Accessible Development

For All!

Hello! My name is Joni.

- Sr. Javascript front-end dev @ Georgetown

- Pseudo-avid Tweeter: @jonihalabi

- More-than-occasional runner

- Baker of a mean oatmeal chocolate chip cookie

P.S. All of these slides are online

https://talks/thatdevgirl.com/accessibility/

Accessible development is just as important as responsive development.

Users browse with more than just their eyes

- Screen readers
- Keyboard-only
- Braille readers

Accessibility Standards

- *WCAG: Web Content Accessibility Guidelines*

- *Section 508*

This talk is really about

~~Accessible development~~

Development!

```
<img src="kitten.jpg">
```

```
<img src="kitten.jpg" alt="A kitten wearing a fez because
```

What do we want?

Accessible websites!

When do we want it?

Right from the start!

We have our design and UX direction from the team.

We know what experience we want all users to have.

How do we start coding?

K.I.S.S.

```
<!DOCTYPE html>
<html>

<head>
  <title>This is an accessible website</title>
</head>

<body>
  <main>
    <h1>This is an accessible website!</h1>
  </main>
</body>

</html>
```

For example...

- Clean markup

- Use HTML5 tags

- Be **SEMANTIC**

- ARIA and role attributes are mostly used for support

Navigating your website

Landmarks are your (and your users') friends.

Landmarks allow users to navigate through the major sections of a site.

HTML 5 Tag	Role
`<header>`	banner
`<nav>`	navigation
`<main>`	main
`<aside>`	complementary
`<section>`	region
`<article>`	article
`<footer>`	contentinfo
`<form>`	form

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MARIAN WRIGHT EDELMAN

Janet Reno Women's Leadership Award recipient

LEAD Conference
Georgetown University, April 6-7, 2017

#GULEAD2017   McCourt School *of* Public Policy

Marian Wright Edelman Wins Inaugural Janet Reno Award

The McCourt School and the Center for Juvenile Justice Reform are delighted to announce that the recipient of the inaugural Janet Reno Women's Leadership Award is Marian Wright Edelman.

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Our mission is to teach our students to help design, analyze, and implement smart policies and put them into practice in the public, private, and nonprofit sectors, in the U.S. and around the world. The McCourt School flagship degree is the Master in Public Policy. McCourt also offers a Master in International Development Policy, a Master in Policy Management, an Executive Master in Policy Leadership, as well as other dual degree and executive programs.

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January 26, 2017

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There is a lot going on at McCourt- join us for an upcoming event.

March 30
DC DAY Event: Running for Political Office
Edward B. Bunn, S.J. Intercultural Center, 12:15 PM

March 31
New Directions in Performance Measurement and Management
Copley Hall, 9 AM

April 3
NAFTA Renegotiated - The Winners and Losers
Arent Fox LLP, 8:30 AM

April 6
2017 LEAD Conference
Georgetown Hotel & Conference Center, 8:30 AM

April 7
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Basic landmark example

```
<header>
  <h1>My site header!</h1>
</header>

<section>
  <p>All the things about my site</p>
</section>
```

Landmarks and Labels

A landmark isn't very useful if you can't tell one from another.

This is *not* OK:

```
<section>
  <p>All the things about my site</p>
</section>

<section>
  <p>More things about my site</p>
</section>
```

The fix!

```
<section aria-label="All the things">
  <p>All the things about my site</p>
</section>

<section aria-label="Even more things!">
  <p>More things about my site</p>
</section>
```

Don't forget about the little details

Random pieces of accessibility information we learned along the way.

Phone numbers are a giant pain

First and foremost, use a `tel:` link

```
<a href="tel:7035551212">(703) 555-1212</a>
```

(703) 555-1212

703.555.1212

A workaround

```
<span>7</span> <span>0</span> <span>3</span>
<span>5</span> <span>5</span> <span>5</span> -
<span>1</span> <span>2</span>
<span>1</span> <span>2</span>
```

A better solution

```
<a
  href="tel:7035551212"
  aria-label="7 0 3. 5 5 5. 1 2 1 2.">
  (703) 555-1212
</a>
```

Link `title` attribute does not do what you think it does

Screen readers are inconsistent with the `title`.

Semantic differences between `<b>` and `<strong>`

`<b>` is for stylistically offset text; i.e. keywords or anything typographically bold.

`<strong>` is for text with strong importance

Semantic differences between `<i>` and `<em>`

`<i>` is for text in an alternative voice; i.e. foreign words or technical terms.

`<em>` is for text that has stress emphasis; i.e. something you would pronounce differently.

Sadly, it doesn't really matter

- Screen readers could read text in these tags differently, but they don't. These tags are ignored unless the user specifies otherwise.

- No accessibility specifications require the elimination of `<b>` or `<i>`, but they need to be used correctly.

Accessible forms

- Logical structure

- Navigable with the keyboard

- Translates to correct HTML code

Labels

```
<label>
  <input placeholder="Your Name">
  Your Name
</label>
```

or

```
<label for="yourname">Your Name</label>
<input id="yourname" placeholder="Your Name">
```

Make sure your error notifications are correct and useful

First Name

Last Name

Email

SUBMIT

Signup

First Name [   ] ⊗ **Enter your firstname**

Last Name [   ] ⊗ **Enter your lastname**

Username [   ] ⊗ **Enter a username**

Password [   ] ⊗ **Provide a password**

Confirm Password [   ] ⊗ **Repeat your password**

Email Address [   ] ⊗ **Please enter a valid email address**

Which Looks Right ◯ 14/02/07 ◯ 02/14/07 ⊗ **Choose your preferred dateformat**

☐ I have read and accept the Terms of Use.

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Questions?

Thank you!

- Slides: https://talks.thatdevgirl.com/accessibility/

- Twitter: @jonihalabi

Accessibility guideline documentation

- W3C

- Section 508

- WCAG

- WAI-ARIA

- Roles Specification

- Siteimprove

References

- Accessibility and phone number formatting

- I thought title text improved accessibility

- Semantic differences between <b>, <strong>, <i>, and <em>

- Testing with a screen reader

- Accessibility: Bold and italic formatting in HTML