



# Meeting Conflicting Access Needs

John Slatin AccessU 2022

**Julie Grundy**

Senior Consultant

 stringy

**Andrew Arch**

Principal Consultant

 amja

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# The clickable card saga of 2021



# Clickable cards

## About the Census



### What is the Census?

Every five years, the Australian Bureau of Statistics counts every person and household in Australia. The Census form asks questions like your age, country of birth, religion, ancestry, language used at home, work and education.



### When to complete the Census

The next Census is Tuesday 10 August 2021. You can complete your Census as soon as you receive your instructions, if you know where you'll be on Census night.



### Why you should complete

Information from the Census helps governments, businesses and not for profit organisations across the country make important decisions. It informs planning for schools, healthcare, transport and infrastructure.



### Keeping the community safe during COVID-19

The safety of the community and our staff is our highest priority. We're actively adapting our approach to suit local circumstances.



# Original card markup

```
<a class="au-card--clickable" href="public/supporters/2021_CS.html">
  <div class="au-card__inner">
    <h3 class="au-card__title">Census Supporters</h3>
    <div class="au-card__description">
      <p>Information and resources about the Census Test and ways to help
people who might have questions.</p>
    </div>
  </div>
  <div class="au-card__footer"><span class="au-cta-link"></span></div>
</a>
```



# Recommended card markup

```
<div class="card">
  <h2>
    <a class="primary" href="public/supporters/2021_CS.html">Census
    Supporters</a>
  </h2>
  <div class="text">
    <p>Information and resources about the Census Test and ways to help
    people who might have questions.</p>
    <div class="au-card__footer"><span class="au-cta-link"></span></div>
  </div>
```

Plus CSS pseudo elements to extend hit target over `div.card`

<https://inclusive-components.design/cards/>



# Usability testing

- Client wanted everything tested by many different users
- In particular we found issues for:
  - Low vision user with ZoomText on Windows
  - Dyslexic user with Speak on iPhone



# Video transcript part 1

A zoomed in view of a website with high contrast styles. Our user's cursor is large and yellow. He tries to use the cursor to select the text of a heading, then continues to scroll.

"So that's a big thing, I can't even highlight this top heading. So that would be a big thing for me. Reading this would make me very fatigued, um...

And then these census support, work for... I guess keeping your community safe, opportunities, and probably why it happens. Information and resources about the census and then we go..."

He attempts to select a different heading, which works.

"Oh ok, I can highlight this heading which is good...."

He tries to select one of the card-style links and it doesn't work.

Can I highlight this? No. What if I do that?"



# Video transcript part 2

He is able to drag the selection from the heading over the card text, which selects some but not all of the cards.

"Yeah like some websites that, it's kind of like a weird thing you can do. If you can highlight one part you can kind of drag it along, but also that means if I wanted to listen to this middle paragraph I would have to listen to the top and that..."

He indicates the second and third cards.

"... rather than the bits and pieces that I want to."

Andrew: "Right."





Back to the team



# Back to the code

Solution must:

- Keep the large clickable area
- Sound useful in a screen reader
- Have selectable text



# Original article

"It's not highly probable the user would choose to select text from a card/teaser when they have access to the full content to which the card/teaser is pointing. But it may be disconcerting to them to find they *cannot* select the text."

<https://inclusive-components.design/cards/>



# New card method

Clickable card demo (redundant click method)

Intopia PRO + Follow

Settings Sign Up Log In

HTML CSS JS

```
1 const cards =
2 document.querySelectorAll('.card');
3 Array.prototype.forEach.call(cards, card
4 => {
5   card.style.cursor = 'pointer';
6   let down, up, link =
7   card.querySelector('h2 a');
8   card.onmousedown = () => down = +new
9   Date();
10  card.onmouseup = () => {
11    up = +new Date();
12    if ((up - down) < 200) {
13      link.click();
14    }
15  }
16 });
```

## Accessible card demo

300 x 100  
Powered by HTML.COM

### Streets of Rage 4 Review

Still raging 26 years later, Streets of Rage 4 is a faithful revival of the classic arcade beat-'em-ups. Move from left to right, punch enemies, destroy objects for points, health, and weapon pickups, punch a few more enemies, and repeat. It's simple and unadventurous, and while it expands modestly on combat with a few new skills to master, Streets of Rage 4 definitely prioritises nostalgia over any kind of big modern reinvention...

Author: [IGN](#)

300 x 100  
Powered by HTML.COM

### Star Wars Jedi: Fallen Order Review

Jedi: Fallen Order pushes all the right buttons for a Star Wars action-adventure. It's a genre remix that samples the combat and exploration of a lightened-up Dark Souls and the action and energy of Uncharted, and that works out to be a great fit for the return of the playable Jedi...

Author: [IGN](#)

300 x 100  
Powered by HTML.COM

### Animal Crossing: New Horizons Review

There are so many different types of Animal Crossing players, and yet Animal Crossing: New Horizons manages to improve upon the virtual lives of each player type that I can think of. For The Collector, there's a near-bottomless bounty of bugs, fish, and furniture to gather; for The Designer, there are new tools and few limits to what you can craft and customize...

Author: [IGN](#)

For more details read [Heydon Pickering's card example in Inclusive Components](#)

<https://codepen.io/intopia/pen/oNYwOpL>

# WCAG isn't enough

- Other situations
  - Menu systems and user expectations
  - Multiple fonts and colours
  - Speech recognition vs speech impairment



No assumptions



How to meet multiple needs?



# Responsive design

- Any screen size





# Responsive design

- Any screen size
- Any orientation (even for native apps)



# Responsive design

- Any screen size
- Any orientation (even for native apps)
- Mouse, touch, keyboard



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<https://web.dev/learn/design/>



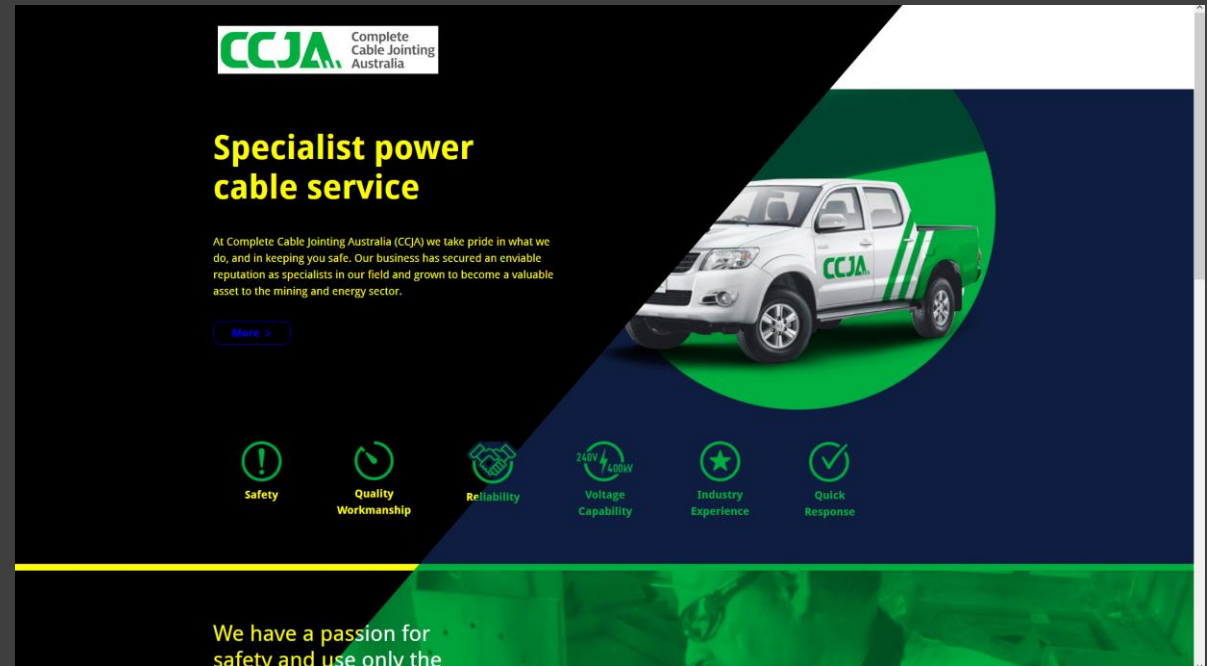
# Respect user settings

- Basic WCAG contrast



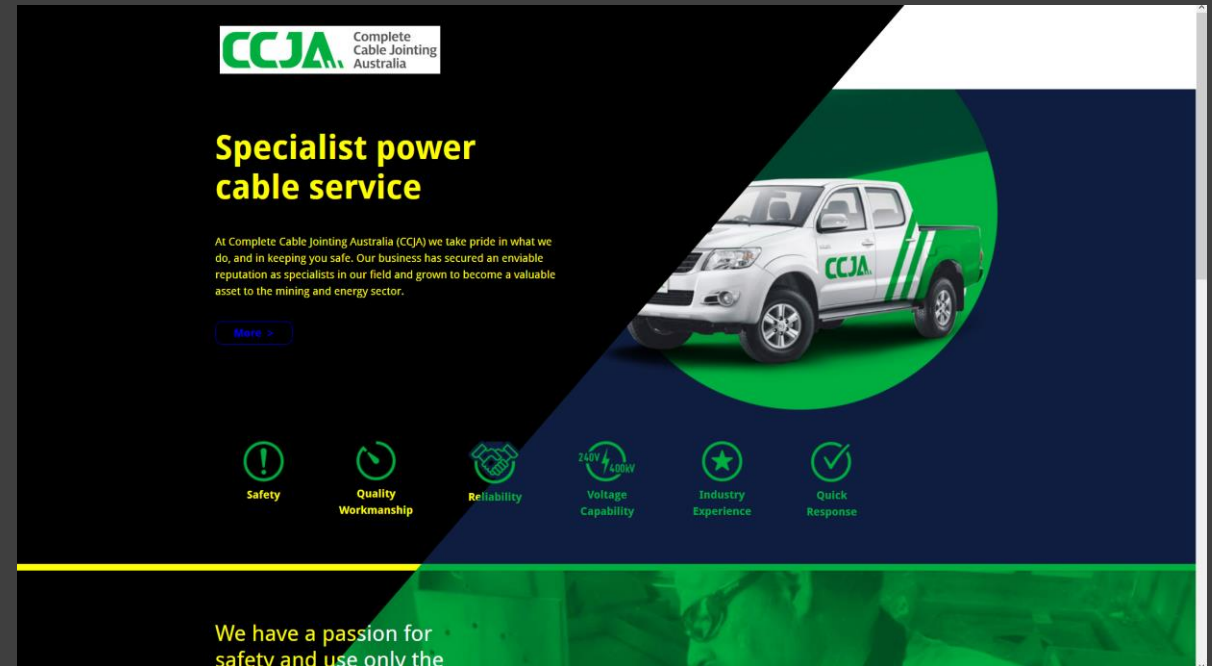
# Respect user settings

- Basic WCAG contrast
- Test in high contrast themes



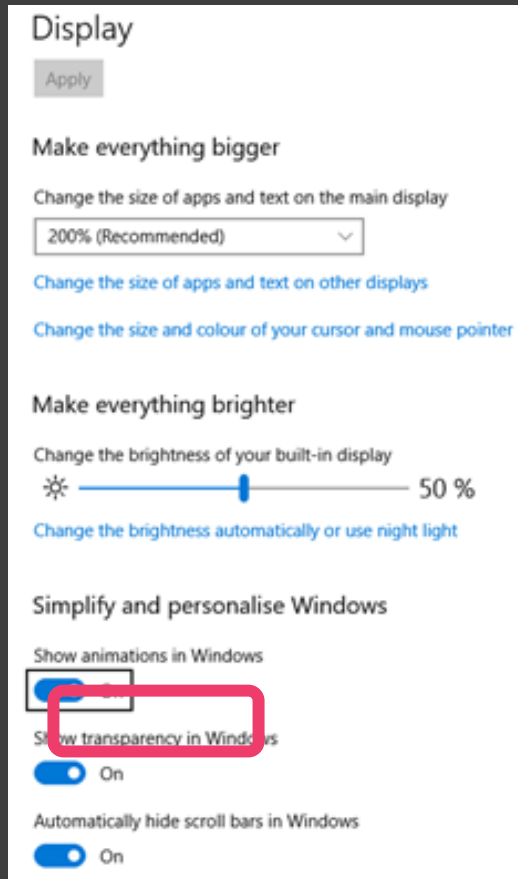
# Respect user settings

- Basic WCAG contrast
- Test in high contrast themes
- Dark mode?

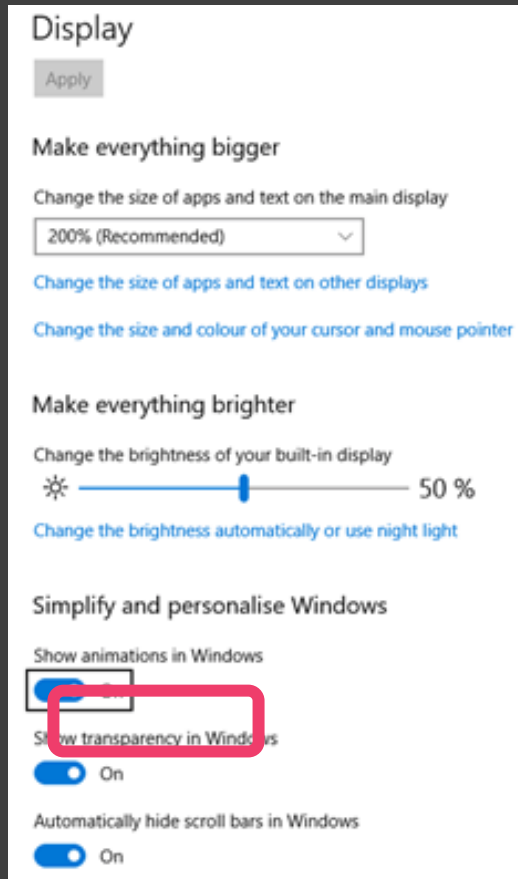


# Respect user settings

- Reduced motion



# Respect user settings

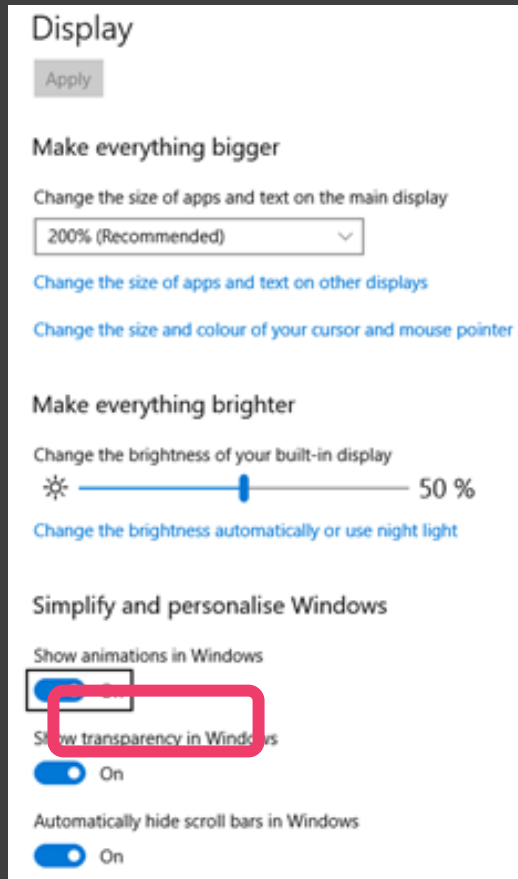


- Reduced motion
- Every platform





# Respect user settings



- Reduced motion
- Every platform
- CSS and JavaScript media queries



# Allow multiple inputs/outputs



<https://mobile.twitter.com/ChanceyFleet/status/1460023280983842821>

Where to from here?



# WCAG extras

Check AAA and upcoming criteria when designing:

- 1.4.7 Low or No Background Audio
- 2.4.9 Link Purpose (Link Only)
- 2.4.10 Section Headings
- 2.5.5 Target Size
- [3.2.6 Consistent Help](#) (version 2.2)



# WCAG extras

Check AAA and upcoming criteria when building:

- 2.3.3 Animation From Interactions
- 2.5.6 Concurrent Input Mechanisms
- [2.4.12 Focus Appearance \(Enhanced\)](#) (version 2.2)
- [2.5.7 Dragging Movements](#) (version 2.2)



# WCAG extras

Check the taskforces:

- Cognitive and Learning Disabilities
- Low Vision
- Pronunciation

[WAI taskforces](#)



# Research the tools

- What happens when multiple tools are running?
- [Project Euphonia](#) and [Common Voice](#)
- Emerging tech like VR and AR



# Learn from users

- Usability testing





# Learn from users

- Usability testing
- Chat online with people with disabilities



# Learn from users

- Usability testing
- Chat online with people with disabilities
- Then do more usability testing



# Let's chat



Remember there is more to accessibility for users than just meeting WCAG!

- Julie: [julie@intopia.digital](mailto:julie@intopia.digital)
- Andrew: [andrew@intopia.digital](mailto:andrew@intopia.digital)

 @Intopia

 Intopia

 [intopia.digital](http://intopia.digital)

 [hello@intopia.digital](mailto:hello@intopia.digital)