

# Learn you some Accessibility for Great Good



The power of the Web is in its universality.

Access by everyone regardless of disability is an essential aspect.

*Tim Berners-Lee* (inventor of the World Wide Web)

The Web is **fundamentally designed to work for all people**, whatever their hardware, software, language, location, or ability. When the Web meets this goal, it is accessible to people with a diverse range of hearing, movement, sight, and cognitive ability.

*W3.org*

# What Accessibility needs can people have?

type	permanent	temporary	situational
 auditory	deaf	ear infection	on a loud train
 cognitive	learning difficulties	hangover	external stimulus
 physical	missing a limb	broken arm	carrying a baby
 speech	mute	sore throat	eating
 visual	blind	eye infection	sunny day

A photograph of a house with a wooden deck and ramp, illustrating accessibility. The house has light-colored horizontal siding and a white door. A wooden ramp leads up to the deck, which has a wooden railing. A person is standing on the deck near a potted plant. The background is slightly blurred.

# Accessibility is good for everyone (and it is good for business)

- There are 13.3 million disabled people in the UK.
- 7% of children are disabled
- 18% of working age adults are disabled
- 44% of pension age adults are disabled

Source: [Family Resources Survey 2015/16](#)

**Accessibility is not exclusionary.**

Your service must be accessible to everyone who needs it. If it isn't, you may be in breach of the Equality Act 2010.

This means you need to start thinking about how users might access and use your service before you design or build anything.

Accessibility isn't the responsibility of just one person. Everyone on your team is responsible for making sure your service is accessible.

More Hows and Whys on Accessibility on gov uk link below

<https://www.gov.uk/service-manual/helping-people-to-use-your-service/making-your-service-accessible-an-introduction>

A stylized illustration of the character Mulan from Disney's 'Mulan'. She is shown from the chest up, holding a large, blank, light-brown scroll horizontally across her body. She has a determined, slightly stern expression. The background is a soft, light yellow gradient.

**Let's get down to business**

# How we should "do" accessibility

- 1.
2. Follow a process (we have a spreadsheet based on WCAG AA scoring)
3. Start it early (don't try and layer it on after code has been created)
4. Repeat it often (each PR should be reviewed for accessibility)



# Terms

- **A11Y** Short for Accessibility (there are 11 letters between the A and Y)
- **WCAG** Web Content Accessibility Guidelines
- **ARIA** Accessible Rich Internet Applications
- **A-AAA** A scoring system, A is the easiest to achieve AAA is the hardest

# Common things to look out for

- Contrast
- Being able to navigate with a keyboard
- That copy is understandable without thought
- Things can be zoomed to 200%
- Images have descriptive or an empty alt attribute
- Headings are in hierarchical order
- Browser page titles are unique and descriptive
- Forms correctly labelled with "for" and "id" attributes
- Page has language defined through 'lang' attribute

# ARIA

Adds some semantic labels to interactive elements.

```
<p role="alert">I am an alert</p>
```

```
<h1 role="presentation">A nice visual header</h1>
```

# Tooling

- [WAVE Chrome Plugin](#)
- VoiceOver (on OS X)
- NVDA screen reader for Windows  
(<https://www.nvaccess.org/download/>)
- Accessibility color contrast test  
(<http://gmazzocato.altervista.org/colorwheel/wheel.php>)
- The Accessibility Engine for automated testing of HTML-based user interfaces. (<https://axe-core.org/>)
- Other tools on this website (<https://www.w3.org/WAI/ER/tools/>)



**Questions**

# Extra Reading

- [WCAG Checklist](#)
- [How people with disabilities use the web](#)
- [Microsoft's Inclusive Design Guide](#)
- [Great list of A11Y resources](#)
- [Gov.uk Accessibility requirements and how to at different phases ie Alpha, Beta, Live](#)