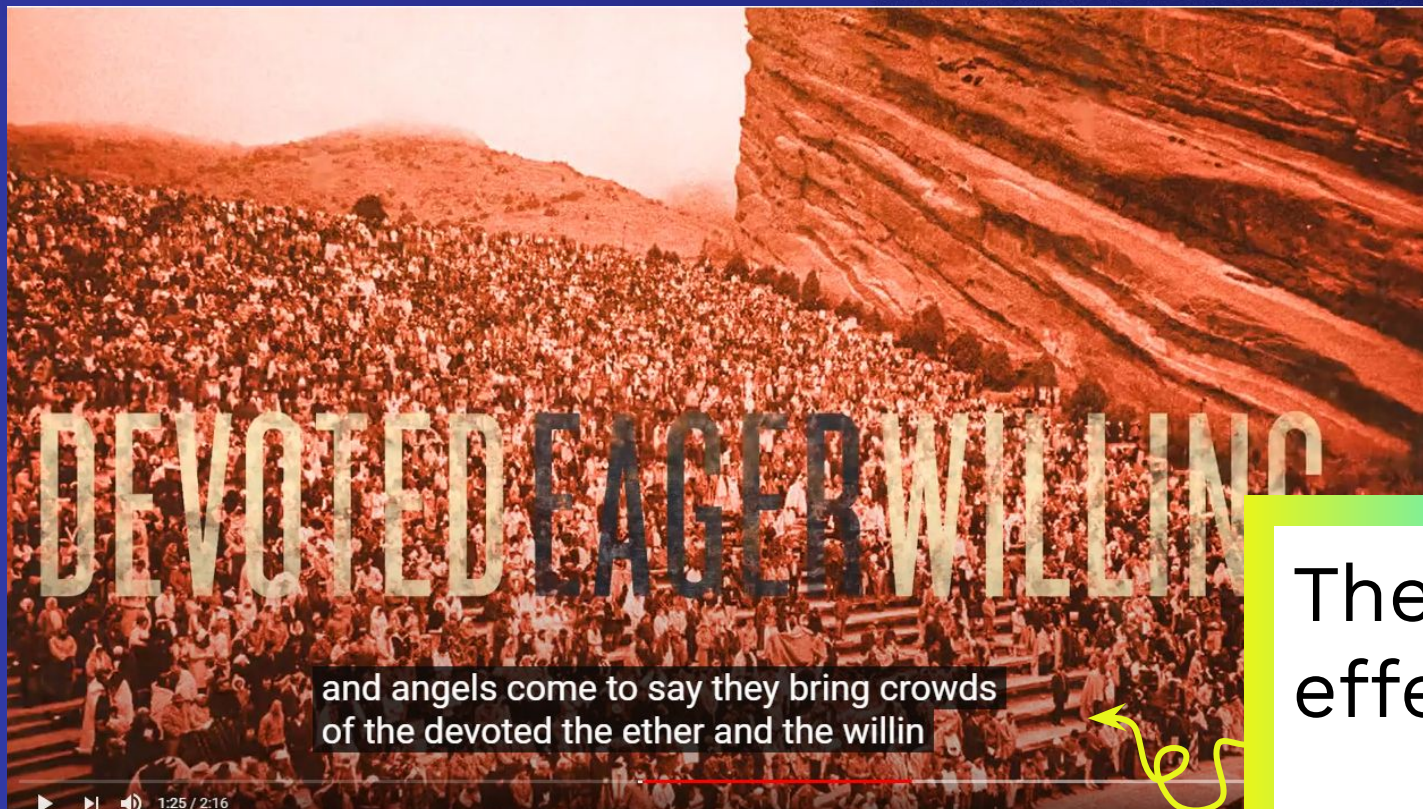
# Accessibility helps everyone!

Why make an accessible website?





The curb cut  
effect!




The curb cut effect!



# Accessibility is in line with your mission statement.

Why make an accessible website?






Accessibility means a wider  
market share, why exclude your  
customer base?




# Accessibility improves public perception.

Why make an accessible website?



Accessibility increases  
compatibility with a wide variety  
of devices and browsers.



# Accessibility improves your search results (SEO).


Why make an accessible website?





# Accessibility increases your eligibility for government funds.

Why make an accessible website?




# Accessibility is a human right protected by law.


Why make an accessible website?

ANSWER IN CHAT


**What questions do you  
have about why we  
build accessible sites?**




I'm scoping this talk to laws in the United States.  
Laws vary around the world, but the concept of  
compliance is similar.



The Rehabilitation Act of 1973, Section 508. The Rehabilitation Act prohibits discrimination on the basis of disability in programs conducted by Federal agencies, in programs receiving Federal financial assistance, in Federal employment, and in the employment practices of Federal contractors.




Section 508 of the Rehabilitation Act requires that information technology meet the guidelines of the Act.




The Americans with Disabilities Act of 1990 is a civil rights law that prohibits discrimination based on disability. It affords similar protections against discrimination as the Civil Rights Act of 1964, which made discrimination based on race, religion, sex, and national origin illegal.






How is compliance enforced?  
Withholding federal funds and lawsuits!

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- Netflix
  - Nike
  - Domino's Pizza
  - H&R Block
  - National Museum of Crime and Punishment


- Duke
- Harvard
- MIT
- Beyonce

Why make an accessible website?



On average in 2019, seven website accessibility lawsuits were filed per day. We saw a decrease in federal cases in March and April, but as of May they were immediately back up to 2019 level.

From <https://bit.ly/2X1pIIR> and <https://bit.ly/2Erhi79>




# Why do we have these laws? The disability rights movement.

Why make an accessible website?









Compliance is just a passing grade. Meeting current legal guidelines isn't future proof.

Why make an accessible website?



ANSWER IN CHAT

**What questions do you  
have about legal  
compliance?**


ACCESSIBILITY 101

# How do we know if a website is accessible?



# Test your designs and site with people with disabilities.

How do we know if a website is accessible?



Involve people with disabilities in  
the creation of your website! Hire  
people with disabilities!

How do we know if a website is accessible?

# The WCAG

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Web Content Accessibility Guidelines! An international set of rules developed by the W3C (World Wide Web Consortium).

How do we know if a website is accessible?

# The WCAG



Web Content Accessibility Guidelines! An international set of rules developed by the W3C (World Wide Web Consortium).

How do we know if a website is accessible?

# The WCAG

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The WCAG has three conformance levels:

- **A** - the absolute minimum
- **AA** - considered “good enough”
- **AAA** - “should meet”

How do we know if a website is accessible?



# The WCAG



The WCAG has four principles:

- **Perceivable** - can be perceived by the senses
- **Operable** - input methods are functional with a wide range of devices
- **Understandable** - content and interfaces that people can comprehend
- **Robust** - compatible with a broad range of software

How do we know if a website is accessible?

# The WCAG - Perceivable

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- Non-text content must have text alternatives.
- Audio and video must have captions or other alternatives, like transcripts.
- Content must be presentable in different ways without losing meaning.
- Make it easier for users to see and hear content.

How do we know if a website is accessible?

# The WCAG - Operable

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- Make all functionality available with just a keyboard, no mouse.
- Give users enough time to read and use content.
- Help users navigate and find content.
- Make it easier to use non-keyboard inputs.

How do we know if a website is accessible?

# The WCAG - Understandable

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- Make text readable and understandable.
- Make content appear and operate in predictable ways.
- Help users avoid and correct mistakes.

How do we know if a website is accessible?

# The WCAG - Robust

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- Write your code correctly!
- Maximize compatibility with current and future user tools.

How do we know if a website is accessible?

# The WCAG




How do we know that our site complies with the WCAG? Professional testing, using both automated tools and manual testing.



ANSWER IN CHAT

# What questions do you have about the WCAG?



Okay, but how do we weave accessibility into the process of making a website, and keep it accessible long-term?

How do we know if a website is accessible?



## Find out next week in **part 2: Keeping your website accessible!**

*Attendees will further develop their accessibility knowledge by learning the basics of managing an accessible website. This includes gathering institutional support, selecting vendors that can ensure accessibility, onboarding other team members to accessibility, content entry, and monitoring accessibility over time.*

How do we know if a website is accessible?

# Agenda

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**Thank you!**



ANSWER IN CHAT

# What questions do you have?