



rosel.li/csunatc24



About Adrian Roselli

- Digital Accessibility Standards Lead, JP Morgan Chase
- I've written some stuff,
- Invited Expert at W3C,
- Building for the web since 1993,
- Learn more at AdrianRoselli.com,
- Avoid on Mastodon @aardrian@toot.cafe.





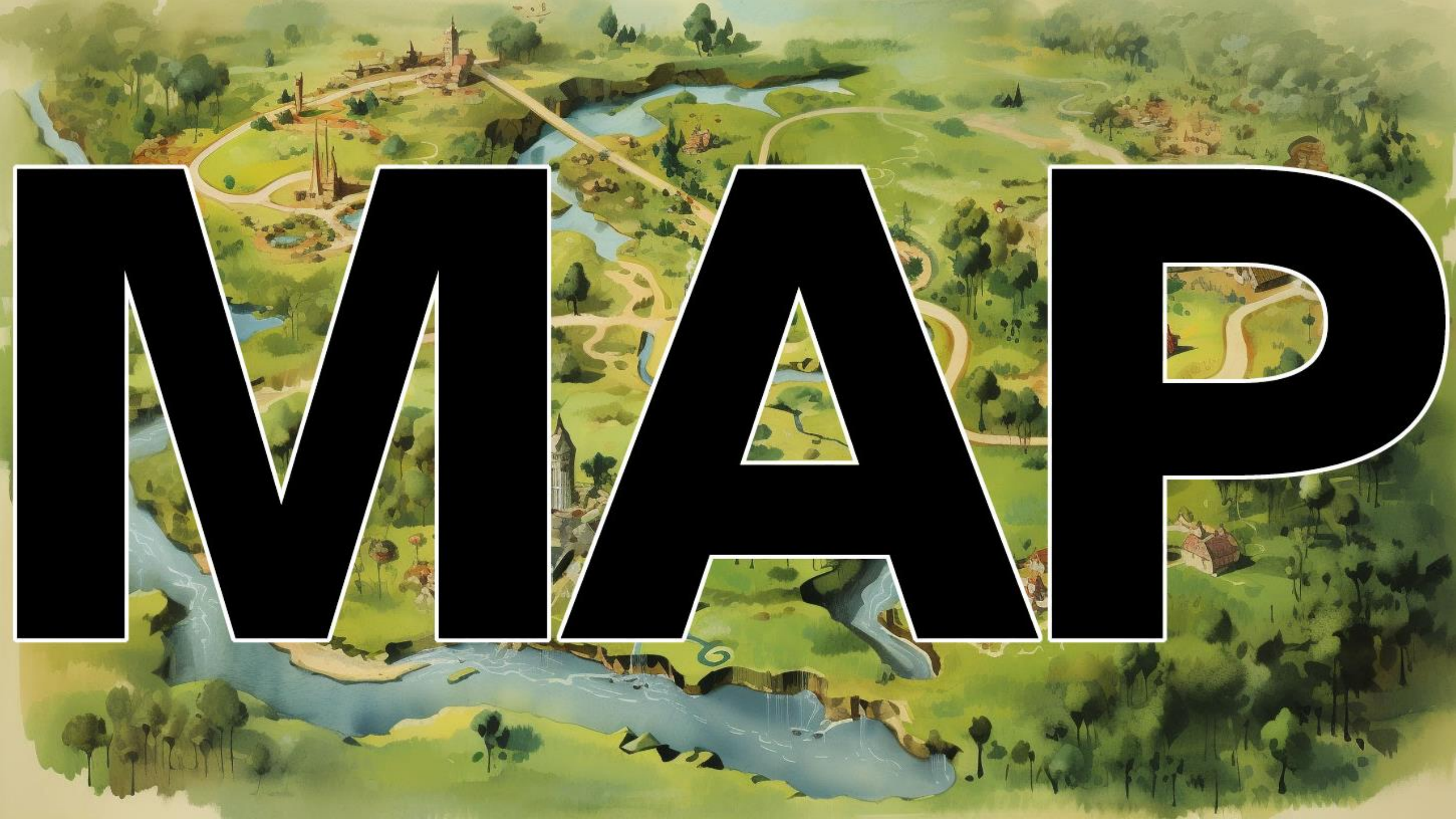


WOCAG

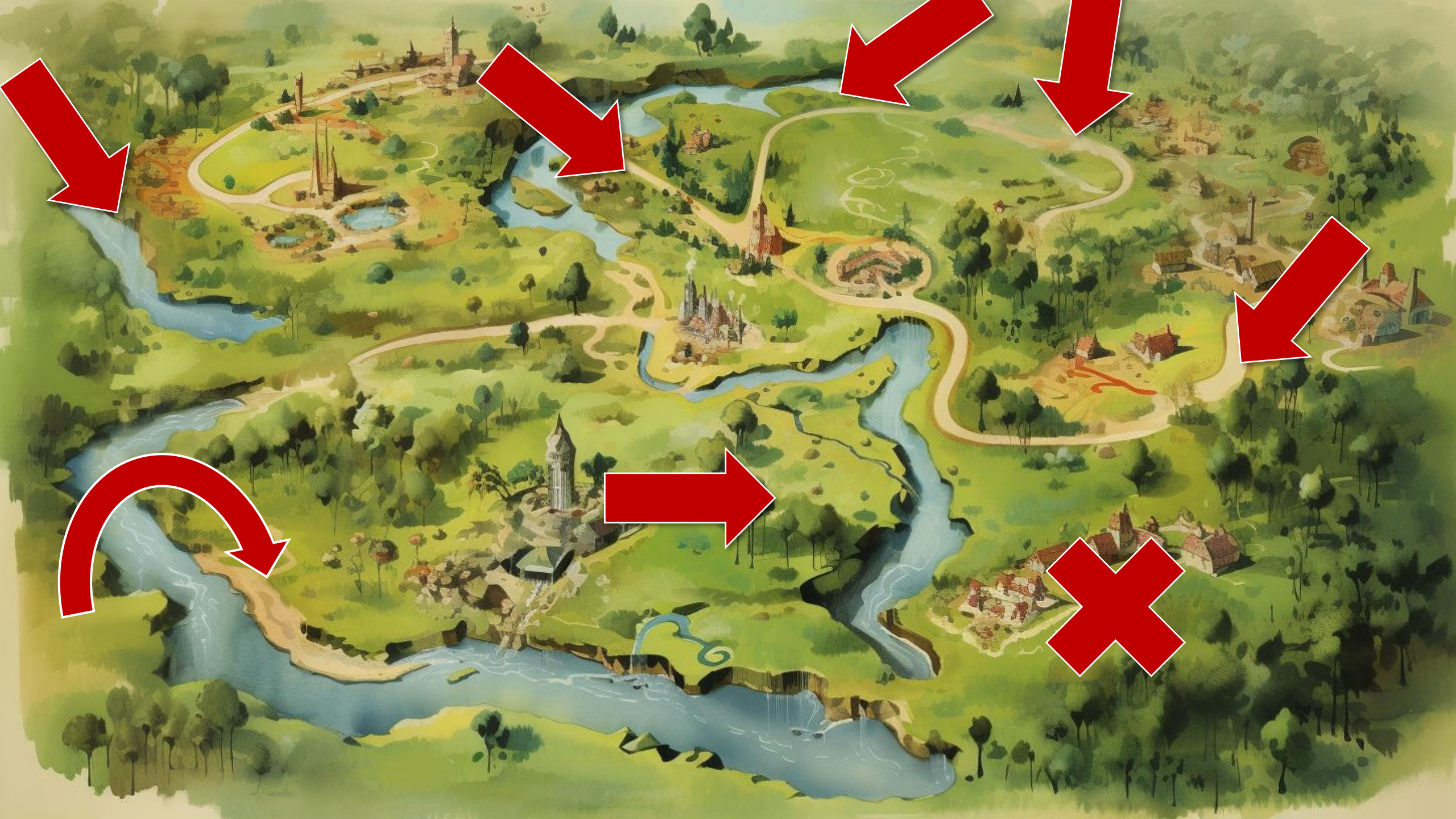
mtre

Meaning

- WCAG is the squishy floor
- Easy to get bogged down
- You're not alone
- But you may be pulling others down with you

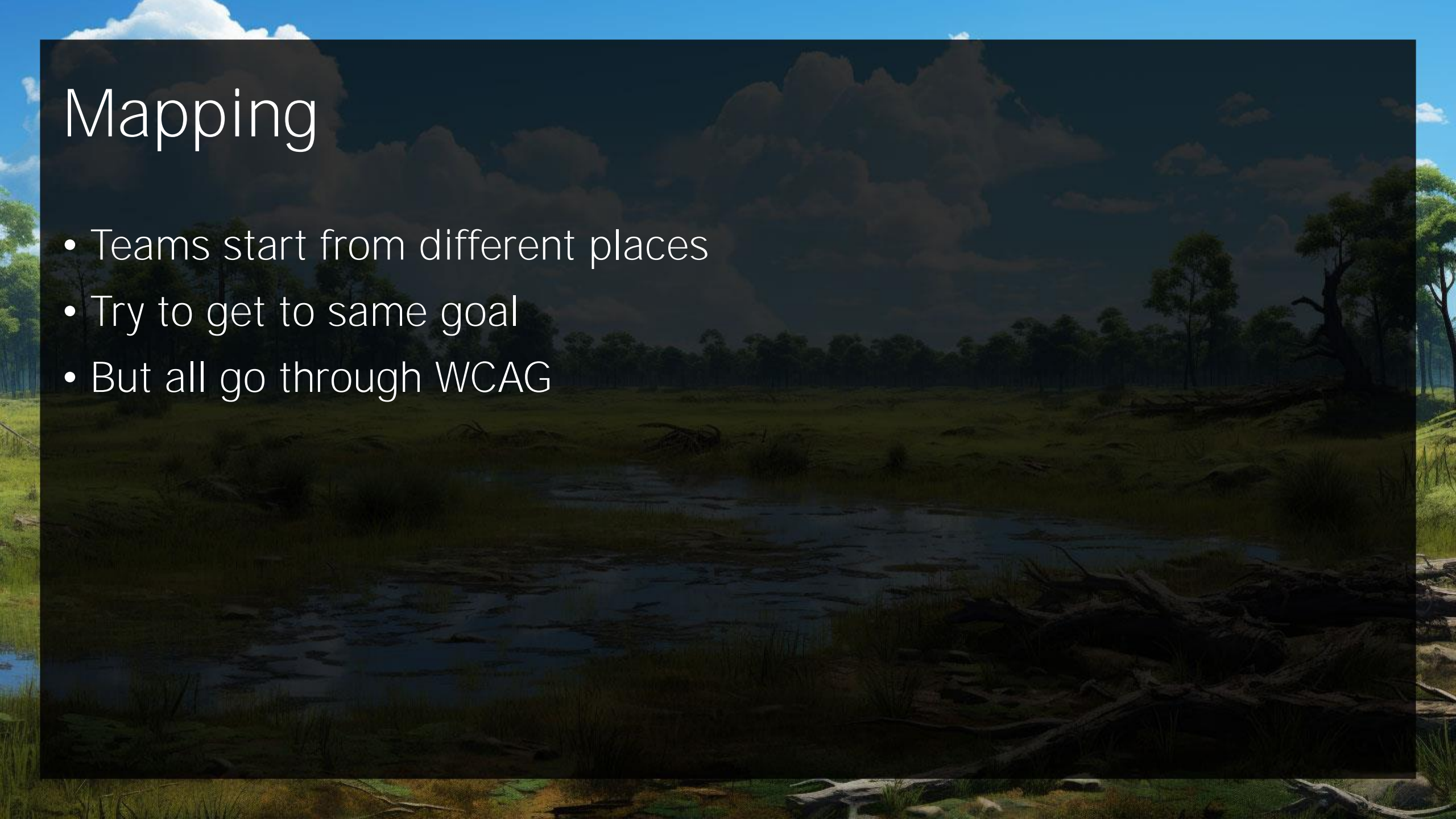


MARD



Mapping

- Teams start from different places
- Try to get to same goal
- But all go through WCAG



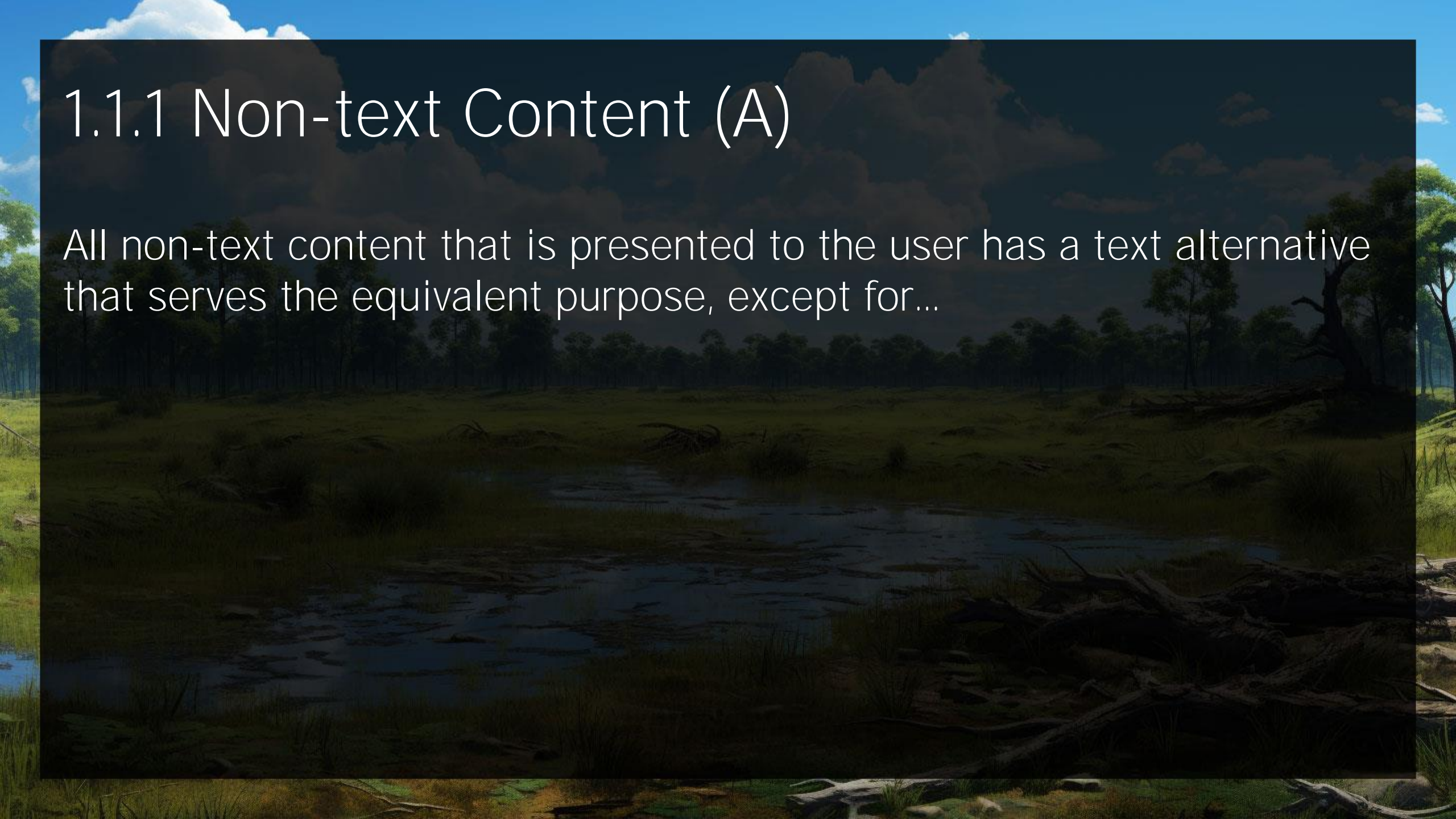
A dark, atmospheric landscape featuring a river or stream winding through a grassy field. The sky is filled with large, dark, dramatic clouds, and the overall lighting is dim, creating a somber and mysterious mood. The foreground shows some fallen logs and sparse vegetation.

Starting is easy...

...agreeing is harder

1.1.1 Non-text Content (A)

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for...



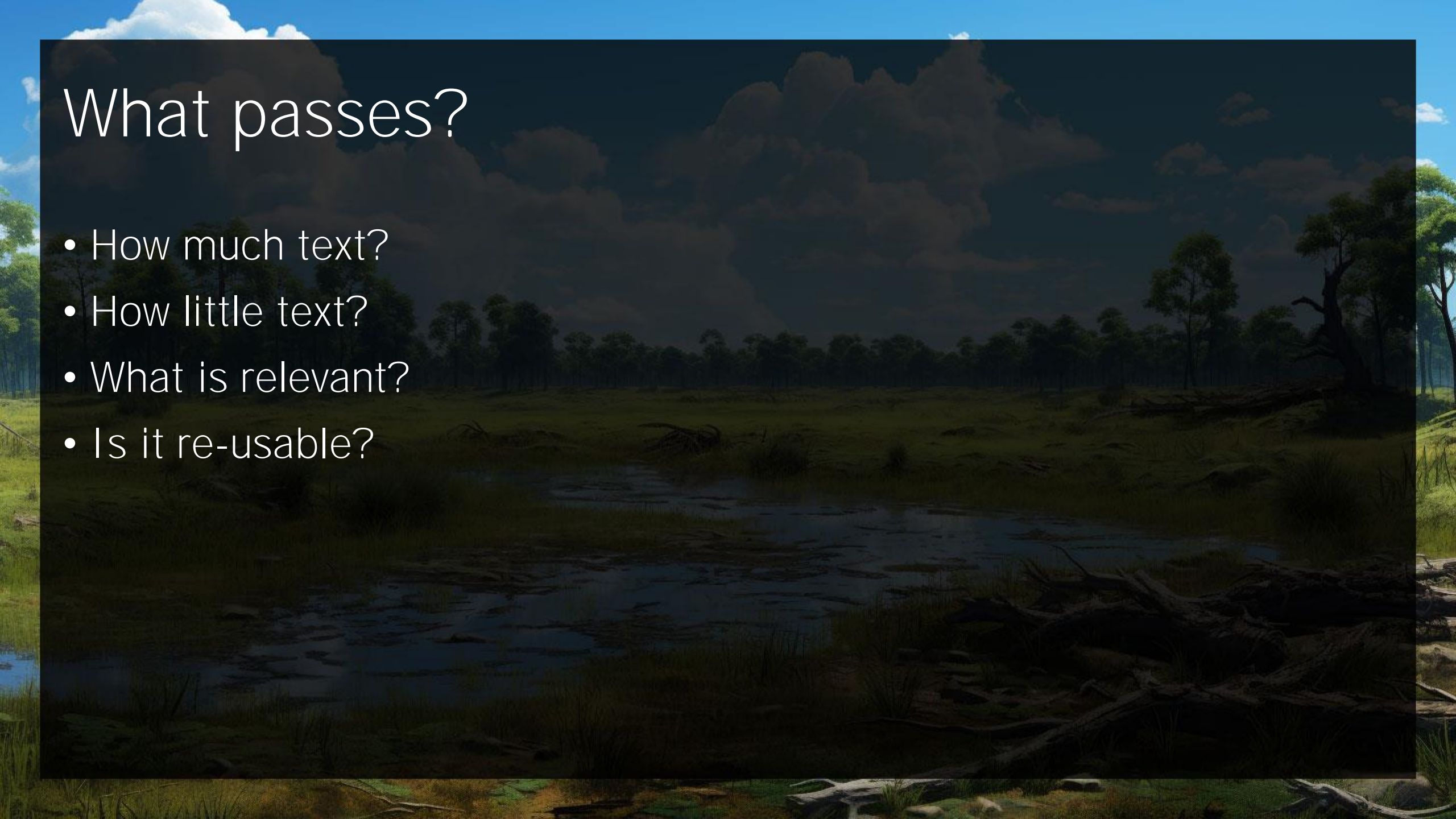
Alt Text Decision Tree

Images that contribute meaning

- Graph or complex information.
- Redundant content.
 - Simple graphic or photograph. Use a brief description of the image in a way that conveys that meaning in the alt attribute.

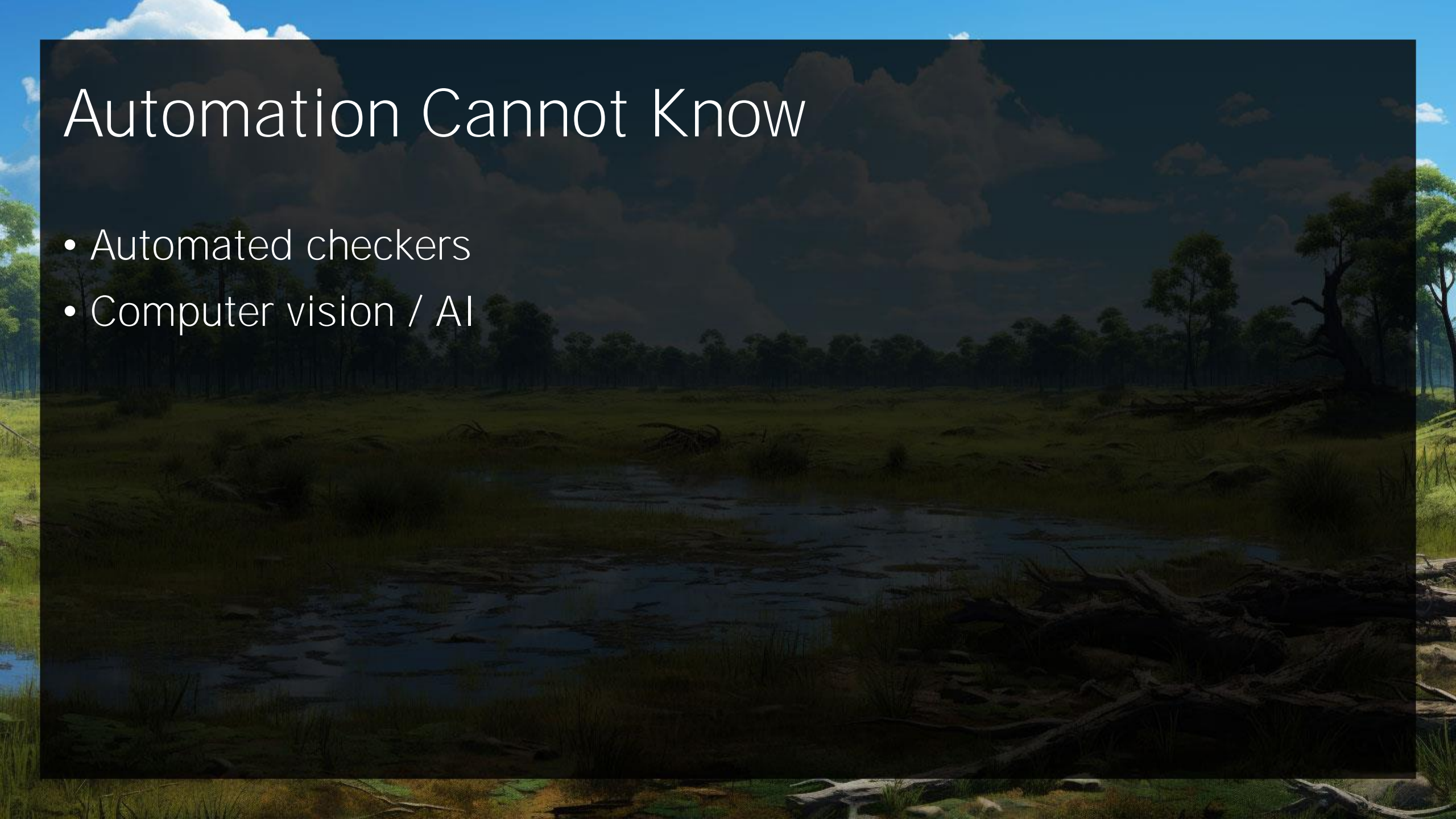
What passes?

- How much text?
- How little text?
- What is relevant?
- Is it re-usable?



Automation Cannot Know

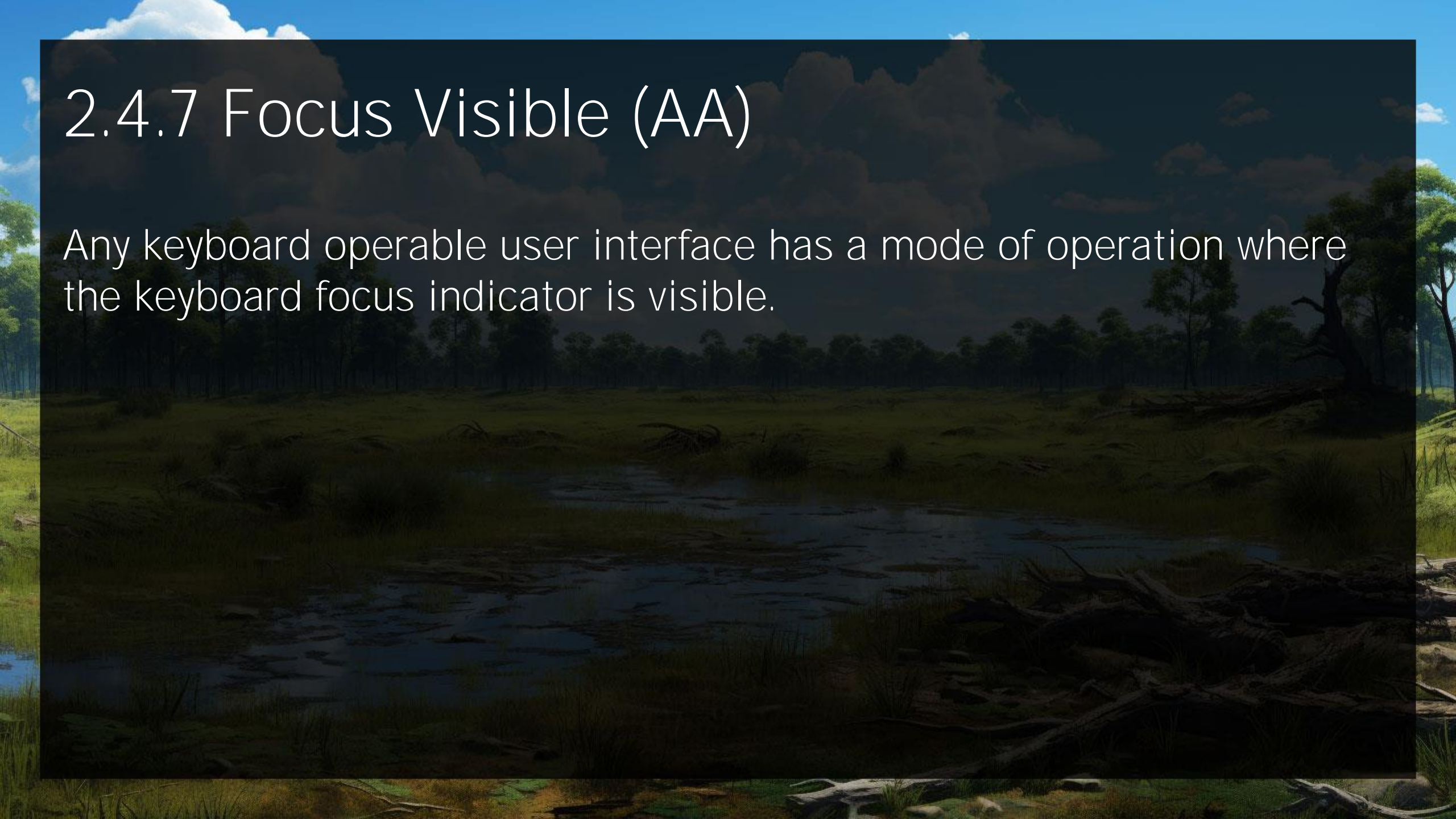
- Automated checkers
- Computer vision / AI





2.4.7 Focus Visible (AA)

Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.



← Prev

Next →

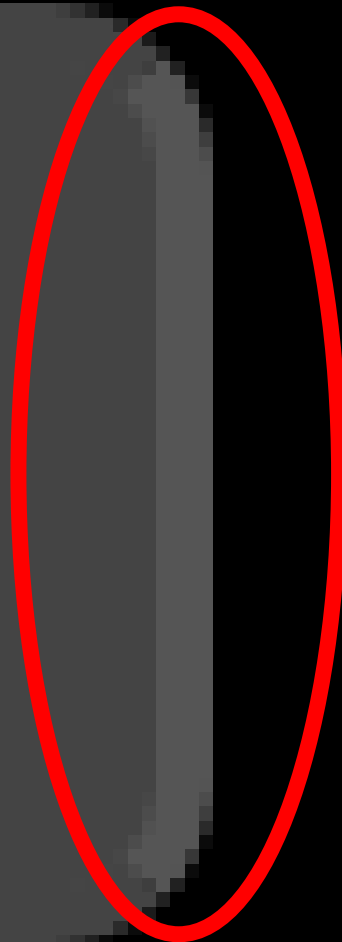
← Prev

Next →

← Prev

Next →

Next



1.4.11 Non-text Contrast (AA)

The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent color(s):

- User Interface Components: Visual information required to identify user interface components and states, except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author.

← Prev

Next →

← Prev

Next →

← Prev

Next →

← Prev

Next →

← Prev

Next →

2.4.13 Focus Appearance (AAA)

When the keyboard focus indicator is visible, an area of the focus indicator meets all the following:

- is at least as large as the area of a 2 CSS pixel thick perimeter of the unfocused component or sub-component, and
- has a contrast ratio of at least 3:1 between the same pixels in the focused and unfocused states.

← Prev

Next →

← Prev

Next →

← Prev

Next →

← Prev

Next →

2.4.11 Focus Not Obscured (Minimum) (AA)

When a user interface component receives keyboard focus, the component is not entirely hidden due to author-created content.

Hey there...

Oops. Error.

But What Is Focus?

2.4.7 Focus Visible

- "...keyboard operable..."

1.4.11 Non-text Contrast

- "...identify user interface components and states..."

2.4.13 Focus Appearance

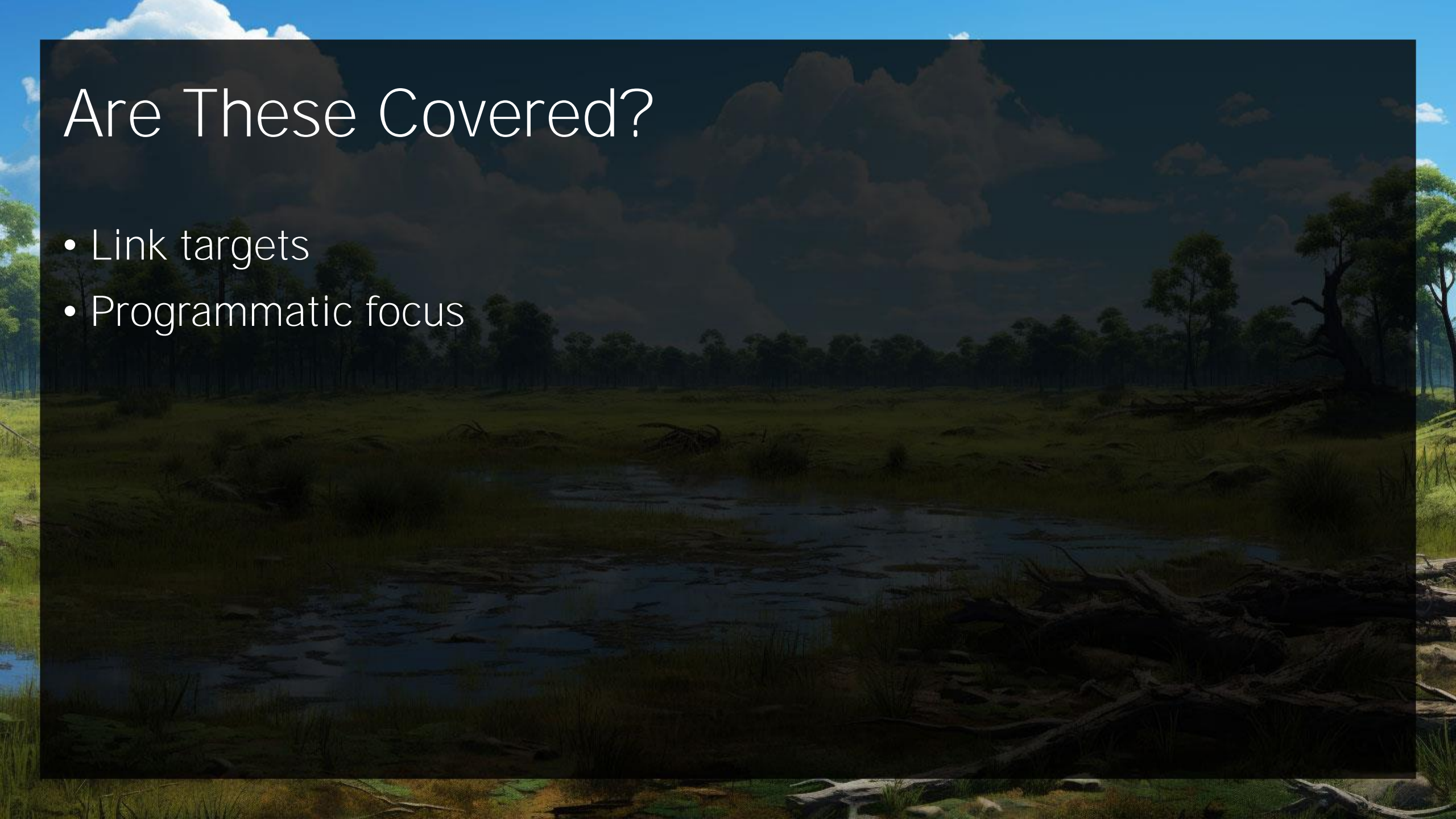
- "When the keyboard focus indicator is visible..."

2.4.11 Focus Not Obscured

- "When a user interface component receives keyboard focus..."

Are These Covered?

- Link targets
- Programmatic focus



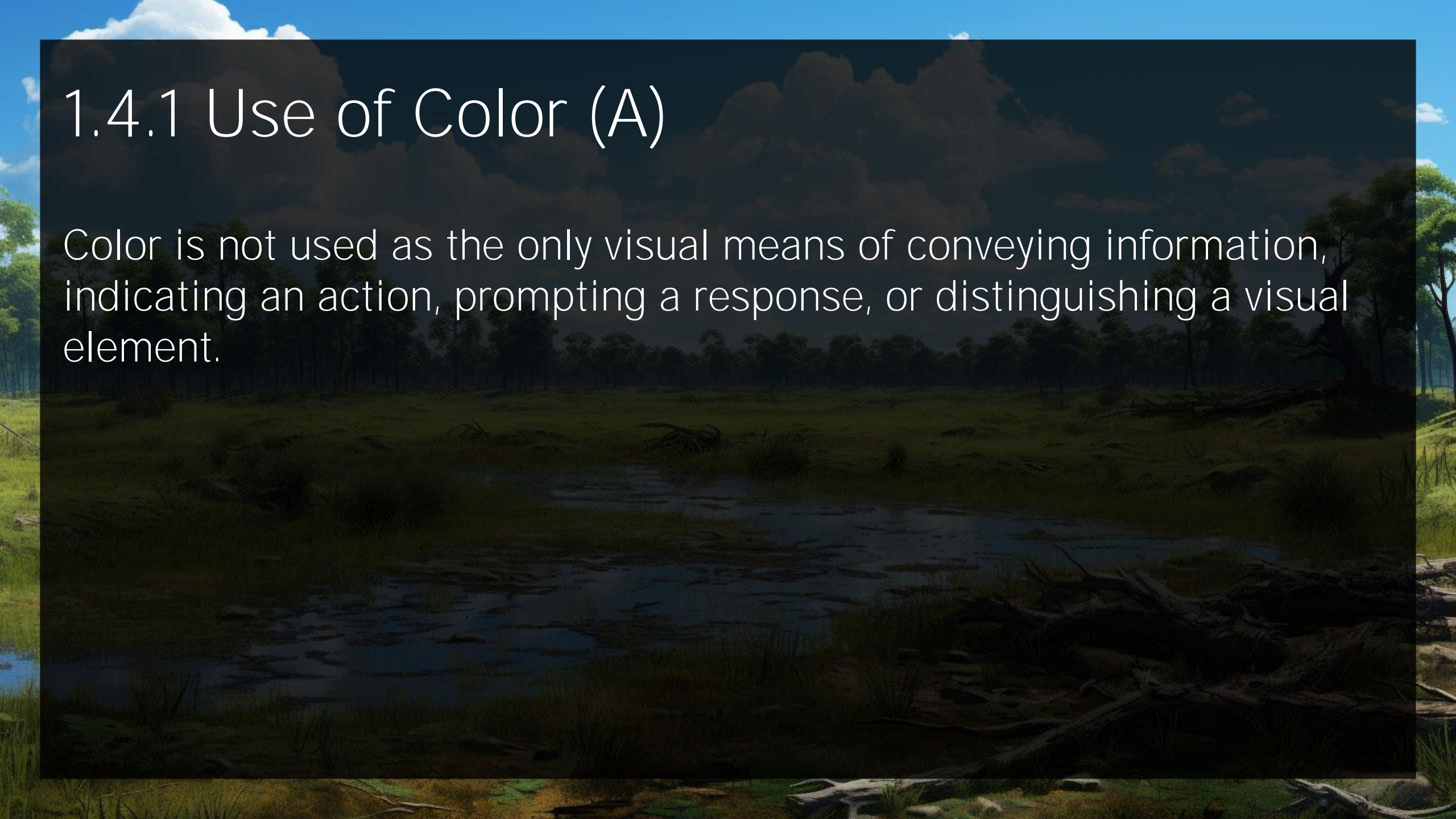
But What Is Contrast?

Contrast algorithm(s)

- WCAG 2.x
 - Normative
 - Techniques
- WCAG 3.x
 - Draft
 - Needs peer review

1.4.1 Use of Color (A)

Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean eu ligula tincidunt velit venenatis sagittis ac ut nunc. Fusce sed imperdiet mauris. Nam quis leo ante. Morbi convallis quis tellus auctor tempor. Vestibulum lacinia diam a magna rhoncus, vel aliquet tellus aliquet. Donec lorem justo, laoreet et facilisis id, volutpat sit amet velit. Pellentesque sit amet mi ac purus convallis finibus a scelerisque elit. Sed bibendum sit amet leo a vulputate. Etiam consequat facilisis pharetra.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean eu ligula tincidunt velit venenatis sagittis ac ut nunc. Fusce sed imperdiet mauris. Nam quis leo ante. Morbi convallis quis tellus auctor tempor. Vestibulum lacinia diam a magna rhoncus, vel aliquet tellus aliquet. **Donec lorem justo**, laoreet et facilisis id, volutpat sit amet velit. Pellentesque sit amet mi ac purus convallis finibus a scelerisque elit. Sed bibendum sit amet leo a vulputate. Etiam consequat facilisis pharetra.

1.4.1 Sufficient Technique

G183: Using a contrast ratio of 3:1 with surrounding text and providing additional visual cues on hover for links or controls where color alone is used to identify them

- "Color (generally defined as a combination of hue, saturation and luminance)..."

1.4.1 Failure Technique

F73: Failure of Success Criterion 1.4.1 due to creating links that are not visually evident without color vision

- "Red and Pink are the same color (hue) but they have different lightness (which is not color). So red and pink would pass the requirement for 'not distinguished by color (hue) alone' since they differ by lightness (which is not color) - as long as the difference in lightness (contrast) is 3:1 or greater."

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean eu ligula tincidunt velit venenatis sagittis ac ut nunc. Fusce sed imperdiet mauris. Nam quis leo ante. Morbi convallis quis tellus auctor tempor. Vestibulum lacinia diam a magna rhoncus, vel aliquet tellus aliquet. Donec lorem justo, laoreet et facilisis id, volutpat sit amet velit. Pellentesque sit amet mi ac purus convallis finibus a scelerisque elit. Sed bibendum sit amet leo a vulputate. Etiam consequat facilisis pharetra.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean eu ligula tincidunt velit venenatis sagittis ac ut nunc. Fusce sed imperdiet mauris. Nam quis leo ante. Morbi convallis quis tellus auctor tempor. Vestibulum lacinia diam a magna rhoncus, vel aliquet tellus aliquet. Donec lorem justo, laoreet et facilisis id, volutpat sit amet velit. Pellentesque sit amet mi ac purus convallis finibus a scelerisque elit. Sed bibendum sit amet leo a vulputate. Etiam consequat facilisis pharetra.

1.4.10 Reflow (A)

Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:

- Vertical scrolling content at a width equivalent to 320 CSS pixels;
- Horizontal scrolling content at a height equivalent to 256 CSS pixels;

Except for parts of the content which require two-dimensional layout for usage or meaning.



I may not have read them.

Books in a Scrolling Container

Author	Title
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Har</i>
F. Scott Fitzgerald	<i>The Great Gatsb</i>
George Orwell	<i>Nineteen Eighty</i>
Nnedi Okorafor	<i>Who Fears Deat</i>



ooks. I may have
may not have read

Scrolling Container

Title	
hy Eliza	<i>The Hidden Hand</i>
thworth	
erald	<i>The Great Gatsby</i>
ell	<i>Nineteen Eighty-Four</i>
for	<i>Who Fears Death</i>

The Code

```
@media (width:320px) and (height:256px) {  
  [role="region"][aria-labelledby][tabindex] {  
    overflow: auto;  
  }  
}
```

Responsive

321



256



DPR: 1.5

No Throttling

UA: Custom User Agent



ead them.

Rolling Container

	Title	Year
y Eliza worth	<i>The Hidden Hand</i>	188
ald	<i>The Great Gatsby</i>	192
	<i>Nineteen Eighty-Four</i>	194
or	<i>Who Fears Death</i>	201

Responsive

320

×

257



DPR: 1.5

No Throttling

UA: Custom User Agent



em.

Container

Title	Year	ISB
<i>The Hidden Hand</i>	1888	978
<i>The Great Gatsby</i>	1925	978
<i>Nineteen Eighty-Four</i>	1948	978
<i>Who Fears Death</i>	2010	978

2.5.8 Target Size (Minimum) (AA)

The size of the target for pointer inputs is at least 24 by 24 CSS pixels, except where:

- Spacing: Undersized targets (those less than 24 by 24 CSS pixels) are positioned so that if a 24 CSS pixel diameter circle is centered on the bounding box of each, the circles do not intersect another target or the circle for another undersized target;

2.5.8 Target Size (Minimum) Understanding

"It is still possible to have very small, and difficult to activate, targets and meet the requirements of this Success Criterion, provided that the targets don't have any adjacent targets that are too close."

Sign up now!

Quickly, before you miss your chance! You don't want to be just like everyone who missed their chance, do you? Are you ok with not standing out from your friends, enemies, and family? Well the best way to do be better than them is to sign up for our newsletter! You can unsubscribe when you (or they) are dead!







STUCK

Now we're lost and stuck

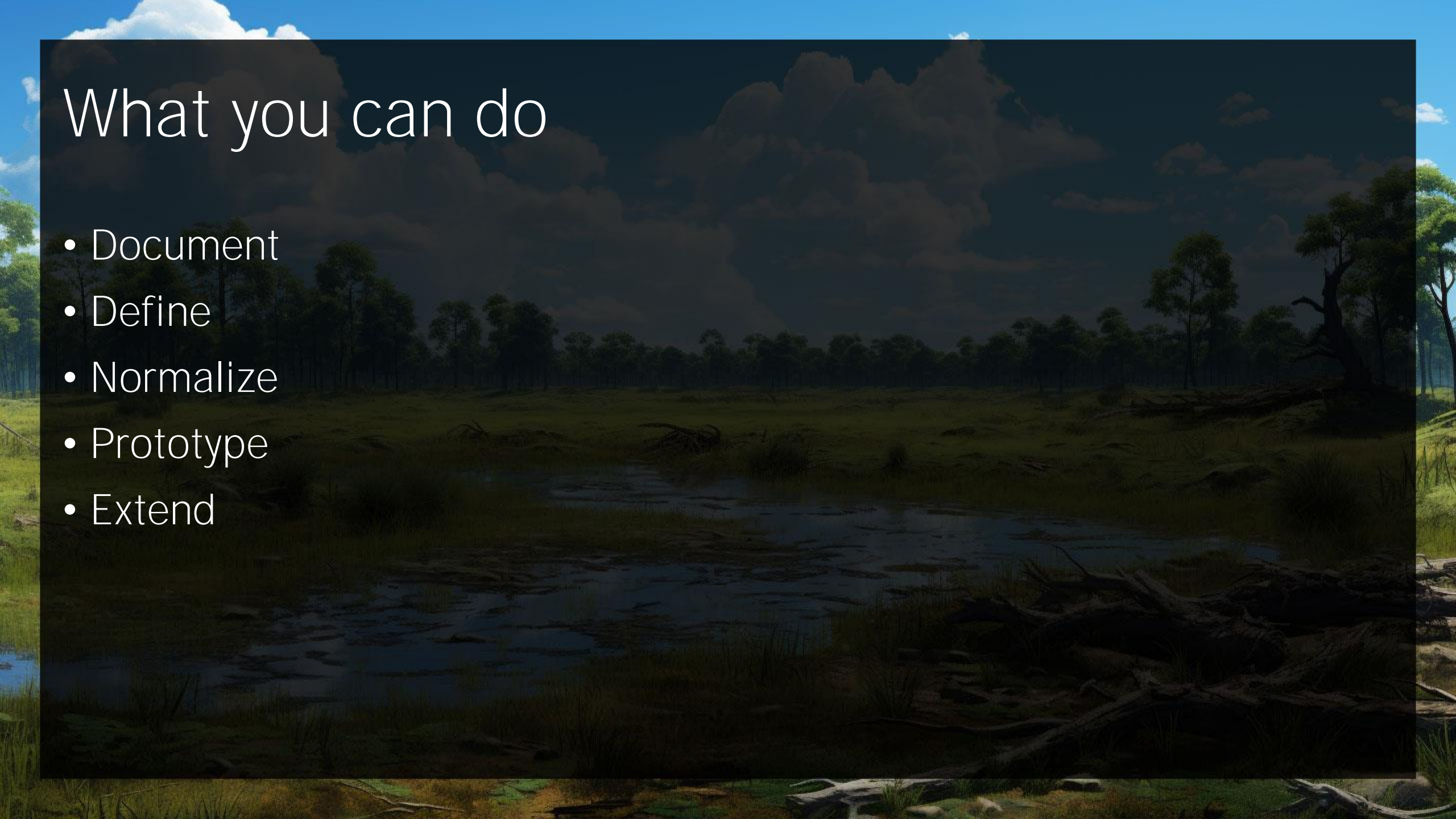
- This was an incomplete list
- Some want to:
 - Do the bare minimum
 - Fail everything
- Difficult for teams
- If it's bad for everyone, WCAG does not cover it





What you can do

- Document
- Define
- Normalize
- Prototype
- Extend

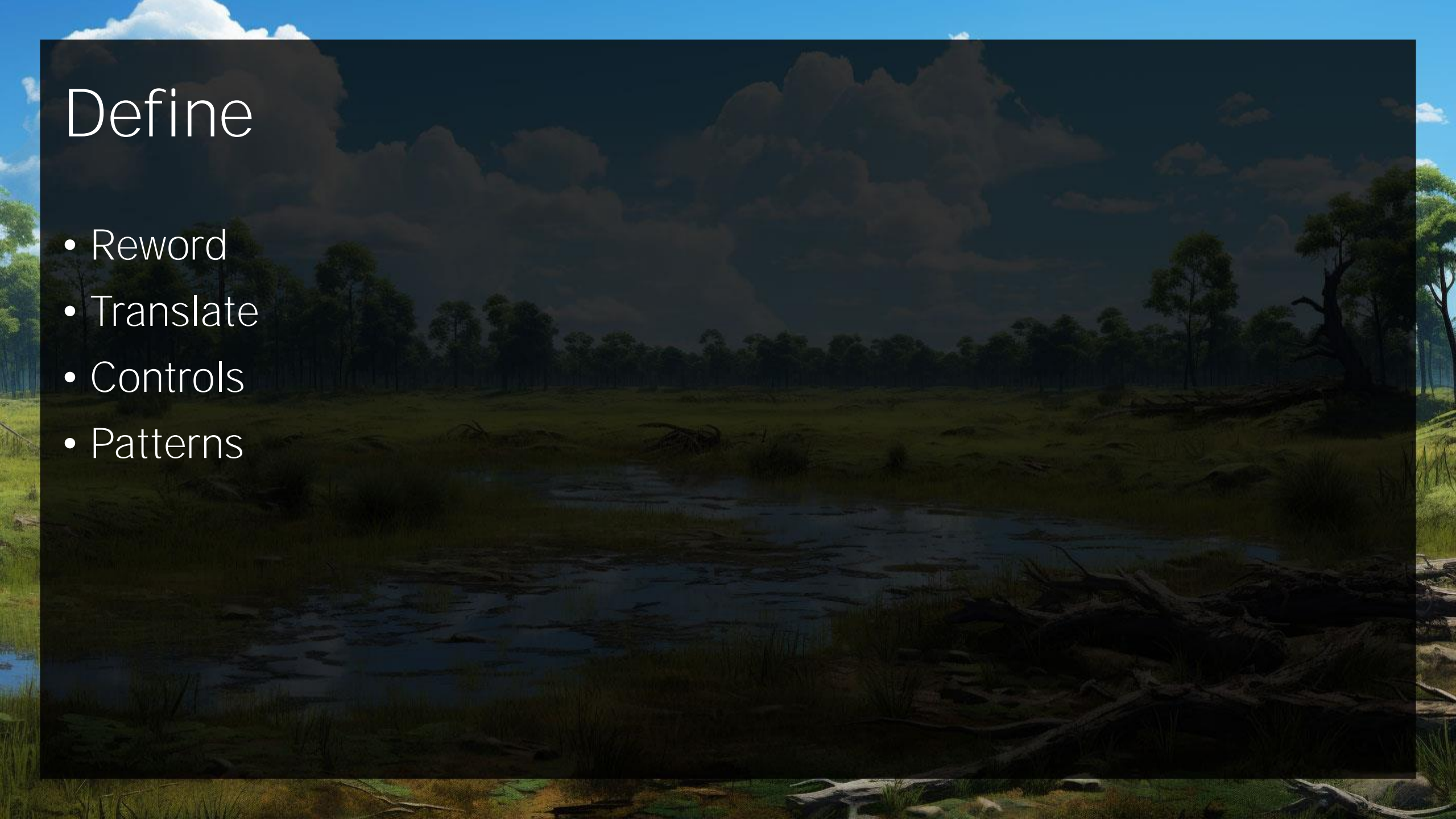


Document

- Edge cases
- Disagreements
- Confusion
- Standards references
- Bugs / issues

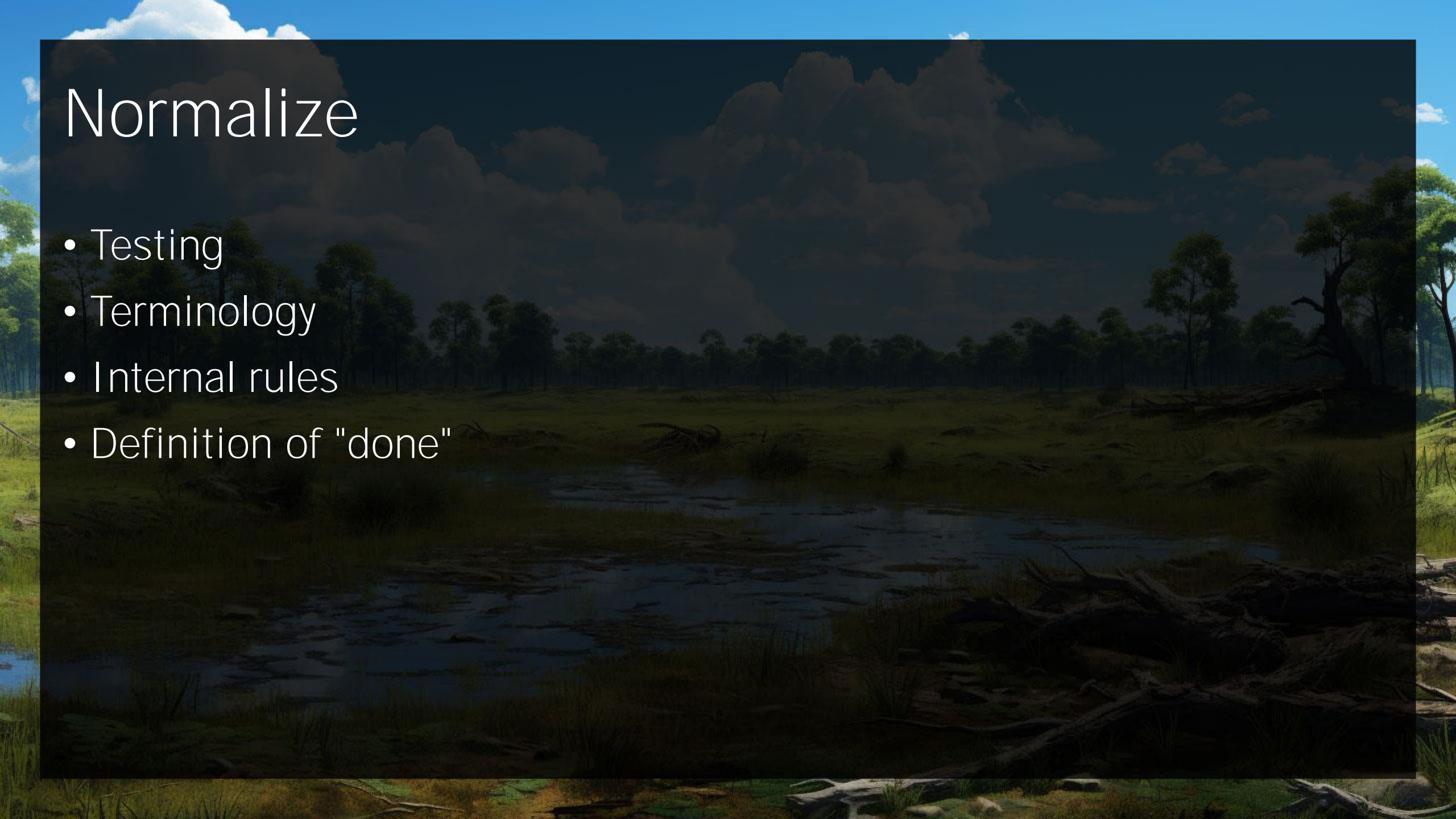
Define

- Reword
- Translate
- Controls
- Patterns



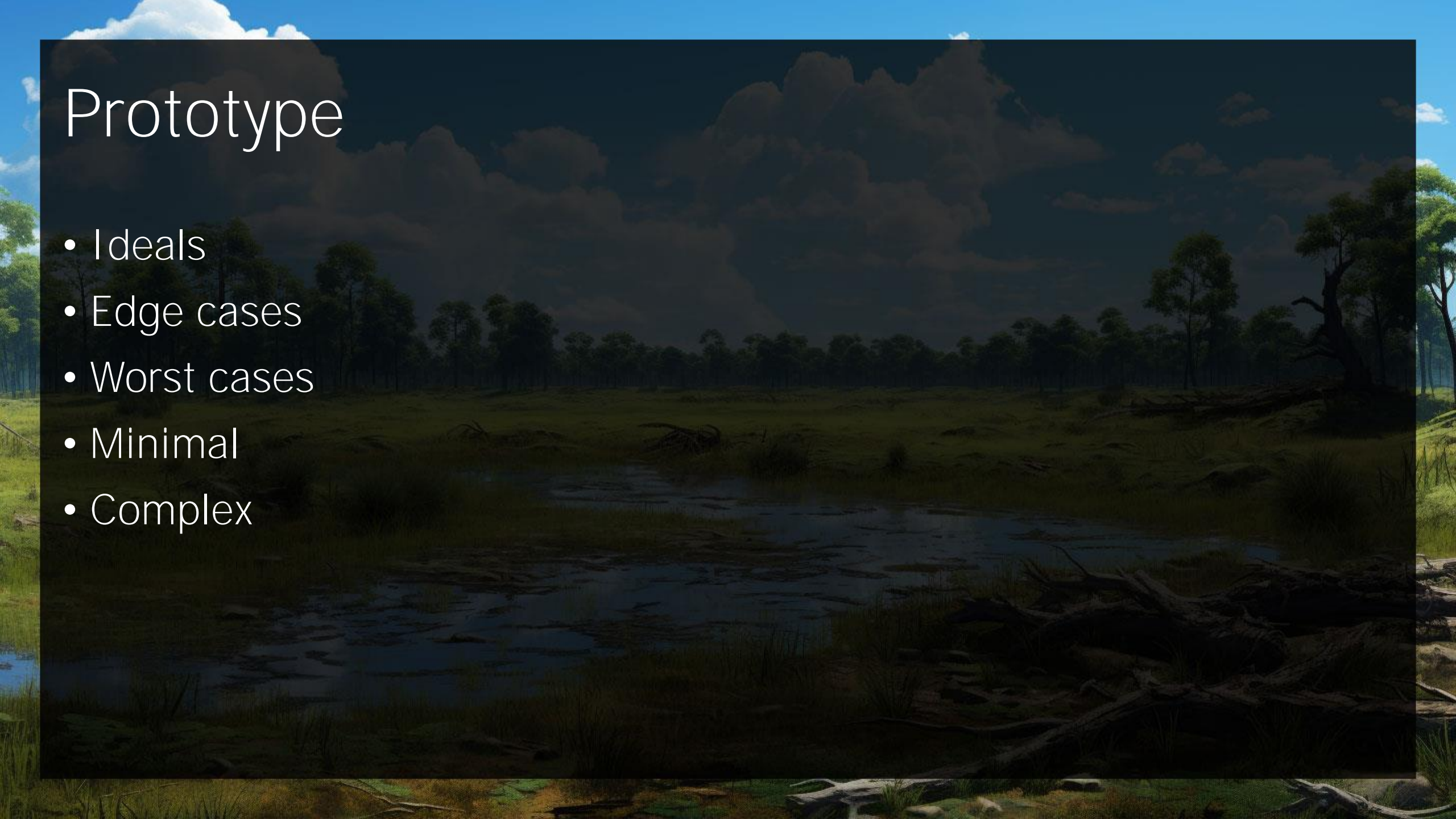
Normalize

- Testing
- Terminology
- Internal rules
- Definition of "done"



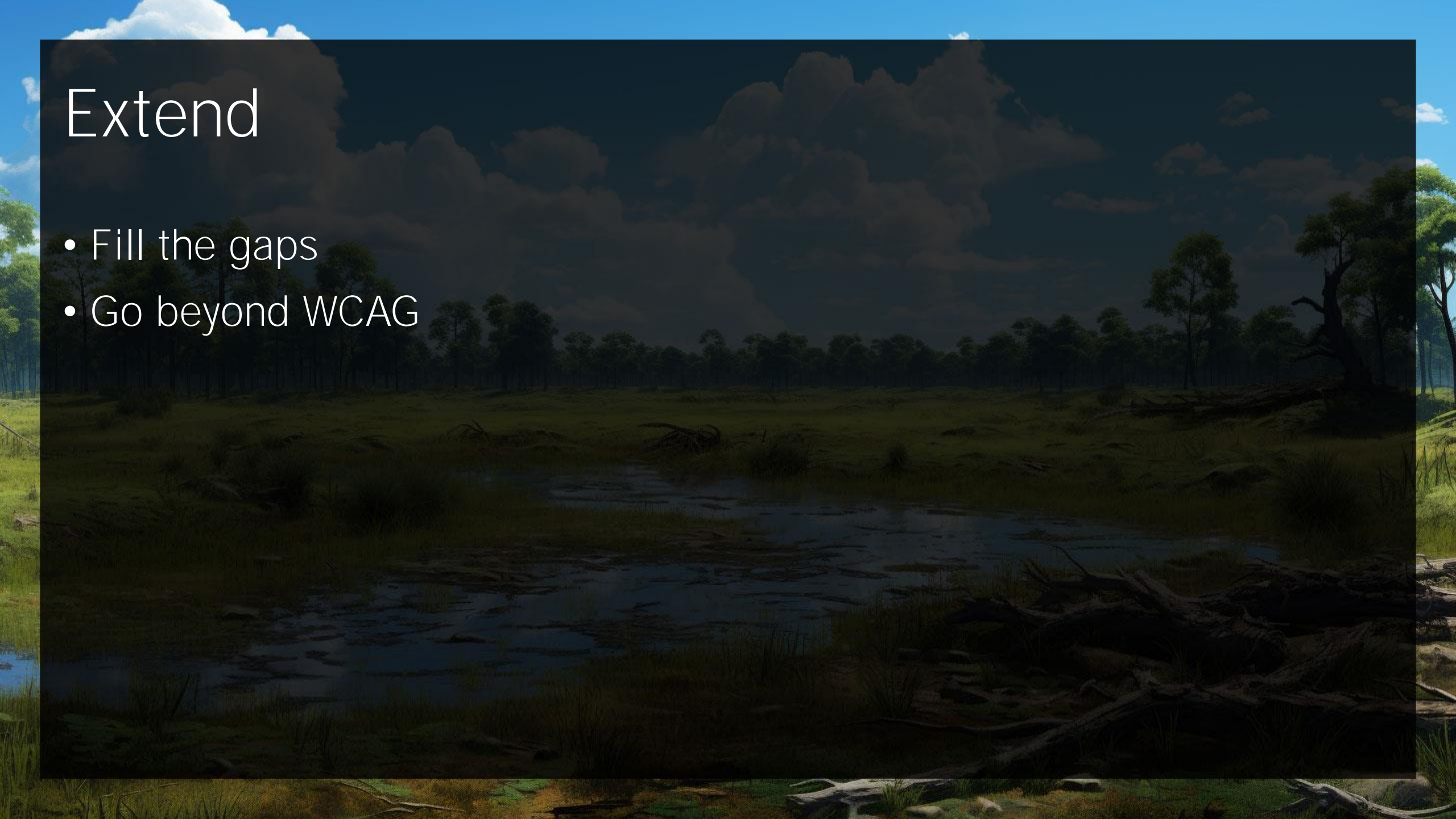
Prototype

- Ideals
- Edge cases
- Worst cases
- Minimal
- Complex



Extend

- Fill the gaps
- Go beyond WCAG



BUTLED





39TH ANNUAL
CSUN
ASSISTIVE TECHNOLOGY
CONFERENCE
MARCH 18-22, 2024 • ANAHEIM MARRIOTT

LINKS

References

- Patrick H. Lauke - These aren't the SCs you're looking for...
 - <https://youtu.be/rBCR66aJZZc>
- GitHub WCAG issues:
 - <https://github.com/w3c/wcag/issues>
- GitHub WCAG discussions:
 - <https://github.com/w3c/wcag/discussions/>
- Working group mailing list:
 - <https://lists.w3.org/Archives/Public/w3c-wai-gl/>



rosel.li/csunatc24