Rodrigo Sanchez

Let’s Take a Ride in the DeLorean: Building for Our Future Selves
This is my first talk at a conference.
My Contact Info

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Ice Breaker

Find someone near you that you don’t know, introduce yourself & share with them what accessibility means to you?
What is Accessibility (A11y)

“Accessibility refers to the design of products, devices, services, or environments for people who experience disabilities.”

https://en.wikipedia.org/wiki/Accessibility
100% of people will get older
Question 1

Who is here?
Are you a Product Manager
Are you a

Project Manager
Are you a Developer?
Are you a

Experience Designer
Are you a Designer?
Are you a Coach?
Or are you a

A role I didn’t mention
Question 2

Who here has ever used a screen reader or another assistive technology (AT)?
Screen Reader Demo

https://vimeo.com/11286974
Question 3

What level of experience do you see yourself at when it comes to implementing accessibility?
What Level of Accessibility

Completely new to accessibility
What Level of Accessibility

Know a little bit about accessibility
What Level of Accessibility

Trying to figure out how to implement accessibility
Have implemented accessibility but have gotten stuck
Read the title of this talk and wanted to go for a ride later
Hello again, I’m Rodrigo & pronouns I use to identify are He/Him.
I was born in Mexico City and raised in US.
I like to call myself a Full-Stack Designer
Who Am I

I’m an activist for the marginalized & disenfranchised
I’m able body except when I take my glasses off that changes.
I’ve had moments where I’ve been injured which have affected my mobility and dexterity.
Who Am I

But the most significant thing was realizing that society created an unconscious bias within me that made me not care.

And I wasn’t even aware of it.
What feeling or thoughts does this wheelchair invoke in you?
How I Got Here

Not the route most people want to take but it happens. Lawsuits!

http://www.lflegal.com/2013/06/weight-watchers-agreement/
How I Got Here

Web Content Accessibility Guidelines (WCAG 2.0)

Covers a wide range of recommendations for making Web content more accessible.

But not a legal requirement.

https://www.w3.org/WAI/standards-guidelines/wcag/
How I Got Here

The education system has failed us
Examples

Relearning something is very difficult so we will go slow.

And I am here to support you.

When you go back connect with others.
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

Green Background #4FA650 & White Text #FFFFFF
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

The green and white only passes large text AA standards
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

Green Background #4FA650 and Black Text #000000
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

The green and black passes normal and large text AA standards
Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

Pink Background #CF3251 and White Text #FFFFFF
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you’re gonna see some serious shit.”

The pink and white passes normal and large text AA standards
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

Grey Background #5E5E5E and Light Grey Text #7A7A7A
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

The grey and light grey does not pass any normal or large standards.
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

Grey Background #5E5E5E and Light Grey Text #E8E8E8
Color Contrast Example

Affects: Low Vision & Color Blindness

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”

The grey and white passes normal and large text AA standards
Affects: Low Vision & Color Blindness

Color isn’t enough to give someone context.
Color Example

Affects: Low Vision & Color Blindness

Required

Give context first add color later but make sure it passes contrast test
Affects: Blindness & Deafblindness

Lighter images with white text

“If my calculations are correct, when this baby hits 88 miles per hour you’re gonna see some serious shit.”
Decorative Images with Text Example

Affects: Blindness & Deafblindness

Darker images with white text

“If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit.”
Image Alt Text Example

Affects: Blindness & Deafblindness

```
<img src="back-to-future.png" alt="If my calculations are correct, when this baby hits 88 miles per hour... you're gonna see some serious shit."
```
Affects: Blindness & Deafblindness

<img src="back-to-future.png" alt="The Delorean shooting off white rays as Marty is about to hit 88 miles per hour DeLorean and travel in time">
Keyboarding Examples
Link Example

Affects: Blindness, Deafblindness & Mobility/Dexterity

Default link state (underlined & blue)
Link Example

Affects: Blindness, Deafblindness & Mobility/Dexterity

“Click Here” as a link does not give me any context about the link

To read more about WCAG Click Here
Affects: Blindness, Deafblindness & Mobility/Dexterity

“To read more about WCAG Click Here” gives actual context about the link making it more accessible.
Affects: Blindness, Deafblindness & Mobility/Dexterity

Adding an outline & changing text color with more contrast when focused makes it more accessible
Affects: Blindness, Deafblindness & Mobility/Dexterity

A form input field by default has an outline when focused on which helps with accessibility
Affects: Blindness, Deafblindness & Mobility/Dexterity

Error messaging needs to be clear.
Affects: Blindness & Deafblindness

A Vimeo video player with the play button outlined in blue to signify it is focused on makes it more accessible.
Affects: Blindness & Deafblindness

A link to download the transcript file of the audio gives people access to the content.
A video with captions can give more context to a person about what is happening in that video beyond the verbal dialog.

Affects: Blindness & Deafblindness
Affects: Blindness, Deafblindness & Mobility/Dexterity

Semantics matter A LOT.

<h1>Doc, about the future</h1>

Instead of

<div>Doc, about the future</div>
Frameworks Example

What does the code generated by the framework look like?
Web Accessibility Initiative – Accessible Rich Internet Applications

A web standard created to help make complex web apps accessible by allowing the ability to add different roles, states and other properties to make their behaviors easier to describe in meaningful HTML

https://www.w3.org/TR/aria-in-html/
Enlarging Text Example

Affects: Low Vision

Text size should be set to a relative measurement such as Relative Em (rem) instead of Pixel (px).

This allows browsers to enlarge text.
Zooming Example

Affects: Low Vision

Make sure your user interface (UI) design isn’t cluttered or very sparse as it can make it overwhelming and difficult to find content when zoomed in.
Implementing accessibility testing should not break your sprint.

<table>
<thead>
<tr>
<th>Overall sprint progress (Story Points)</th>
<th>2 days left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time elapsed</td>
<td>49 %</td>
</tr>
<tr>
<td>Work complete</td>
<td>53 %</td>
</tr>
<tr>
<td>Scope change</td>
<td>0%</td>
</tr>
<tr>
<td>Blocker</td>
<td>1</td>
</tr>
<tr>
<td>Flagged</td>
<td>1</td>
</tr>
</tbody>
</table>

Assignees in Sprint
Communicating

Start simple.

Find out who on the team and organization knows anything about accessibility.

Start having conversations to make it part of the process.
User Testing

Include people with disabilities aka be inclusive.

Know that testing will be different from how you have tested before.
Do you know if the tools you use to work are accessible to people with disabilities?
Helpful Tools

Add aXe automated testing extension to Chrome, Firefox, Github or npm for FREE

https://www.deque.com/axe
Helpful Tools

Download Colour Contrast Analyzer by The Paciello Group

For testing transparencies download Lea Verou’s color contrast tool
Helpful Tools

Start testing your own websites and apps with built-in or free tools like VoiceOver, TalkBack, NVDA, and Narrator.

Apple VoiceOver  Android Accessibility Suite  NVDA  Windows Narrator
Activity

Take a minute to try to find VoiceOver or Android Accessibility Suite/TalkBack on your smart phone.
What We Did at Weight Watchers

We started using Chrome Developer Tools to make changes to our live site on the fly.

How to open Developer in Chrome

Mac (command+option+i)

PC (F18 or control+shift+i)
What We Did at Weight Watchers

We started to reach out to orgs working with people with disabilities to better educate ourselves and other teams.
I started asking questions on Twitter
What We Did at Weight Watchers

We started building our own internal code snippet library taking our old code and updating it for future use by Devs.
What We Did at Weight Watchers

The dev team even created internal trainings on accessibility.
What We Did at Weight Watchers

This is going to take time and require some culture shifts.
Let’s Recap

• My journey to realizations about myself
• Unconscious bias towards people with disabilities
• Education systems failures that perpetuates the bias
• Find support and be supportive
• Examples
  • color contrast, semantic html & fixing broken innovation(s)
• Small things you can start with now using FREE tools
• Lastly, remember that we are all getting older and that bias will be part of our future selves if we don’t change it
Want to talk in the future?

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