User stories for accessibility

Accessibility in an agile world?

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creating an inclusive digital world

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What is Agile?

Agile is …

A development methodology that is

- Iterative

- Incremental

- Evolutionary

Rather than specification driven with a long development phase that thinks about the user at the end

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Agile is ...

The *Manifesto for Agile Software Development* values

- **Individuals and Interactions** over processes and tools

- **Working Software** over comprehensive documentation

- **Customer Collaboration** over contract negotiation

- **Responding to Change** over following a plan

Leading to opportunities to incorporate, and adjust to, user needs as they are discovered
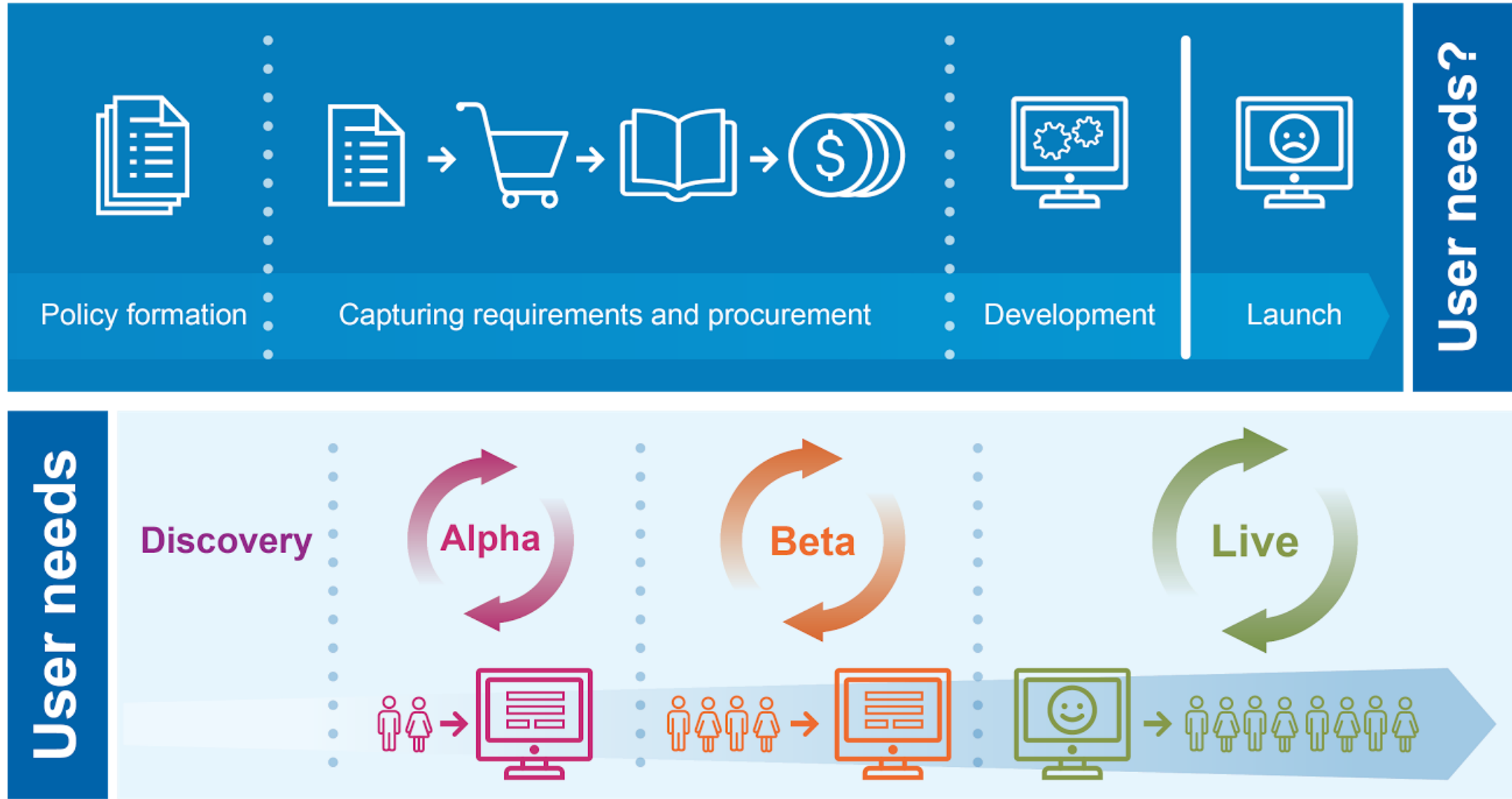
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Image courtesy of @DTA

Agile is …

… a collection of

values, principles, behaviours, and practices

enabling teams to build services iteratively, delivering early and often.

Agile is a **state of mind** rather than a process to be followed

Courtesy @RodBMolina

How does Agile work?
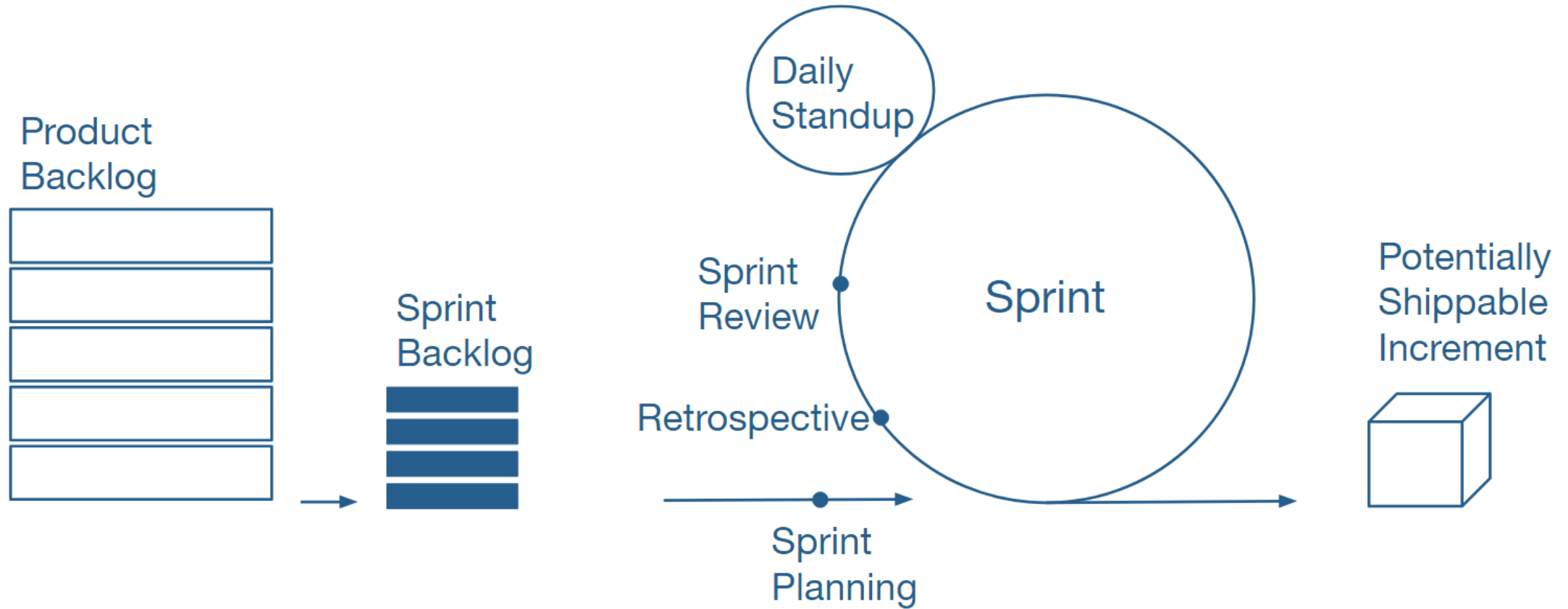
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Agile operating model

Image courtesy of @DTA and @RodMolina

Agile workflow

Agile often involves a series of iterations or sprints

Work for each sprint is defined in a 'user story' expressed from the perspective of an end-user goal:

as a [**role / person**]
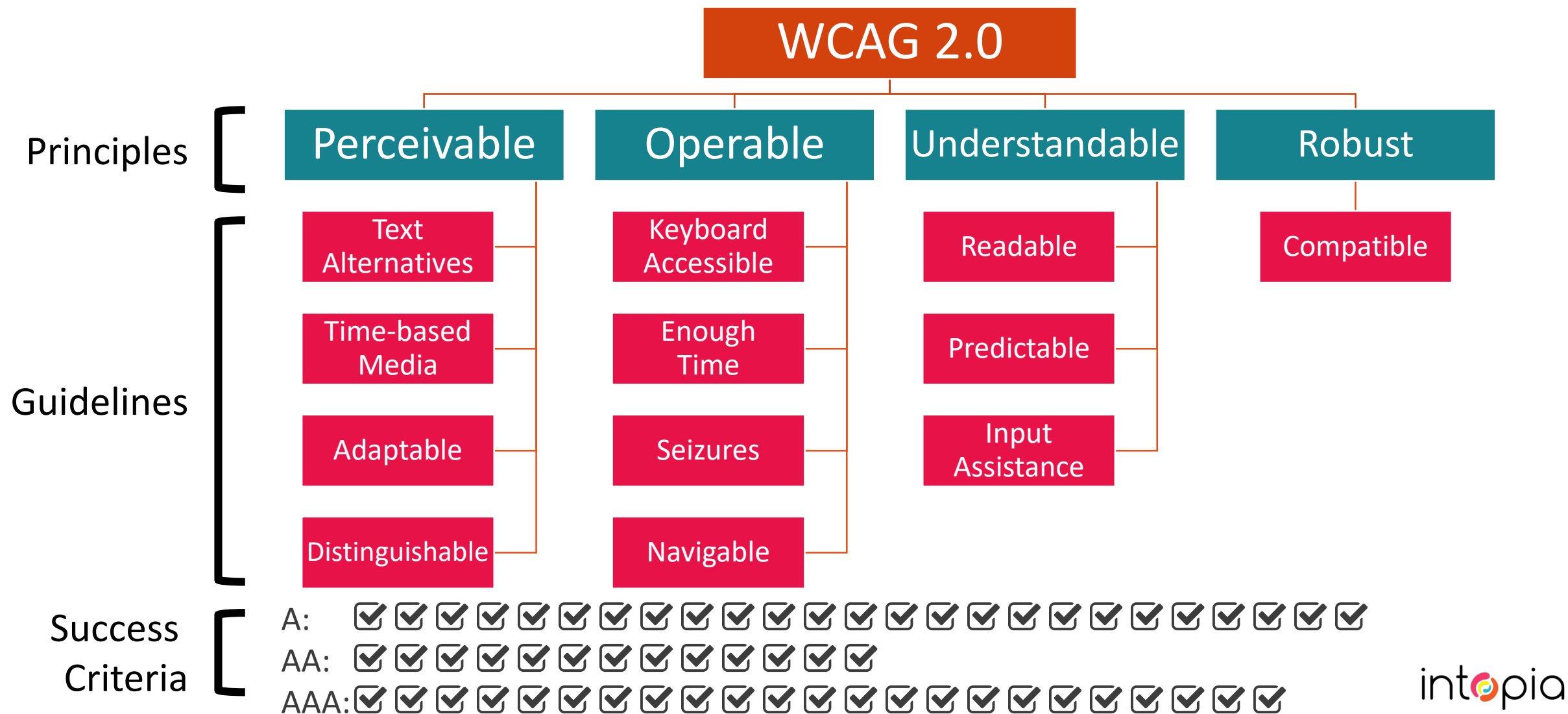I want / need [**some requirement or feature**]
so that [**goal / value / reason**]

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Benefits of user stories

- Define problems faced by people with varying ability
- Articulate user's needs clearly
- Less prescriptive than requirements documentation
- Result in shared understanding of the outcome for the user
- Promote discussion and collaboration

When applied to accessibility for people with disability, they can help demystify WCAG

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WCAG 2.0 framework

W3C®

WCAG 2.0

Principles

Perceivable	Operable	Understandable	Robust

Guidelines

Text Alternatives	Keyboard Accessible	Readable	Compatible
Time-based Media	Enough Time	Predictable	
Adaptable	Seizures	Input Assistance	
Distinguishable	Navigable		

Success Criteria

A: ☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑

AA: ☑☑☑☑☑☑☑☑☑☑☑☑☑

AAA: ☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑☑

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User stories make accessibility real – no longer the elephant in the room

Completing a user story

Teams have a checklist of criteria which must be met before a user story can be considered "done"

Definition of Done

For role based stories can include

- Feature is tested for accessibility

For person/persona based stories

- Features works for the user with their technology or limitations

User stories for accessibility

Components of a user story

- The user
  - A real person from user research or usability testing
  - A persona that has a disability or impairment

- The outcome when interacting with the system

- The goal or value that is delivered

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Common Persona Attributes

- **Name:** naming your persona makes them more real.

- **Motivations**: why would the user use your product?

- **Goals**: what do they want to achieve, and how can your product help?

- **Frustrations**: what problems does your user have with certain tasks?
  - This is where disability or impairment can be described along with assistive technology or adaptive strategies used

- **Demographics**: age, gender, location, occupation.

- **Picture**: giving the user a face makes them more real and relatable.

- **Quote**: what memorable quote sums up your user and the problem you want to solve for them?

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Attributes for Diverse Personas

Alternatively, add additional diversity related attributes

- **Ability:** the level of ability the user has – do they have any impairments?

- **Aptitude:** how experienced is the user with the web?
  Do their abilities create any specific difficulties when using a computer?

- **Attitude:** what are their attitude towards life, or towards the web?

- **Access points:** does this user need assistive technologies or rely on adaptive strategies to access the web?

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Sarah Horton and Whitney Quesenbury describe 8 personas

Barclays Bank describe 7 personas

Sample user stories

As a **sighted non-mouse user** *I need* **better keyboard focus** *so I can* **see where I am in a page as I tab through it**

As a **sighted user with poor concentration** *I need* **visible labels on all form fields** *so I can* **understand what information is requested**

As a **sighted user with cognitive issues** *I need* **all instructions to appear on screen and specify the exact requirements** *so I can* **understand all information needed**

Sample user stories

As a **screen reader user** *I need* **alt-text on informative images** *so I can* **understand all the important information on a page**

As a **screen reader user** *I need* **all link text to be meaningful** *so that I can* **navigate more easily**

As a **low vision user** *or* **colour deficient user** *I need* **more obvious link indicators** *so I can* **see where to click on a page**

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Sample user stories

As a **hearing-impaired person,** *I need* **captions on the videos** *in order to* **fully understand the eLearning modules**

As a **low vision user,** *I need* **to increase the font size** *in order to* **read the screens**

As a **front-line user under pressure to meet KPIs** *I need* **clear link text** *in order to* **know intuitively where to go next**
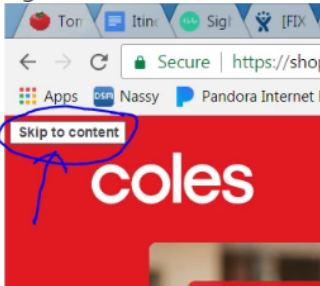
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Helping specify the requirement

To help the developers implement the user stories correctly

- Add an explanation of the issue on the page

- Add a possible solution to resolve the issue

- Prioritise the issue

- Reference the WCAG Success Criteria (if applicable)
  - Point to the Quickref (not the TR)

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Skip Links

Epic	As a '**keyboard (tab-key) navigation user**' I need '**some "skip links"**' to '**help me navigate more quickly**'
Notes	Obvious one is 'skip to content' at top of page, but maybe need 'skip' related to filters etc too

Ref	Work needed	Examples	Notes
SL1	As a keyboard (non-mouse) user on a product listing page, I can quickly get to the product listing area without having to navigate the main menu every time. • add 'Skip to main content' • see requirement SH2 for main content heading suggestion	Having a 'skip link' at the start of the page avoids the main menu	This will help all non-mouse users: • screen reader users • sighted keyboard users • Dragon 'speech to text' users 'Skip to main content' link can be hidden until tabbed to, however while tabbing users will reveal it, Dragon users may not discover it. Make sure the skip link text is large enough for low vision users and has good contrast.
SL2	As a keyboard (non-mouse) user on a product listing page, after I get to the main content area I can quickly get to the: 1. filters 2. sort options 3. product listings	Having 3 x 'skip link' at the start of the product listing area allows rapid navigation for non-mouse users. The skip link text could be: 1. Skip to product list 2. Skip to product filters 3. Skip to sort options	Again, pros and cons of hiding the 'skip links' - *pragmatically* so as not to mess with current design, these can be hidden from mouse users and only appear when they receive keyboard focus.
SL3	As a keyboard (non-mouse) user trying to access the filters, some additional 'skip links' would assist	The skip link text could be: 1. Skip to type filter 2. Skip to price filter 3. Skip to size filter 4. etc	Note that the filter lists can be very long on some pages NOTE: some filters are not filters *per se*

Create an understanding of disability

Have a team presentation / discussion about diversity

• Talk about ageing, culture, disability and the overlaps

• Watch the W3C <u>Perspectives videos</u>

Make diversity and disability real by

• Relating to grandparents

• Discussing personas

• Including team in usability sessions

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Point out that accessibility IS usability for some

'Accessibility is just the beginning. It is **usability** that makes the difference.'

'**Wasting time** is the worst customer experience'

Patti Moore
UX Australia keynote 2016

Gerry McGovern, 27/3/17
http://gerrymcgovern.com/wasting-time-is-the-worst-customer-experience/

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Definition of done

Definition of done

For role based stories can include

- Feature is tested for accessibility

For person/persona based stories

- Features works for the user with their technology or limitations

More specifically

- All tasks finished (with the ability of the user in the story)
- All tests passed (including using the feature with the user's ability
- Code checked in to version control

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Would this pass?

Let's continue the conversation

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Slides:
https://bit.ly/2IIvNRF

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