Let’s Be Real

A practical, developer guide to common accessibility challenges

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Reality Check

Developer Concerns

- Package management
- Code environment
- Workspaces
- Performance
- Optimizations
- Asset loading
- Server-side rendering
- CDN optimizations
- Collaboration tools
- Review tools
- Linting
- Formatting
- Coverage reports
- Lighthouse scores
- Examples
- Documentation
- Changelogs
- Version control
- Package publishing
- Deployments
- Unit tests
- Integration tests
- Visual regression tests
- API integration tests
- Continuous deployment
- Accessibility

Who We're Working With*

- Project Manager
- Content Manager
- BA
- Designer
- Developer
- QA

*probably

You have a team.
You are not alone.

P.S. if you don’t have a team and you are alone, you especially have no excuse…

You are not alone, but….

- Accessibility is not only *your* responsibility but developers need to be realistic about this.

- You’re the technical expert. You’re probably the one who makes accessible code a reality.

You do not require permission to create accessible code.

-Melanie Sumner

What do you do…

- If your hard drive failed?
- If your monitor wouldn’t turn on?
- If GitHub went down?
- If you didn’t have the basics you needed to complete your work?

Alt text: a cat with a look of panic on its face

Alt text: a baby with a scrunched up crying face

What do you do…

- When there is no keyboard navigation pattern in the spec?
- When you're reviewing code that works but isn't using semantic HTML?
- When you can tell the designs don't have enough contrast?

Alt text: a cartoon dog sitting on a chair and smiling, while the room around him is on fire.

Stop just accepting it.

You’re being set up for failure.

You deserve better.

Speak Up

- Gracefully educate your colleagues
  - “I noticed the keyboard specs were missing- would you like me to add them?”

- Set them up for success, too!
  - “Here’s where I get the common keyboard navigation patterns. They’re super useful!”

Be Persistent

https://www.youtube.com/watch?v=KxGRhd_iWuE

Focus, please!

Focus vs. Selection

- Focus
  - Focus is a pointer (think, mouse cursor)
  - There is only ONE point of focus at any time
  - Interactions happen at the point of focus

Focus vs. Selection (con't)

- Selection
  - Selection can be performed on specific elements
  - You could have a multi-select
  - When focus leaves, the selection persists

Simple Developer Rule

- `document.activeElement` must <u>always</u> have a value
  - The value can’t be null
  - The value can’t be the body element

- Maybe you can test for this somehow…

Overlays

- It might look like an overlay.
- It might act like an overlay.
- If I can use my keyboard to navigate to the options behind the overlay, guess what?
- It’s not an overlay.

Keyboard Navigation

N.I.H. is real

Photo of a giant wheel by Kosta Bratsos on Unsplash

Know what already exists

- Operating systems
- Assistive technology
- Browsers
- Common conventions

http://w3c.github.io/aria-practices/#keyboard

A11ynomicon

#noBlackMagic

Presentation Role

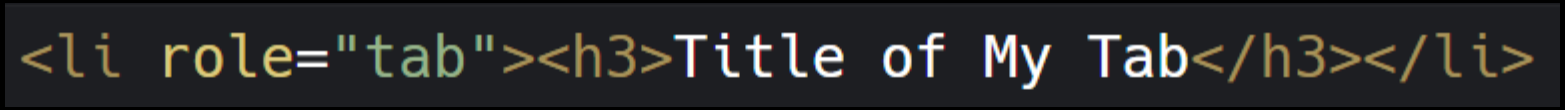
- WAI-ARIA requires browsers to automatically apply role="presentation" to some types of UI components.
- Role-based, not element based.
  - Even if you 'div', this is a gotcha!

Drumroll, please...

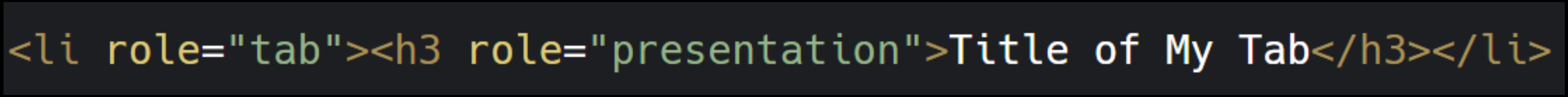
- button
- checkbox
- img
- math
- menuitemcheckbox
- menuitemradio
- option
- progressbar
- radio
- scrollbar
- separator
- slider
- switch
- tab

Wait, what?

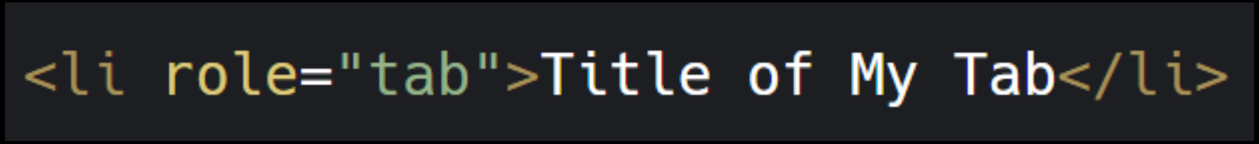
Insert Incantation Here



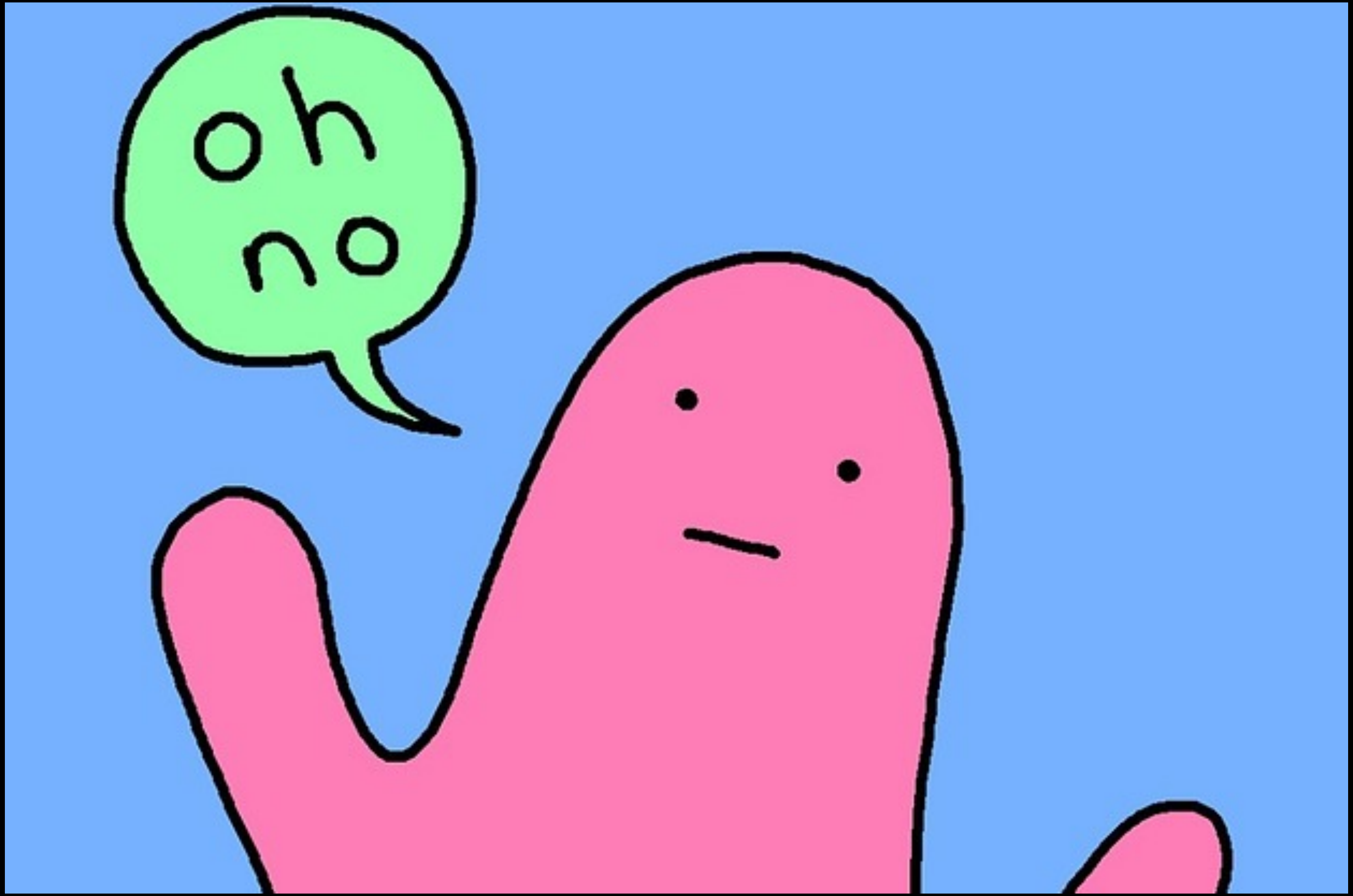
```
<li role="tab"><h3>Title of My Tab</h3></li>
```



```
<li role="tab"><h3 role="presentation">Title of My Tab</h3></li>
```



```
<li role="tab">Title of My Tab</li>
```


oh no

How to succeed

Mel’s list for developer success

#10

Accept that “Not Invented Here” syndrome is real

#9

Use a checklist.

THE NEW YORK TIMES BESTSELLER
THE CHECKLIST MANIFESTO
HOW TO GET THINGS RIGHT
ATUL GAWANDE
BESTSELLING AUTHOR OF BETTER AND COMPLICATIONS
PICADOR

#8

Be part of the conversation. Silence is not golden.

#7

Get to know the techniques…and the failures.

https://www.w3.org/TR/WCAG20-TECHS/

#6

Keyboard navigation must exist!

#5

Sometimes the answer isn’t more code, it’s a simpler UX.

#4

There might be several ways to do a thing. Keep an open mind.

#3

There is no substitute for knowing how assistive technology works.

#2

Use semantic HTML.

#1

Be Magnanimous.

Thank you!

I believe in you. You got this. Persistence, patience and passion will win. I'm proud of you. I want to tell you that incase no one else ever has. Don't beat yourself up. You are a work in progress which means you'll get there a little at a time, not all at once. Everything will be okay in the end. If it's not okay, it's not the end. You are much stronger than you think. A little progress each day adds up to big results. You are amazing. You are good enough. You are worth it.

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