# What's inclusive design?

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#### World Health Organization defines disability

Disability is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives.

*Complex Phenomenon = Experience* 

# Different way of thinking

Instead of pushing away disabled people away from society we strive to adapt the environment to various abilities.

We build and adapt the environment: Ramps. Elevators. Accessible Vehicles. Sports.



Declan Farmer defends the puck from a competitor during the 2018 Paralympic Winter Games. USA took the gold the last three Paralympics.



Aaron "Wheelz" Fotheringham was the first wheelchair BMX athlete to stick a backflip in a wheelchair. Now he performs with Nitro Circus.

# How this relates to design.

As a designer, you have the power to choose who is excluded from your design.

## Exclusion

No one means to exclude someone.

Exclusion happens when we design something that only considers our own perspective.

We create mismatches between the user and the interaction.

# Identify exclusions in your design

 Ideally we want to include people with disabilities in our studies

 We can begin by identifying these mismatches by being empathetic towards different abilities.

### Let's consider

What exclusions could happen on a CTA "L" Station?



## **CTA Exclusions**

- Audio only announcements could exclude anyone deaf
- Trains that aren't even with the platform post problems.
- Packed trains exclude those with strollers or wheelchairs



Tactile Buttons with Braille

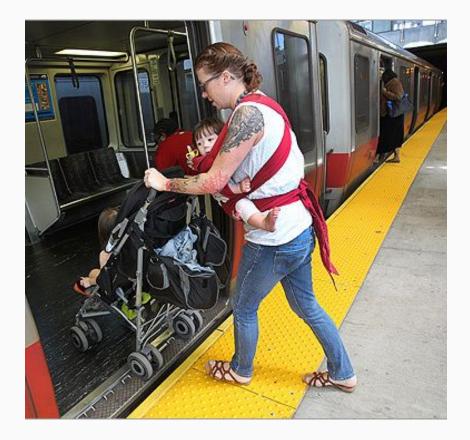
Audio Jack for additional assistance.

Clear instructions on screen



# Solve for the extreme, extend to others





#### Make a plan

In design we can be intentional about why we choose to exclude people and take responsibility for making it better over time.

- Engage the communities when possible.
- Remember it's okay to not be perfect.
- Be decisive on who is excluded.
- Be willing to change, and listen.

Where to start?

#### 1. Provide Text Alternatives for Images

This is especially critical if your image provides information a user needs.

#### 2. Use Headings to Create Structure

Headings provide landmarks for easier readability and screen reader users.

#### 3. Provide Headings and Summaries for Content

Having a brief summary of a large table of data, or content improves scanability.

#### 4. Provide Clear and Meaningful Links

Never label a link "click here" provide context to where the link goes, or what it does. Ex. "Continue reading this article"

#### 5. Provide a Strong Color Contrast

Small text must be a minimum 4.5:1 contrast ratio and large text must be a minimum of 3:1. There are many amazing tools/plugins to test colors.

#### 6. Do not use color alone to convey information

You can mark text green to show success, but also add an icon, shape or text.

#### 7. Text inputs should always have a label

Usability overall increases when inputs have clear labels, but this is especially critical for accessibility

#### 8. Underline your links!

Also related to #6. Overall creating a beautiful link underline to show something is clickable improves accessibility

#### 9. Limit movement and flashing of content

Moving or flashing content needs to be limited and can distract or harm users.

#### 10. Fonts, fonts, fonts!

People read fonts better when they are larger, and do not have similar looking letters.

This talk heavily influenced by Microsoft's Inclusive practice.

Kat Holmes who developed this practice at Microsoft wrote a wonderful book:

Mismatch: How Inclusion Shapes Design Kat Holmes



**Other Sources** 

https://ux.princeton.edu/accessibility/accessibility-checklist

https://drive.google.com/file/d/1GYIEqdOxq7RdKxG\_Od7GzrBh\_iYEfNBY/view

https://a11y-style-guide.com/style-guide/section-resources.html

https://www.microsoft.com/design/inclusive/

#### **Understanding Inclusive Design**

https://www.microsoft.com/design/inclusive/

https://inclusivedesignprinciples.org

**Quick Start Guide** 

https://accessibility.digital.gov/

**Testing Resources** 

https://css-tricks.com/accessibility-testing-tools/

#### Courses

https://www.lynda.com/Accessibility-tutorials/Foundations-U X-Accessibility/435008-2.html?

https://www.udacity.com/course/web-accessibility--ud891

https://dequeuniversity.com/

https://egghead.io/courses/start-building-accessible-web-ap plications-today

#### A11y Checklist

https://github.com/Heydon/inclusive-design-checklist

https://a11yproject.com/

#### **Great Inclusive Design**

https://accessibility.blog.gov.uk/2018/02/28/how-we ve-made-gov-uk-elements-even-more-accessible/

https://airbnb.design/designing-for-access/

#### Wins

https://www.xbox.com/en-US/xbox-one/accessories/ controllers/xbox-adaptive-controller

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# Thank you!

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