

# Making a Web Form Accessible

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## GETTING STARTED WITH KEYBOARD ACCESSIBILITY



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# Accessibility

Web accessibility means that people with disabilities can use the Web

W3C Web Accessibility Initiative



# Accessibility

Accessibility is the word used to describe whether a product ... can be used by people of all abilities.

BBC – My Web My Way





# More Users, More Success



# In This Course

**Our Case Study**

**Keyboard  
Accessibility**

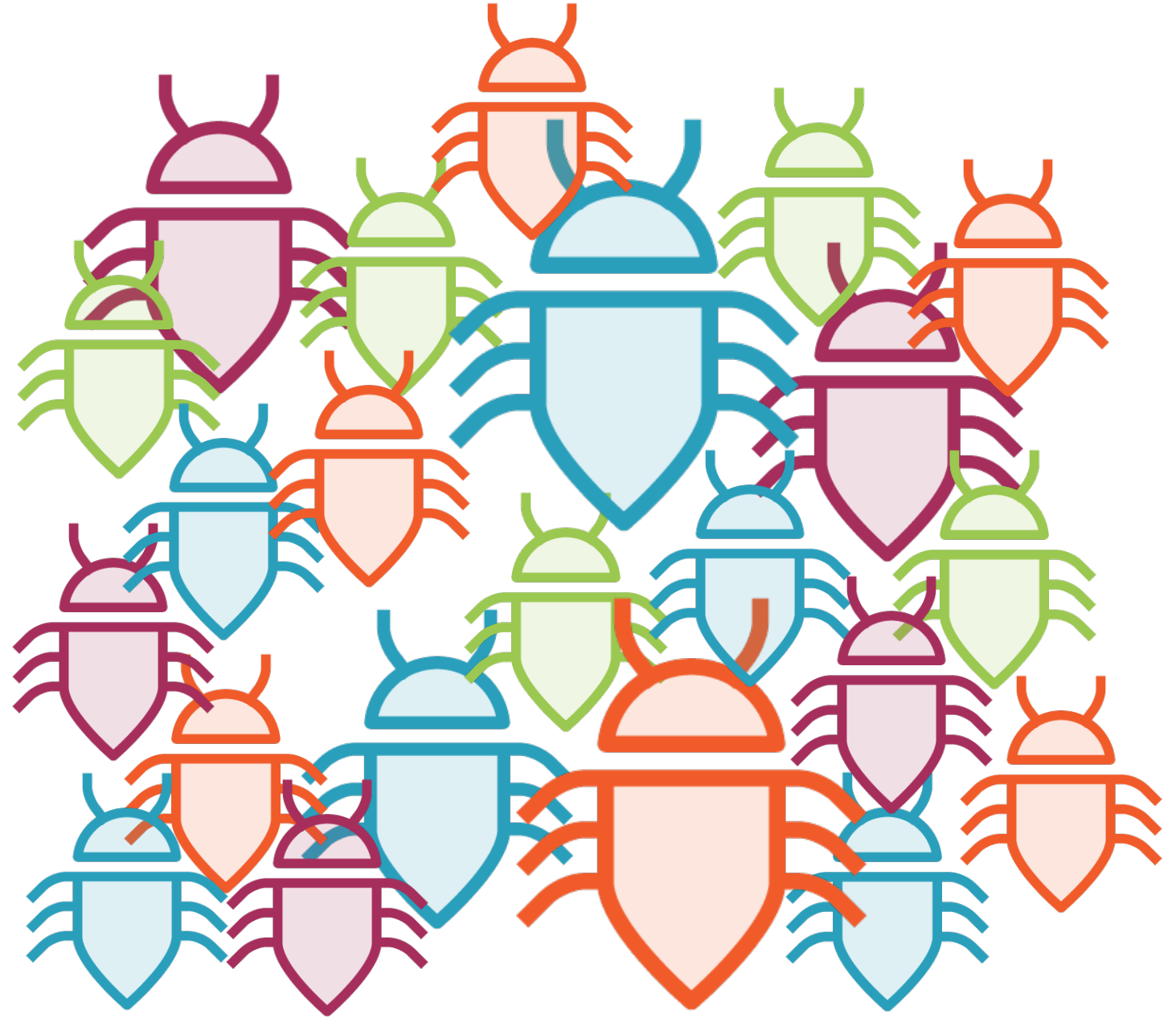
**Working with a  
Screen Reader**

**ARIA for Context**

**Form Validation**

**Final  
Improvements**

22 issues to resolve





Why Have We Got so Much Work to Do?





# Why Have We Got so Much Work to Do?



Why Have We Got so Much Work to Do?



Consider Accessibility from the Start



As developers, it's our responsibility to ensure that accessibility doesn't start in "phase two".

What Kind of Disabilities Should We  
Accommodate For?

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# Physical Disabilities

Various disabilities, long-term and temporary

Navigating websites using a keyboard alone

Lack of fine motor control – don't put buttons too close together





# Color Blindness

Difficulty to differentiate between colors

Shouldn't use color alone to convey information





# Deafness

**Need captions on videos**

**Useful to those in noisy environments too**



# Visual Disabilities

**Mild vision impairment to blindness**

**Need increased font size and magnifiers**

**Screen readers read out content and allow navigation with keyboard commands**

**We'll try out a screen reader later on**

# Web Content Accessibility Guidelines (WCAG)

Testable success  
criteria

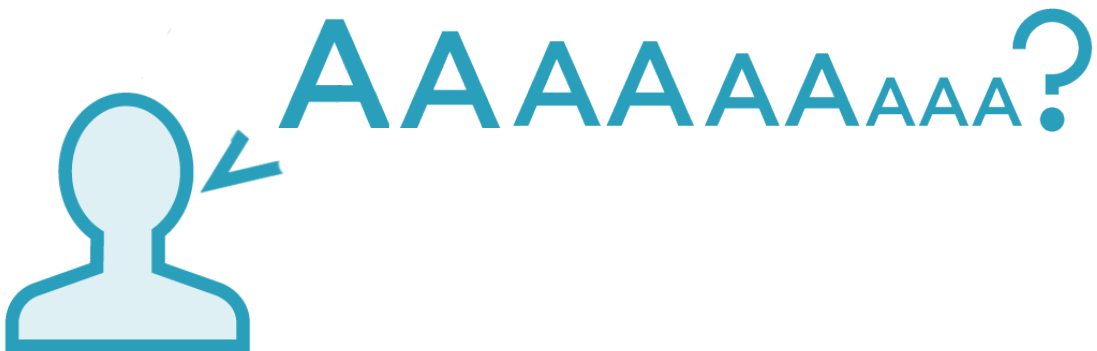


A, AA, AAA

Three levels of  
conformance

Each success  
criterion has an  
associated level

Typically, we try  
to ensure AA



# Four Principles



Perceivable



Operable



Understandable



Robust

You Can  
Still Use  
JavaScript!

**Common misconception that the site must work without JavaScript to meet WCAG**

**WCAG 2.0 says it's fine to rely on JavaScript, as long as the success criteria are still met**

“WCAG is a technical standard,  
not an introduction to  
accessibility.”





“WCAG is a technical standard,  
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accessibility.”



# Section 508



**Another set of guidelines from the U.S.**

**Software used by Federal Agencies must comply**

**Single level of compliance**

**Similar to the WCAG**

# Our Case Study

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Booking a Room at a Hotel

# Keyboard Accessibility



# Keyboard Navigation

Arrow keys to scroll up and down

Tab and Shift-Tab to navigate through controls

Enter to click a focused link or button

Space to check boxes

Issue 1  
Keyboard  
Focus



# WCAG 2.4.7



Focus Visible



Keyboard focus should be “highly visible” at all times

Keyboard-only users can easily get confused without it



# Styling Items That Have Focus

Leave the default  
outline, or just  
change the outline  
color

Try to make  
custom styling  
more than just a  
color change

Don't be subtle

The site looks a lot more polished and professional now

Issue 2

Focus  
Order



# WCAG 2.4.3



Level  
**AA**

Level  
**AAA**

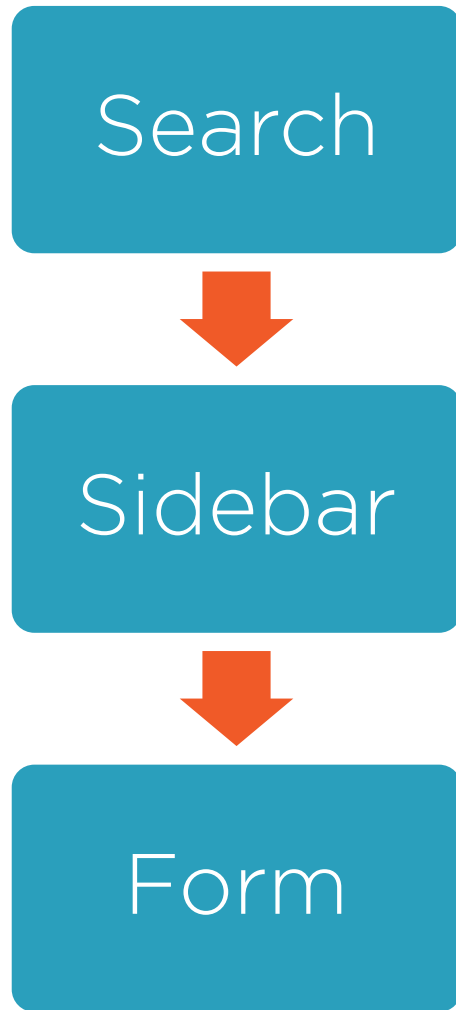
Focus Order



Components receive focus in a  
“meaningful” order

Focus shouldn't jump around unexpectedly

Consider those using a magnifier



By default, focus order just follows the structure of the underlying HTML

The tabindex  
attribute

**Set to a numerical value**

**That is the order that is followed**

Unless really, really necessary...

Don't set tabindex to  
control focus order

Issue 3  
Select Box  
Options





```
<select>
  <option>Aberdeen, Scotland</option>
  <option>Leeds, England</option>
  <option>Reading, England</option>
  <option>Glasgow, Scotland</option>
</select>
```

```
<select>
  <optgroup label="England">
    <option>Leeds</option>
    <option>Reading</option>
  </optgroup>
  <optgroup label="Scotland">
    <option>Aberdeen</option>
    <option>Glasgow</option>
  </optgroup>
</select>
```

# Module Review



What is  
Accessibility?



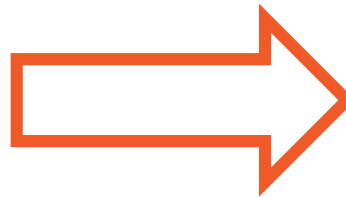
WCAG  
Guidelines



Case Study  
Site



Focus  
Visibility



Focus Order



Select  
Options

