

STARTING YOUR ACCESSIBILITY JOURNEY: A DEVELOPERS GUIDE



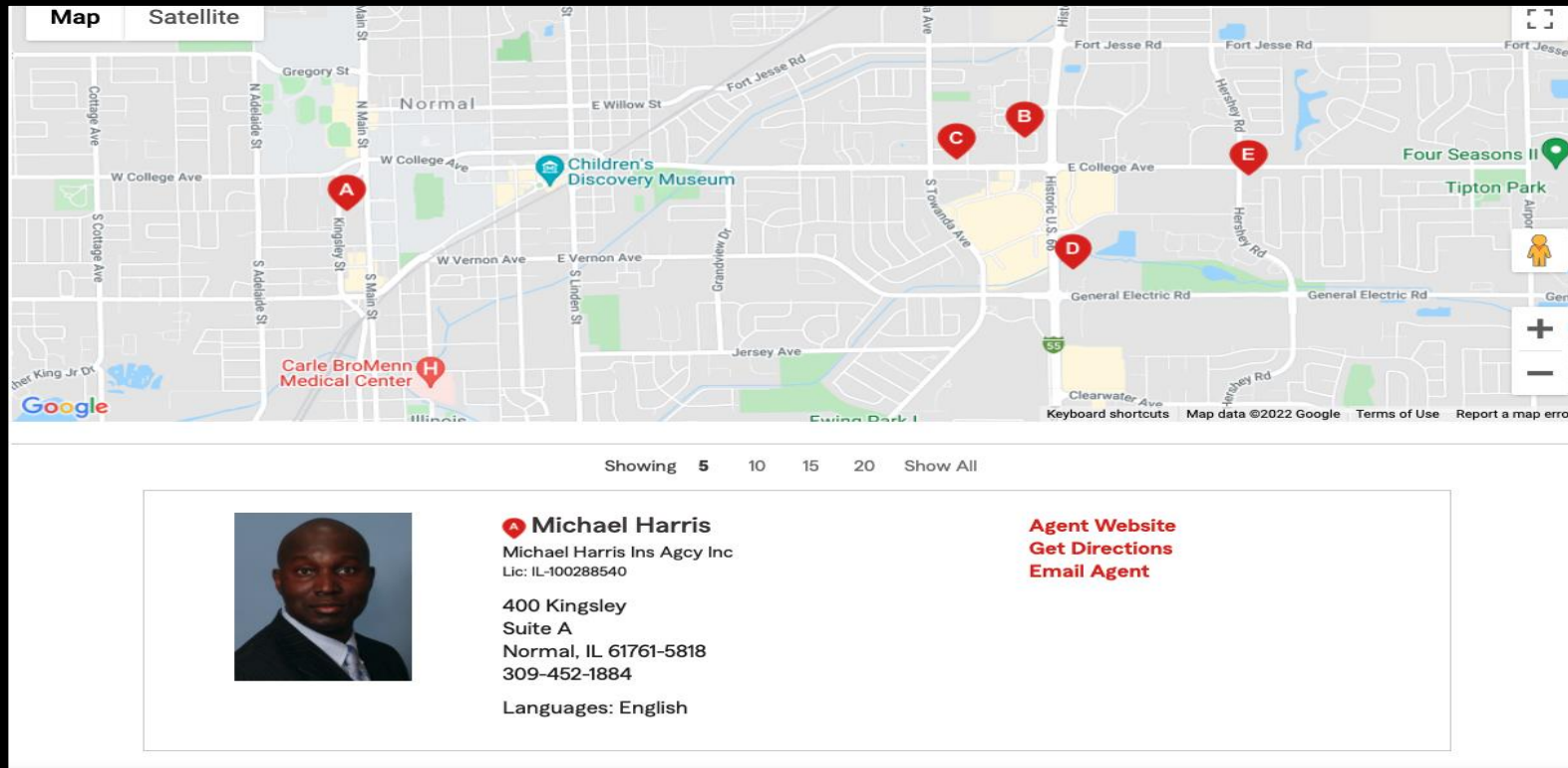
Introduction



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My Accessibility Journey

- I was a web developer at State Farm.
- I was assigned to a large project, by myself, to create an agent locator map module



My Accessibility Journey

- Finished it in record time!
 - Then reality set in very hard.....With this thing called Accessibility???
 - Guess how many accessibility issues were found?



256!!

My Accessibility Journey Began!

- I took the challenge to move ahead with accessibility and change my perspective on development all together!
- I met with folks on digital accessibility team with disabilities and began to understand how to use assistive technologies
- However, I ran into an issue where almost all developers run into “Where Do I Even Start?!?”



The Challenge

- Accessibility has a stigma that it is a time-consuming process that naturally slows everything down:
 - No way to automate
 - Impossible to learn it all
 - Manual testing is too slow
- Developers naturally want to be able to learn new things, but time is a key constraint in an agile environment
- How can we as accessibility advocates break through to developers and development teams in order to get them onboard and practicing accessibility?



Take The Small Wins!!!

Strategies for Developers

- Use Automation Daily
 - Accessibility Testing Libraries
 - Linting
- 10 Minutes a Day Challenge
- Test your content with Keyboard



Use Automation Daily

- Automated accessibility testing catches the lower third of accessibility issues while developers are developing content
- Two main types of automation:
 - Accessibility Testing Libraries
 - Axe-core
 - pA11y
 - Linting
 - Axe-Linter
 - ESLint

axe-core



Automated Accessibility Libraries

```
const AxeBuilder = require("axe-webdriverjs");
const selenium = require("selenium-webdriver");
const { By } = require("selenium-webdriver");
import "babel-polyfill"

describe("Cart page", () => {
  let axeDriver;
  let driver;

  beforeAll(async () => {
    driver = await new selenium.Builder().withCapabilities(selenium.Capabilities.chrome()).build();
    axeDriver = await new AxeBuilder(driver);
  });

  afterAll(async () => {
    await driver.quit();
  });

  test("is accessible", async () => {
    await driver.get("http://localhost:3000/cart");
    const results = await axeDriver.analyze();
    expect(results.violations.length).toBe(0);
  });
});
```


Accessibility Linting

```
TS Home.tsx
const path: string

src > compo (alias) const corgi: string
1  impo import corgi
2  impo
3  Axe Linter (image-alt): Ensures img elements have alternate text or a role of none or
4  cons presentation (dequeuniversity/image-alt)
5  <div> View Problem (XF8) No quick fixes available
6  <img src={corgi} className='center' />
7  </div>
8  )
9
10 export default Image
11
```

TERMINAL PROBLEMS 1 OUTPUT DEBUG CONSOLE

Filter (e.g. text, **/*.ts, !**/node_modules/**)

TS Image.tsx src/components 1

⊗ Axe Linter (image-alt): Ensures img elements have alternate text or a role of none or presentation (dequeuniversity/image-alt) [6, 5]

```
.eslintrc.json JS Checkbox.js x
1 import React, { Fragment } from 'react';
2
3 export const Checkbox = () => (
4   <Fragment>
5     <input id="promo" type="checkbox" />
6     <label>Receive promotional offers?</label>
7   </Fragment>
8 );
9
```

(property) JSX.IntrinsicElements.label: React.DetailedHTMLProps<React.LabelHTMLAttributes<HTMLLabelElement>, HTMLLabelElement>

Form label must have associated control eslint(jsex-a11y/label-has-for)

Quick Fix... Peek Problem

Ln 1, Col 26 Spaces: 2 UTF-8 LF JavaScript Prettier: ✓ 1

Automation Outcomes

- Learning accessibility in small chunks by issue
 - Help links
 - Suggested fixes
- Enforcing accessible best practices
 - Code reviews
- Enforce accessibility in CI/CD
 - Zero policy on issues

axe-core



10 Minutes A Day Challenge

- Once upon I met with a development team, and I asked “How much time do you all have to do any custom learn or research?”
 - The response: “We don’t even have 15 minutes!”
 - My response: “Ahh cool, so you have 10 minutes!”

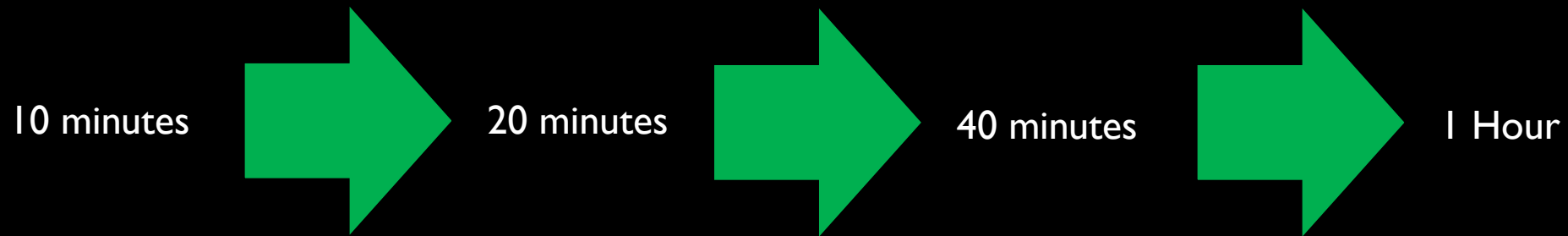


10 Minutes A Day Challenge

- As simple as the title, take 10 minutes a day for accessibility knowledge gathering
- This can be as simple as the following:
 - Taking an accessibility training course:
 - [W3 Accessibility Foundations \(Free\)](#)
 - [Udacity Web Accessibility \(Free\)](#)
 - [Deque University \(Paid Subscription\)](#)
 - Reading accessibility article:
 - [The A11y Project](#)
 - [A11y Weekly](#)
 - [WebAIM News Letter](#)

10 Minutes A Day Outcomes

- Builds a foundation of accessibility knowledge specific to developers needs
 - Not a blanket solution, it fits the developers need and wants
- Small chunks of learning turn into bigger chunks of learning overtime



Test With a Keyboard

- Manual accessibility testing can seem like a lot initially.
- Make it simple by introducing keyboard testing or “No Mouse Mondays”
- Make the keyboard tests simple initially
 - If its actionable can I focus it, and does it have focus indicator?
 - Does it work with enter and space?
- That’s it Initially! It can evolve over time to include the use of a screen reader

Outcomes From Keyboard Testing

- Builds a foundation for manually testing
 - Also enforces keyboard functionality for EVERYTHING in their application
 - Can enforce more semantic HTML over time
- Helps development teams add more manual checks over time
 - Screen Reader Testing
 - Zoom

Building For The Future

- Does doing these automatically get people on board with accessibility?
 - No, like with everything new it takes time to learn and master.
- It is about building a foundation in an ever-changing world of priorities and influence
- Using these strategies can help get developers down a path that I have traveled and has made me into what I am now. A developer that gives a damn, and that's what we need in this world.



Any Questions??