Introduction to digital accessibility

Digital Health

Acknowledgement of Country

I'd like to acknowledge the Traditional Owners of the lands on which we meet today, the Cammeraygal people of the Eora.

We pay our respects to Elders past and present, and extend that respect to all First Nations people present today.

Add some quick intros in chat:

- What's your current role?
- How long have you worked at your current organisation?

My name is Russ Weakley:

- 1995: Web Design and HTML
- 2003: Accessibility
- 2012: Component libraries and Design systems

Feel free interrupt and ask questions any time!

Resources provided?

A version of the slides and any other associated resources will be provided at the completion of the session.

What will we cover?

- Why should you care about accessibility?
- Let's meet some people
- Exercise: Who is responsible?
- <u>Discussions: Recruiting, preparing accessible scripts, conducting interviews</u>

Why should you care about accessibility?

Key reasons to care:

- 1. Legal responsibilities
- 2. Reputation
- 3. Improved user experience
- 4. Commercial incentives

1. Legal responsibilities

All public-facing digital products in Australia:

- Are required to comply with the <u>Disability Discrimination Act 1992</u>.
- Must conform to WCAG 2.0 AA via the Australian Human Rights Commission.

2. Reputation

Some examples

• 2019, USA: Guillermo Robles v. Domino's Pizza

2015, Australia: <u>Gisele Mesnage v. Coles</u>
2000, Australia: <u>Bruce Maguire v. SOCOG</u>

While there are financial risks associated with legal actions, the possible damage to an organisation's reputation is far more significant.

Domino's will likely forever be remembered as the brand that argued against the basic rights of a blind man - and lost.

Source

3. Improved user experience

Features intended for people with disabilities often **improve the user experience for many other groups**.

4. Commercial incentives

What does the term "disability" mean in Australia?

Persons are considered to have a disability if they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities.

Source

Do you know the **percentage of people** who have some form of disability in Australia?

Some stats

• Australia: <u>17.7% of the population</u>

• New Zealand: 24.3% of the population

• USA: <u>26% of the population</u>

These estimates are known to be low, as many people **don't identify as** having some form of disability.

Can any organisation afford to alienate potential customers?

So, why should you care?

Accessible digital services will:

- · Reduce the risk of legal or reputational damage
- Improve customer experience for everyone
- Have the potential to attract a larger audience
- · Position your organisation as an inclusive and caring brand

Let's meet some people

We're going to look at how a range of different people **interact with the digital world**.

- 1. People with no vision
- 2. People with low vision
- 3. People with reduced colour vision
- 4. People with limited movement
- 5. People with different learning or cognition

- 6. People with reduced or no hearing
- 7. People with affected speech

1. People with no vision

Characteristics:

- Blindness
- <u>Legally blind</u>

May use:

- A keyboard without a mouse
- Screen reader software (e.g. JAWS, NVDA, VoiceOver, Narrator)
- Refreshable braille devices (e.g. Stand-alone, Notetakers, Smart displays)

May need:

- The ability to navigate using the keyboard only
- Well structured content
- Alternatives for visual content
- Clearly labelled interactive components
- Accessible forms

2. People with low vision

Characteristics:

- Low visual clarity
- · Light and glare sensitivity
- Contrast sensitivity
- · Limited field of vision

May use:

- Screen magnifier software (e.g. ZoomText)
- Specific computer settings (e.g. Enlarge text sizes, magnify the display)
- Screen reader software (e.g. JAWS, NVDA, VoiceOver, Narrator)

May need:

- Good colour contrast
- Readable fonts
- The ability to magnify or zoom content
- The ability to customise the display

3. People with reduced colour vision

Characteristics:

- Typical (Trichromacy)
- Green-deficient (Deuteranomaly) and Green-Blind (Deuteranopia)
- Red-deficient (Protanomaly) and Red-Blind (Protanopia)
- Blue-deficient (*Tritanomaly*) and Blue-Blind (*Tritanopia*)
- Blue Cone Monochromacy (Achromatomaly)
- Monochromacy (Achromatopsia)

May need:

- Good colour contrast
- Information that is conveyed using methods other than colour-alone

4. People with limited movement

Characteristics:

Limited strength

- · Limited reach or range
- Limited dexterity

May use:

- Voice recognition software (e.g. Dragon NaturallySpeaking)
- Eye or head tracking software (e.g. Dynavox, Apple iOS)
- Head pointer
- Sip and puff
- Head switches
- Mouth stick

May need:

- · The ability to navigate using the keyboard only
- · Efficient methods of navigating content
- Enough time to complete tasks

5. People with different learning or cognition

Characteristics:

- Limited or no literacy/numeracy
- Limited understanding of complex language
- · Limited focus and/or memory
- · Limited planning and execution
- · Limited emotional control
- · Debilitating mental health conditions

May use:

- Spelling and grammar software (e.g. Grammarly, MS Word)
- Screen masking software (e.g. Read&Write)
- Text to speech (e.g. Speechify)
- Screen reader software (e.g. JAWS, NVDA, VoiceOver, Talkback, Narrator)

May need:

- Content that is clearly written and presented
- Navigation that is easy to understand
- · Help to avoid mistakes
- · Limited distractions
- Processes that do not rely on memory

6. People with reduced or no hearing

Characteristics:

- Muffling of speech and other sounds
- Difficulty understanding words, especially in crowds
- Total inability to hear

May need:

- Captions and transcripts
- Sign language translations
- A choice of communication methods

7. People with affected speech

Characteristics:

- Apraxia of speech (AOS)
- Cluttering (also called "tachyphemia")
- **Dysarthria**
- Stuttering
- Selective Mutism

May need:

- Additional time
- Allow people to finish at their own pace
- Optional methods of communication

Disabilities may be complex

- Disabilities are often spectrums
- Some people have multiple disabilities
- Some disabilities change over time
- Some disabilities change from day to day

Any of these people could be your customers today or tomorrow!

Any questions or comments?

Exercise:Who is responsible?

We're now going to look at a **who is responsible for different** accessibility features in FigJam.

Questions/discussion?