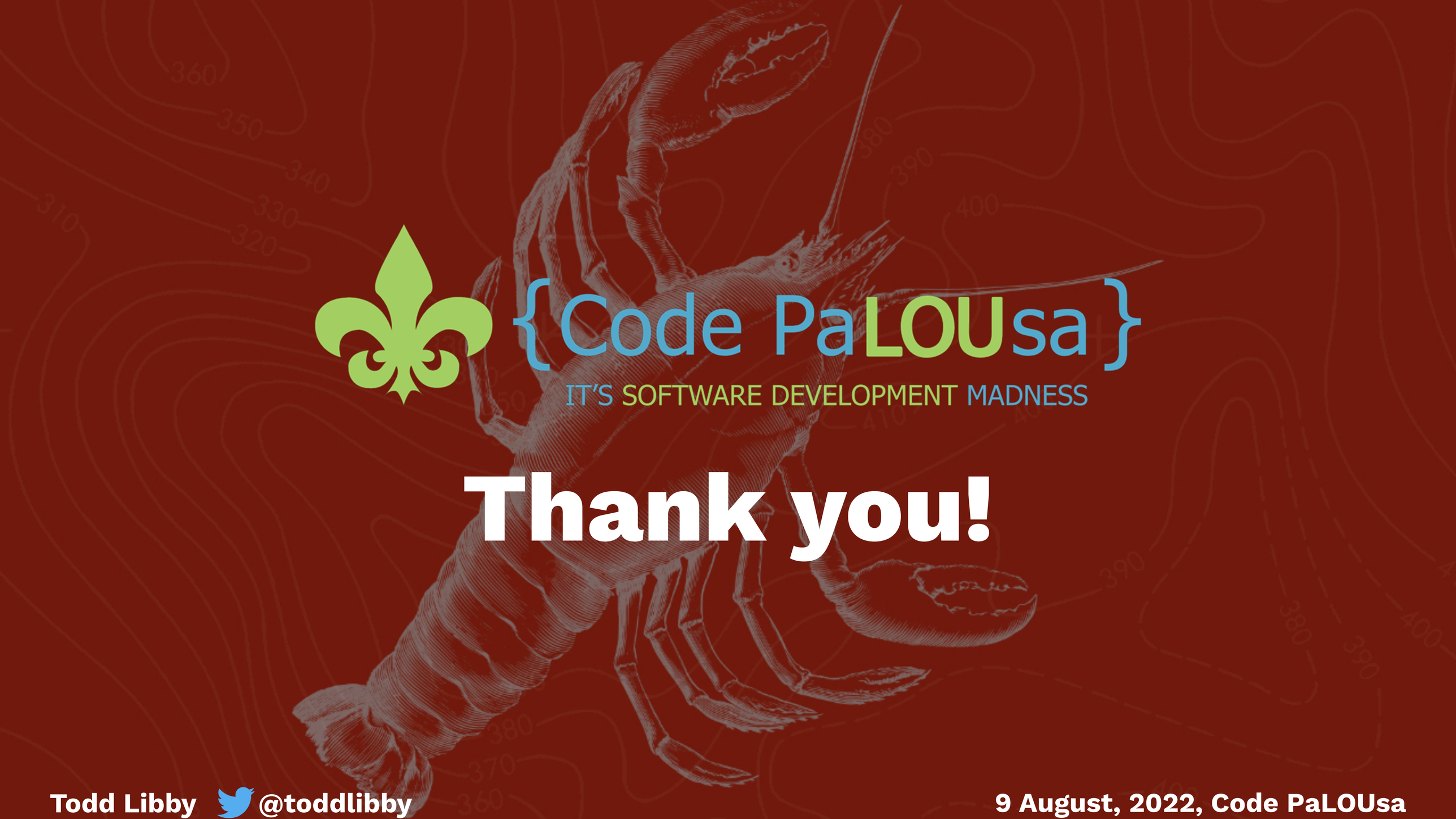
Making a Strong Case for Accessibility

Todd Libby @toddlibby

9 August, 2022, Code PaLOUsa



Thank you!

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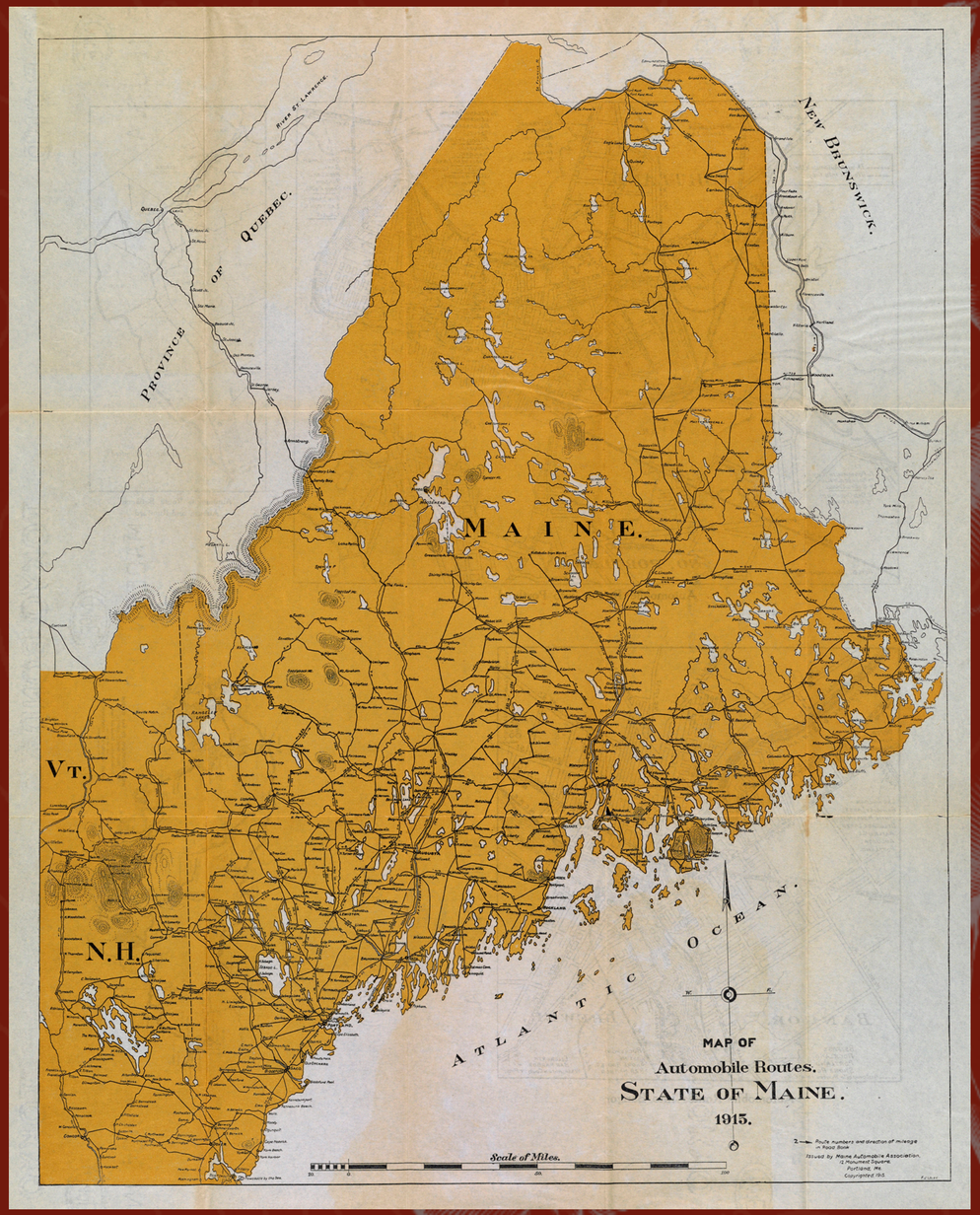
Friends of Code PaLOUsa

Thank you, attendees!



Maine

Todd Libby @toddlibby

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Arizona

Todd Libby @toddlibby

Todd Libby @toddlibby

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Portland, Maine 🦞 ➡ Phoenix, Arizona 🥵

Accessibility Team Lead @ WebstaurantStore

Accessibility Engineer @ Centre for Inclusive Design

W3C Invited Expert - Accessibility & WCAG3

23 years of developer, design, & accessibility experience

Host of the Front End Nerdery Podcast

Making the Case at Your Organization

Todd Libby @toddlibby

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Using Data to Advocate

Todd Libby @toddlibby

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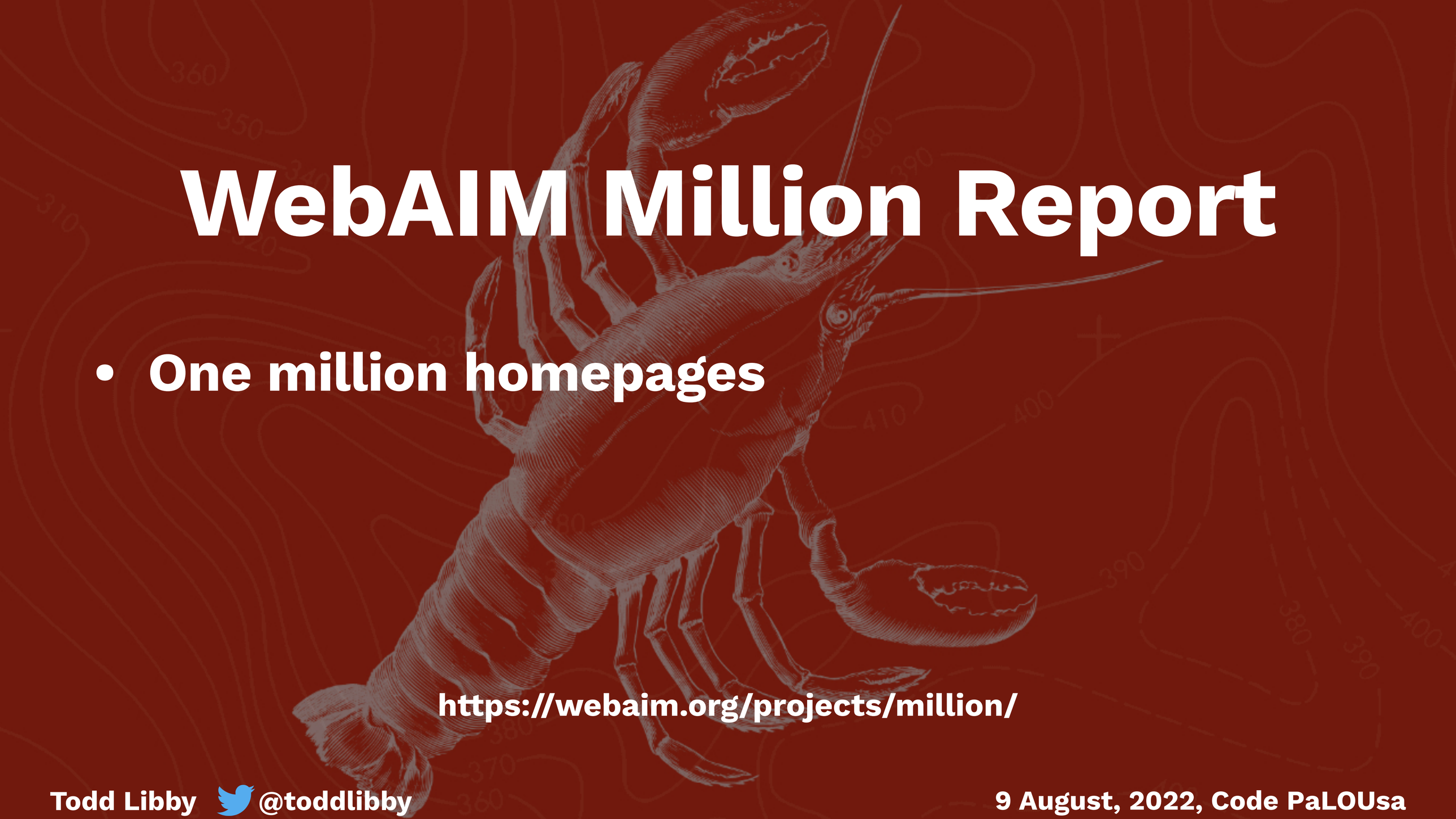

WebAIM Million Report

- One million homepages

https://webaim.org/projects/million/

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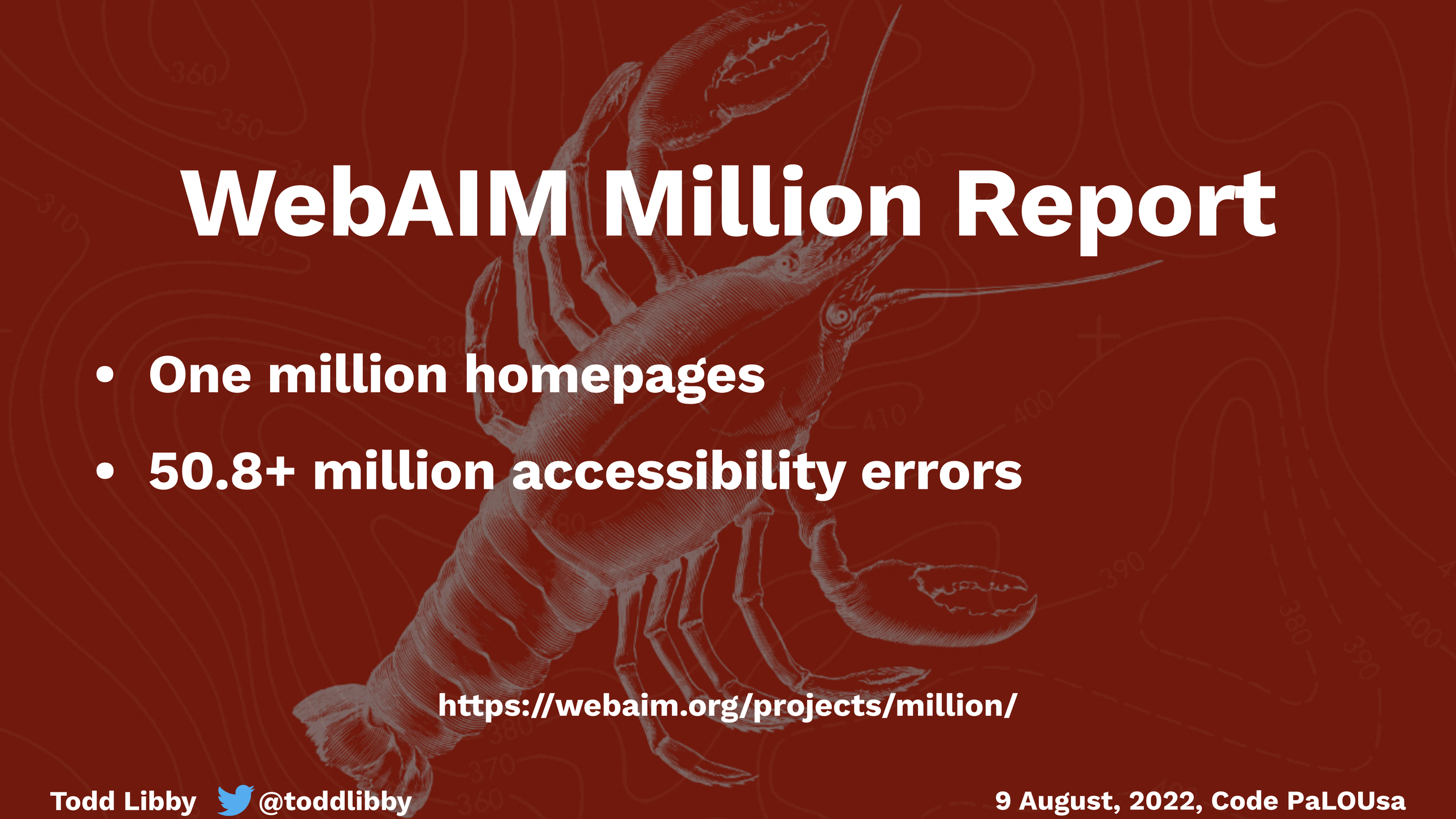

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- 50.8+ million accessibility errors

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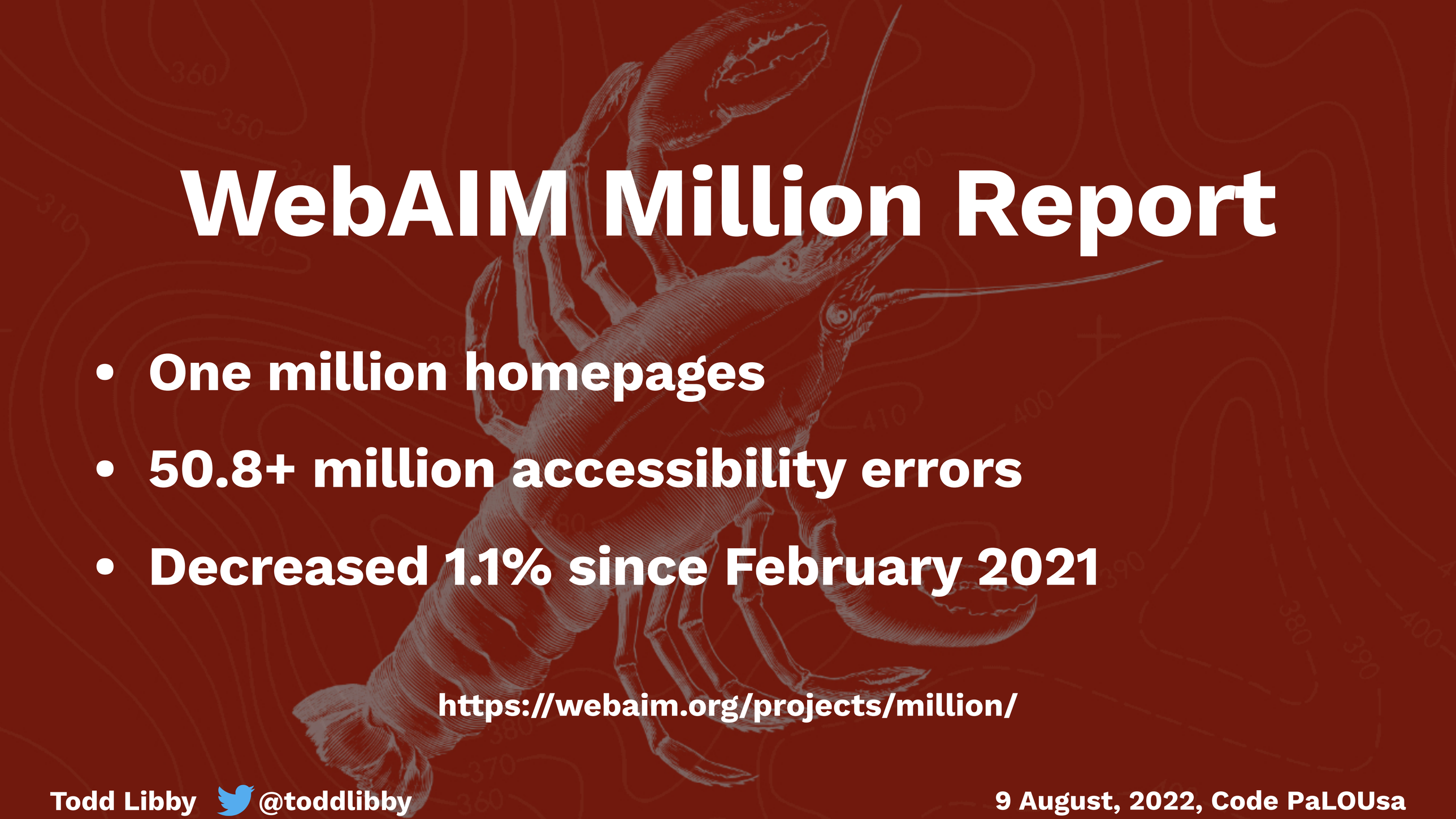

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- Decreased 1.1% since February 2021

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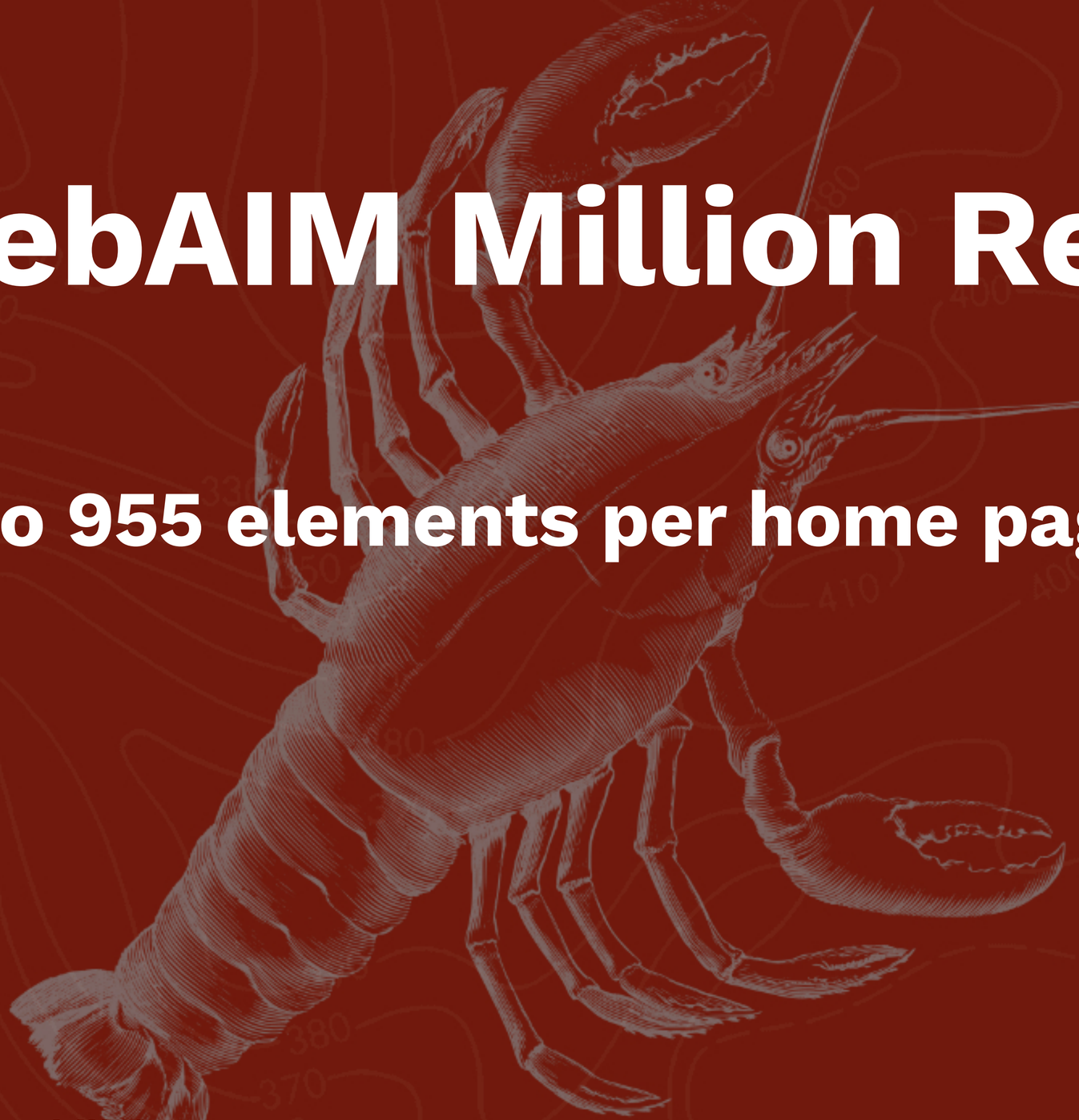
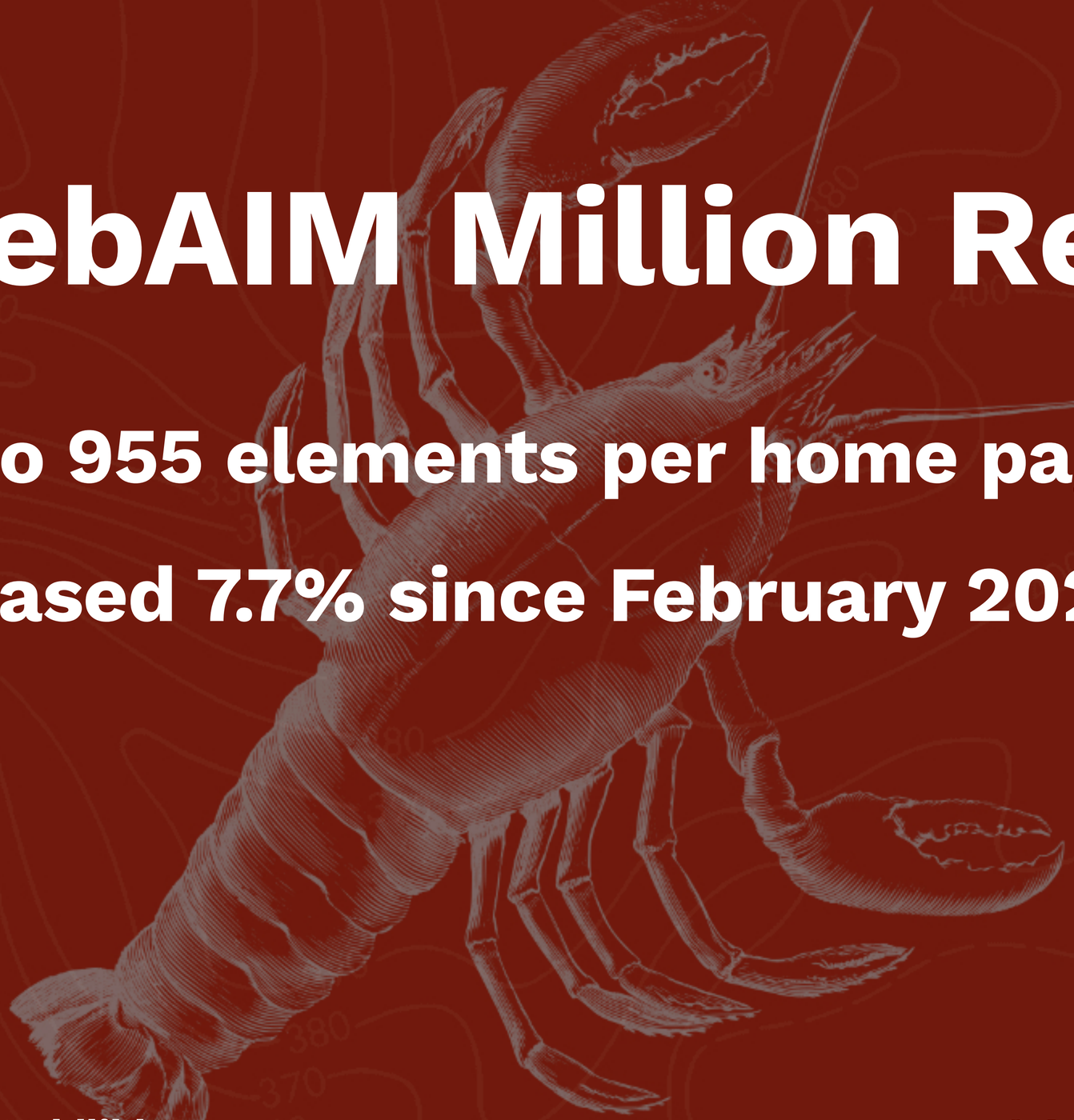
WebAIM Million Report



- 887 to 955 elements per home page

WebAIM Million Report

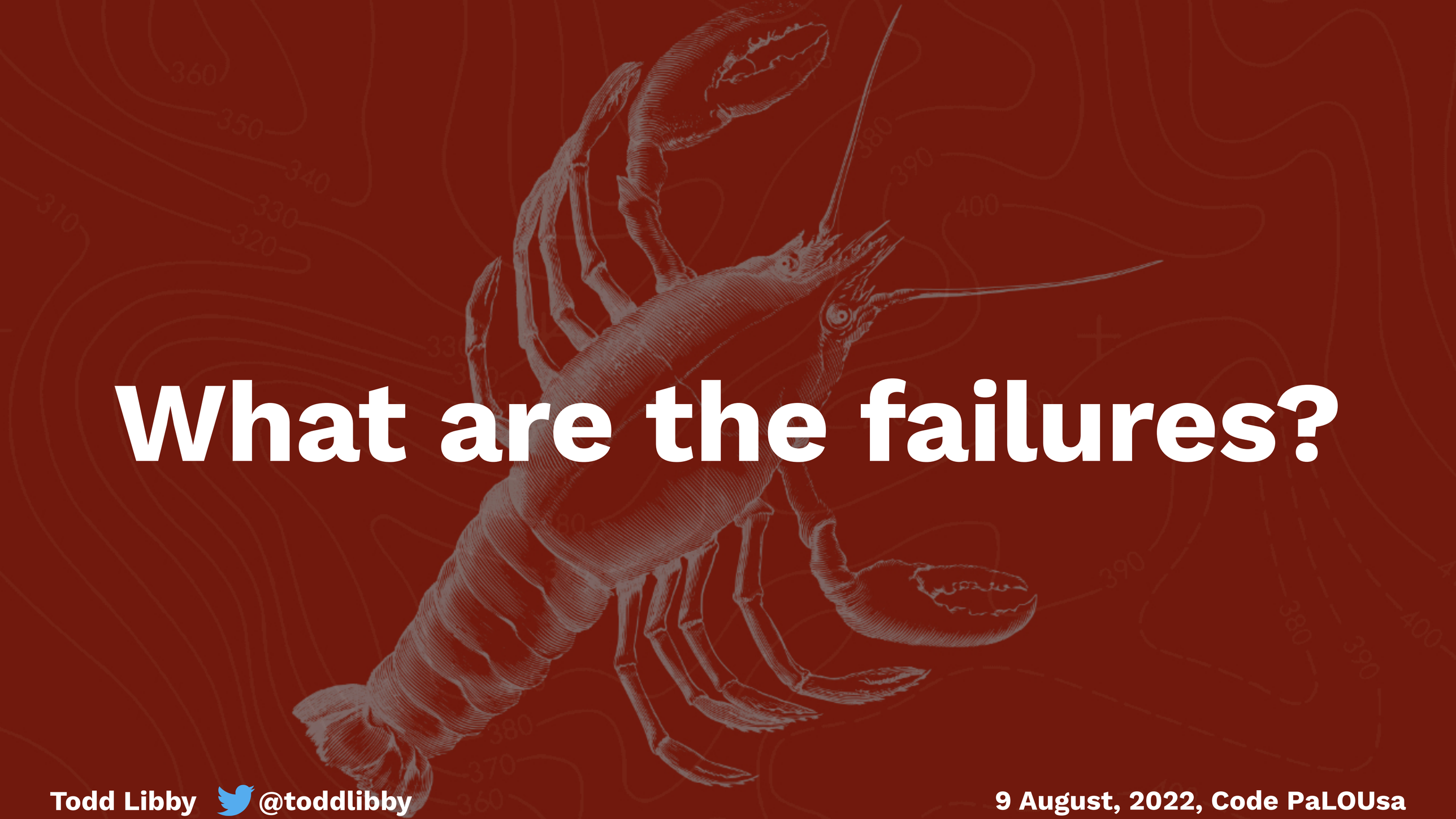
- 887 to 955 elements per home page
- Increased 7.7% since February 2021



WebAIM Million Report

- 887 to 955 elements per home page
- Increased 7.7% since February 2021
- 5.3% of all home page errors had a detected accessibility error

96.8% had WCAG 2 failures



What are the failures?

Low Contrast of Text

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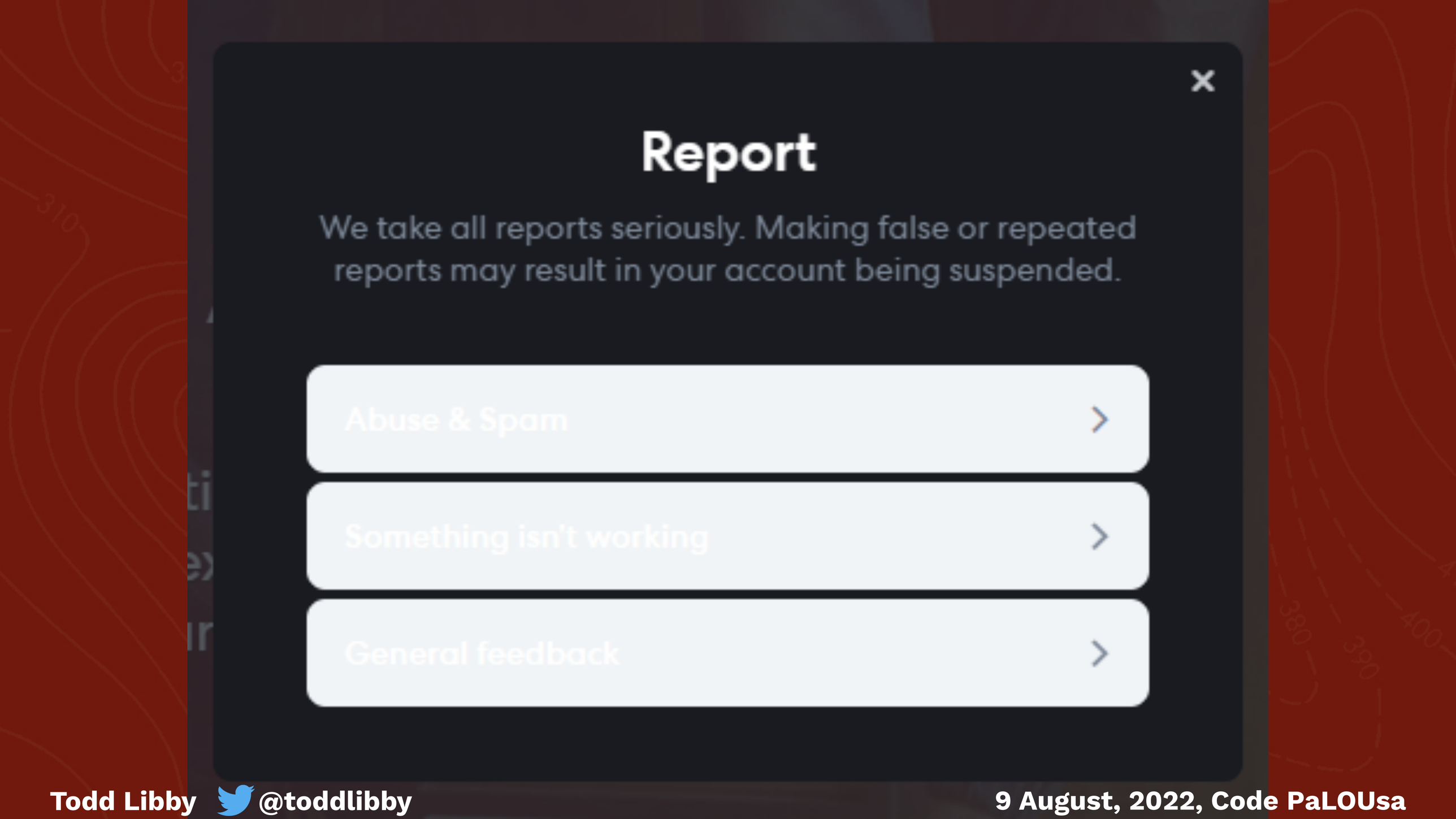
Report
We take all reports seriously. Making false or repeated reports may result in your account being suspended.
Abuse & Spam
Something isn't working
General feedback

1.1:1 color contrast ratio

(Contrast ranges from 1:1 to 21:1)

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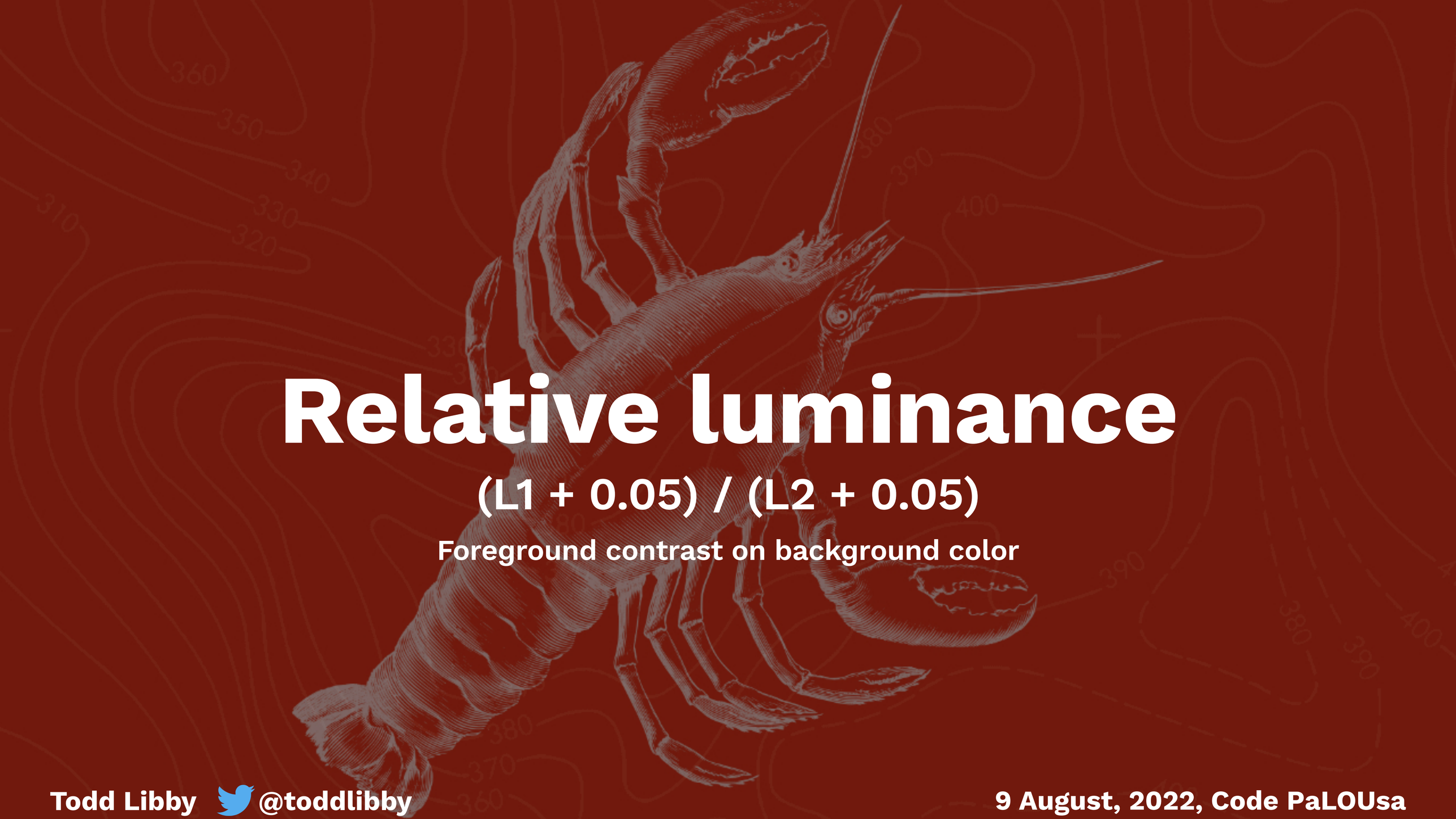

Relative luminance

(L1 + 0.05) / (L2 + 0.05)

Foreground contrast on background color

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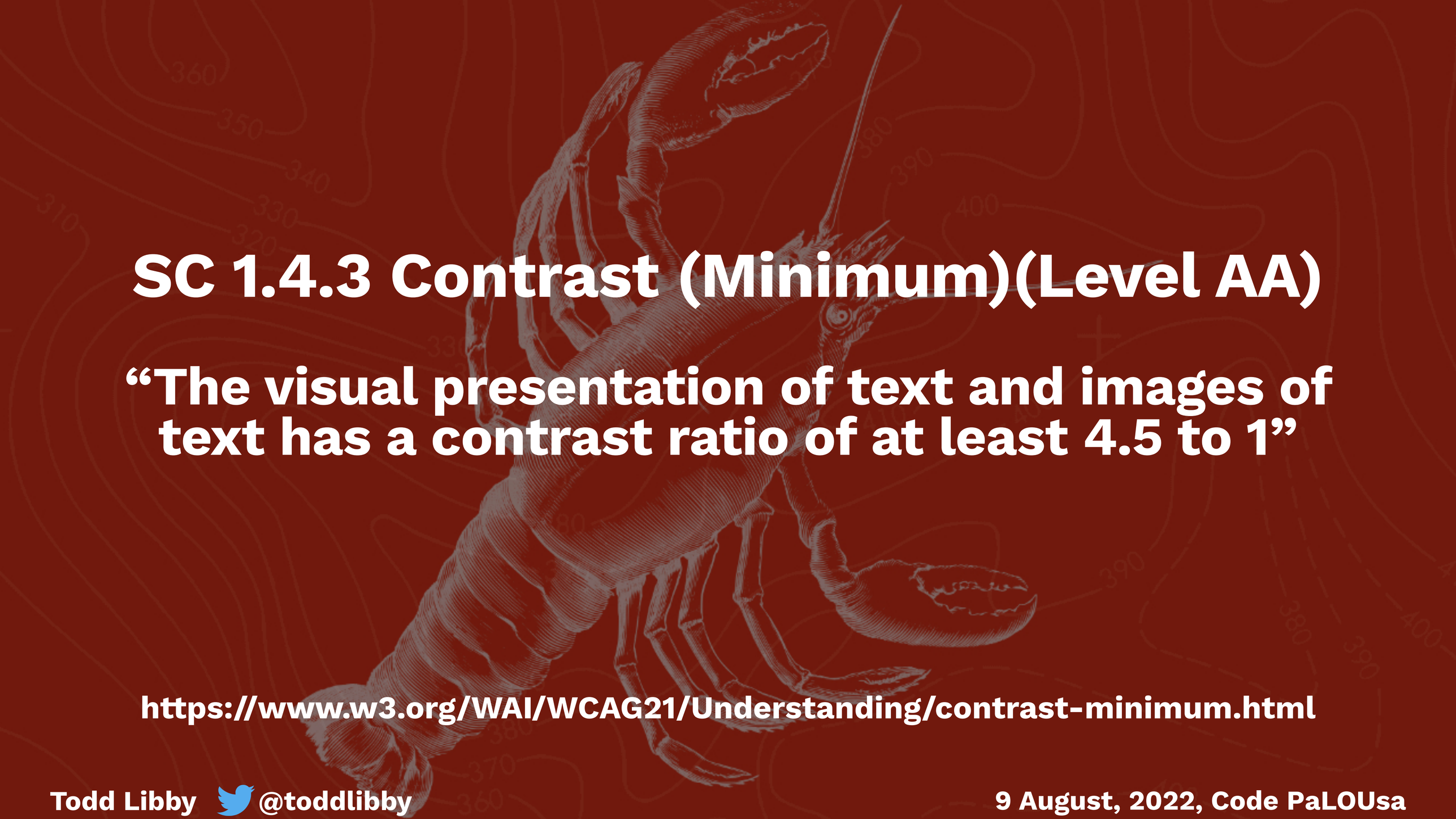

SC 1.4.3 Contrast (Minimum)(Level AA)

“The visual presentation of text and images of text has a contrast ratio of at least 4.5 to 1”

https://www.w3.org/WAI/WCAG21/Understanding/contrast-minimum.html

Missing Alternative Text

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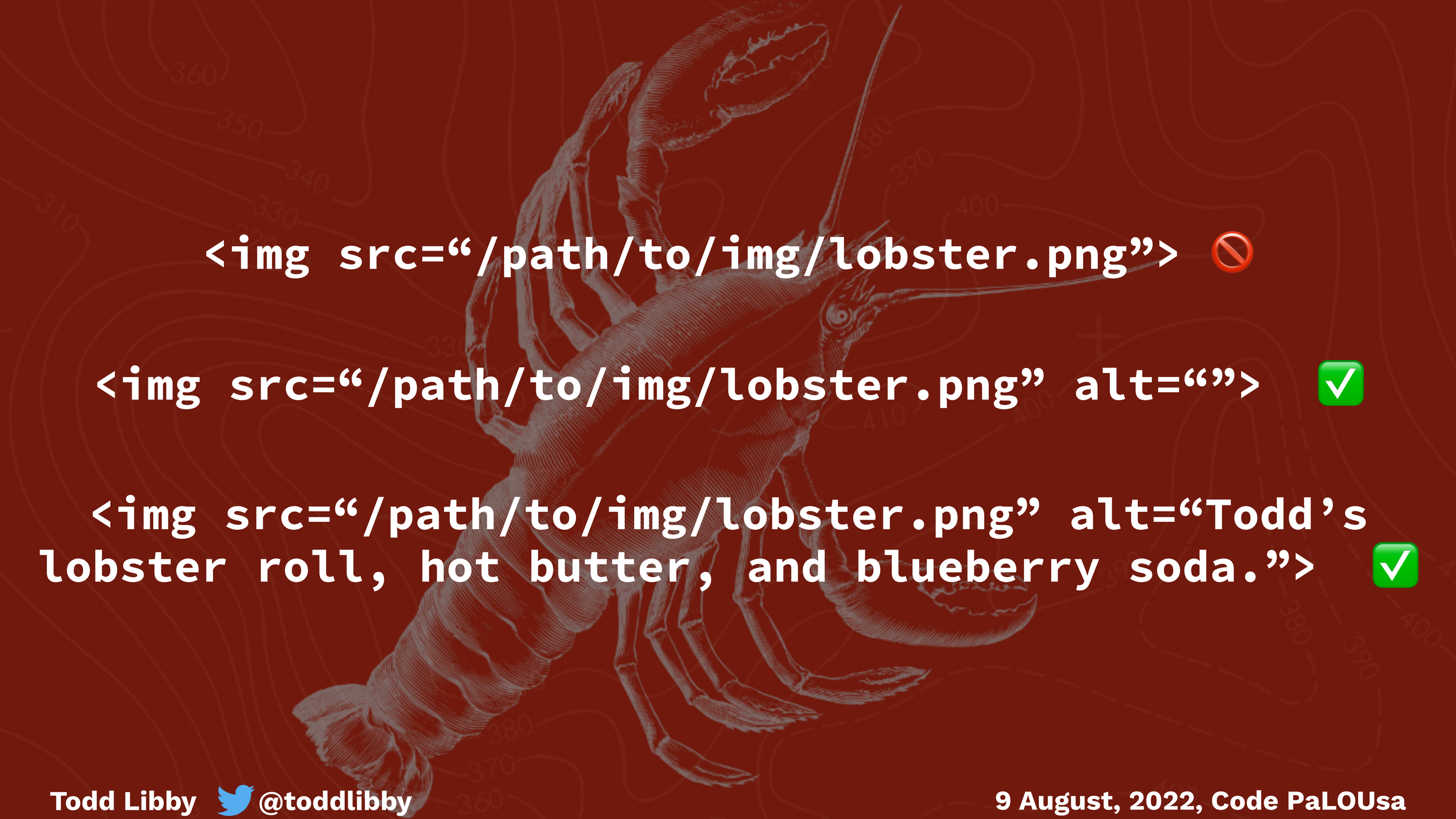

```
<img src="/path/to/img/lobster.png">
```

🚫

```
<img src="/path/to/img/lobster.png" alt="">
```

✅

```
<img src="/path/to/img/lobster.png" alt="Todd's lobster roll, hot butter, and blueberry soda.">
```

✅

NASA @NASA · Jul 12

Normal 0%

Cosmic cliffs & a sea of stars. @NASAWebb reveals baby stars in the Carina Nebula, where ultraviolet radiation and stellar winds shape colossal walls of dust and gas. nasa.gov/webbfirstimages #UnfoldTheUniverse

Image description

The image is divided horizontally by an undulating line between a cloudscape forming a nebula along the bottom portion and a comparatively clear upper portion. Speckled across both portions is a starfield, showing innumerable stars of many sizes. The smallest of these are small, distant, and faint points of light. The largest of these appear larger, closer, brighter, and more fully resolved with 8-point diffraction spikes. The upper portion of the image is blueish, and has wispy translucent cloud-like streaks rising from the nebula below. The orangish cloudy formation in the bottom half varies in density and ranges from translucent to opaque. The stars vary in color, the majority of which, have a blue or orange hue. The cloud-like structure of the nebula contains ridges, peaks, and valleys – an appearance very similar to a mountain range. Three long diffraction spikes from the top right edge of the image suggest the presence of a large star just out of view.

Dismiss

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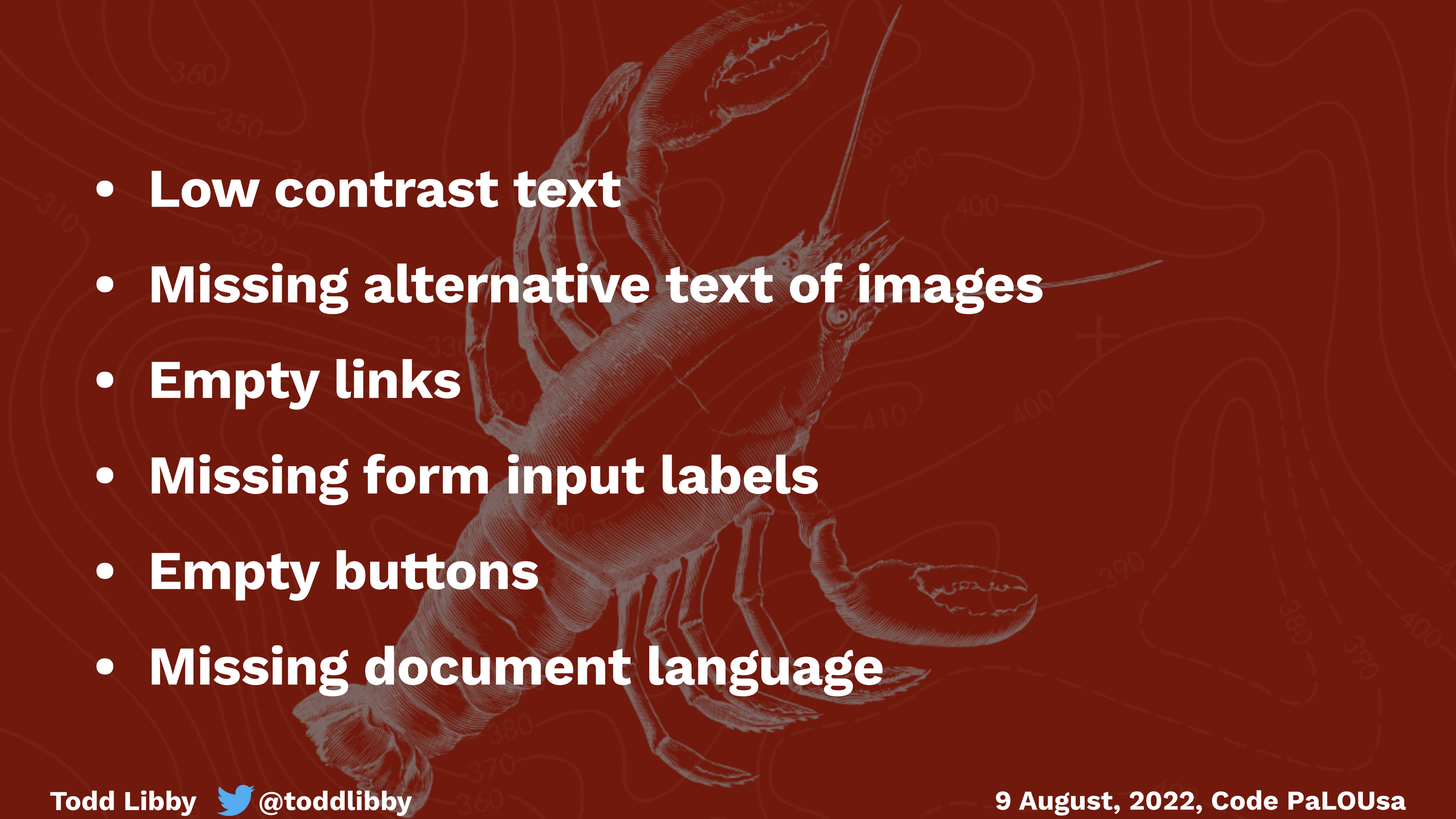
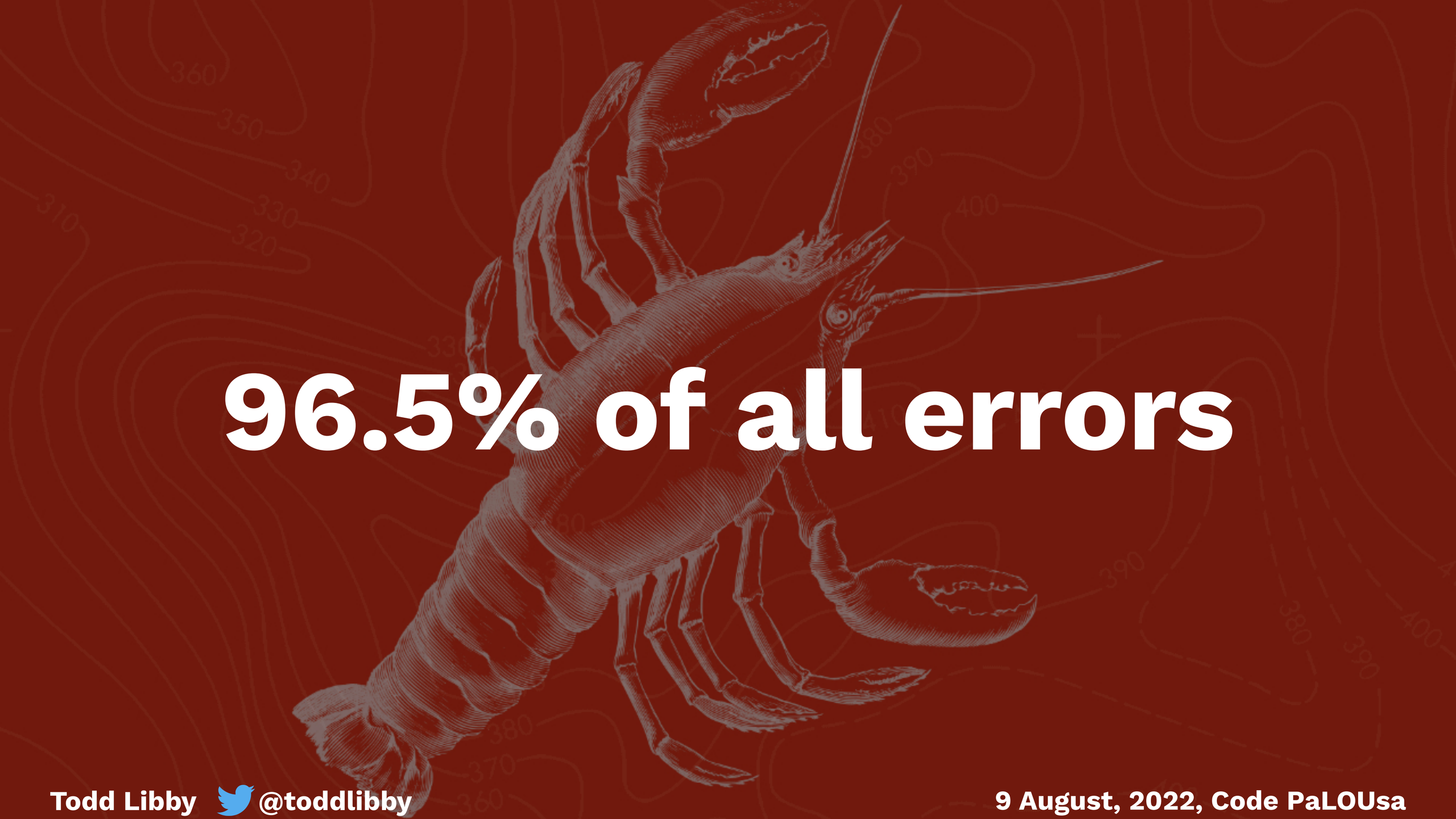
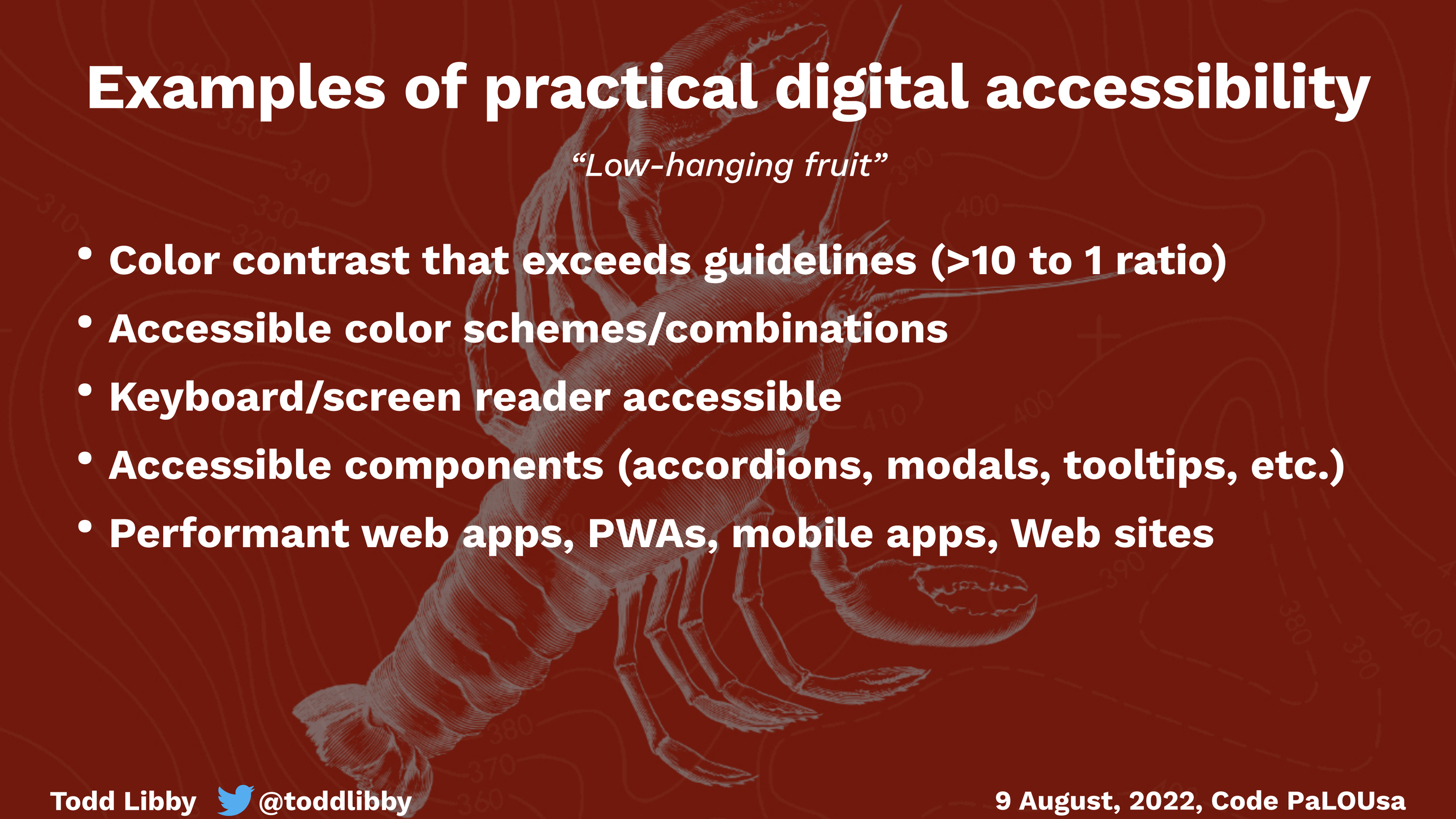


- Low contrast text
- Missing alternative text of images
- Empty links
- Missing form input labels
- Empty buttons
- Missing document language


96.5% of all errors

Examples of practical digital accessibility

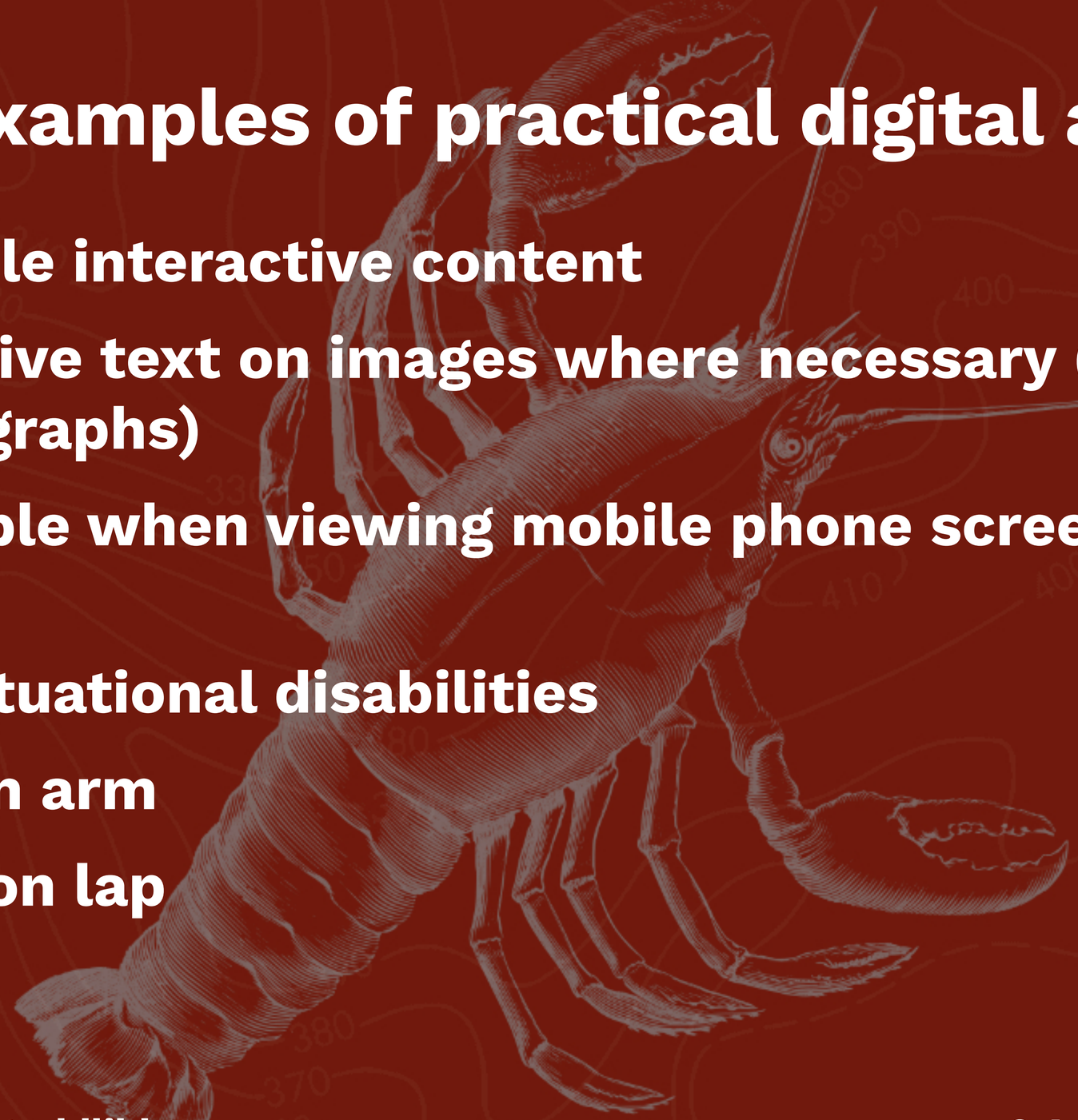
“Low-hanging fruit”



- Color contrast that exceeds guidelines (>10 to 1 ratio)
- Accessible color schemes/combinations
- Keyboard/screen reader accessible
- Accessible components (accordions, modals, tooltips, etc.)
- Performant web apps, PWAs, mobile apps, Web sites

More Examples of practical digital accessibility

- Scrollable interactive content
- Alternative text on images where necessary (infographics, charts, graphs)
- Accessible when viewing mobile phone screen (glare from sun)
- Other situational disabilities
  - Broken arm
  - Child on lap



Disability is just Blind, Deaf, or Paralysis. Right?

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FALSE

Learning / Cognitive
ADHD / ADD
Fibromyalgia / Arthritis
Tremors / Parkinson’s
Migraine Headaches / Photophobia

Excuses

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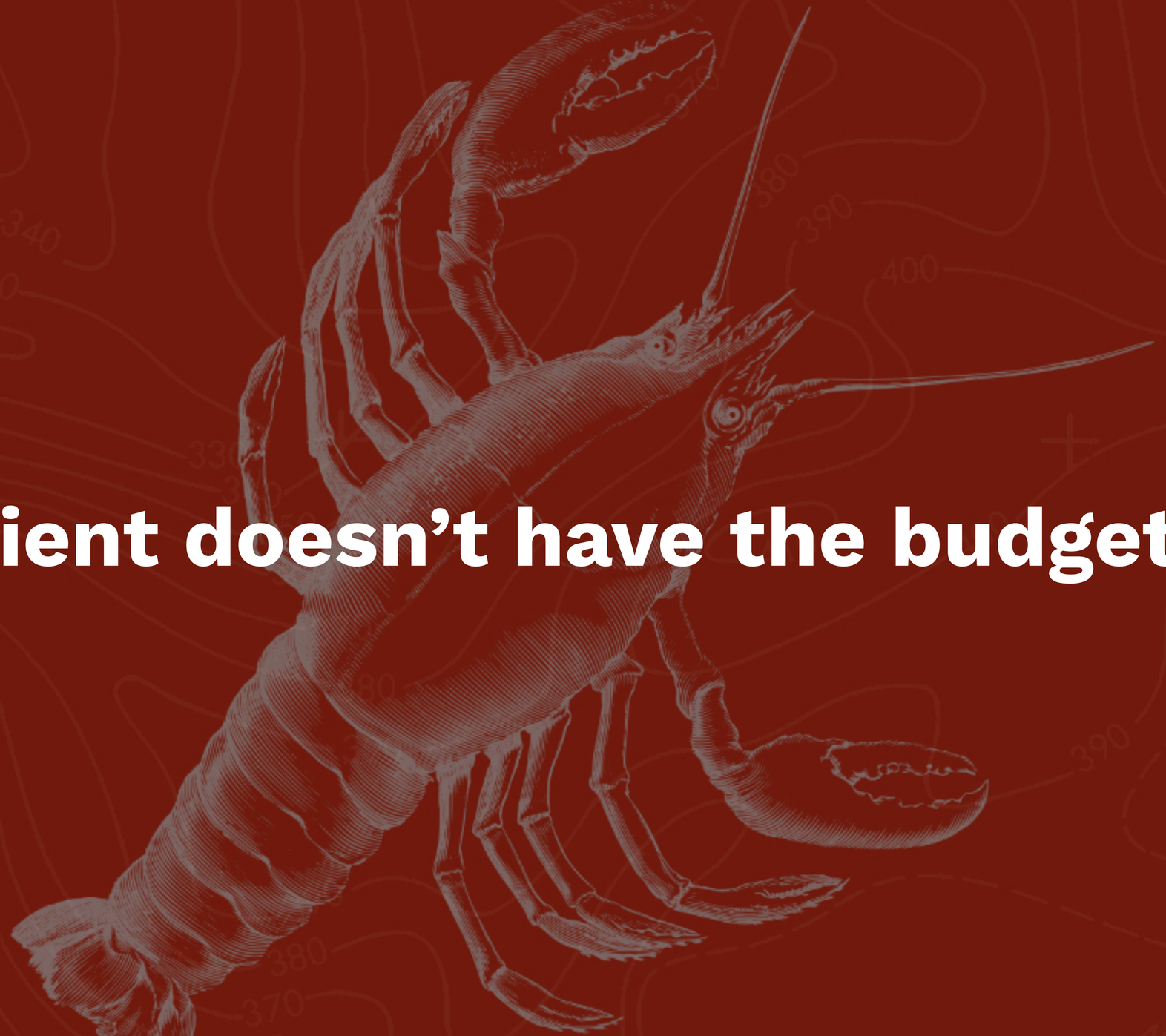

“The client doesn’t have the budget for it.”

“We’ll get to it after launch.”

“Why do we even need to make this thing accessible?”

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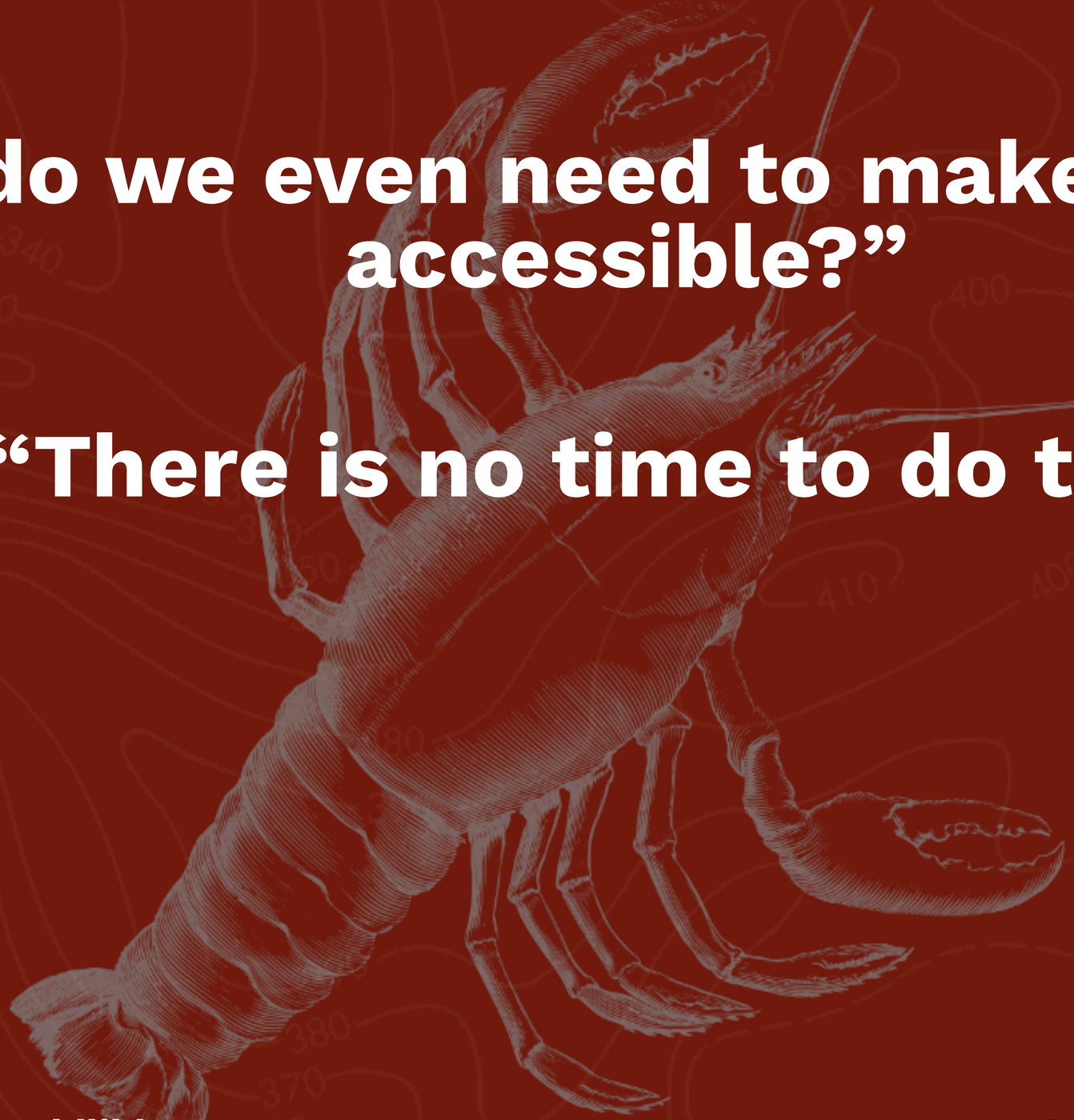
“There is no time to do this.”



“Why do we even need to make this thing accessible?”

“There is no time to do this.”

“We don’t have disabled users.”

“Why do we even need to make this thing accessible?”

“There is no time to do this.”

“We don’t have disabled users.”

“The people that use our product are not disabled.”

“It’s a huge waste of time.”

internally screaming

– LOOK, I CAN'T SPEAK
WITHOUT SWEARING

Todd Libby @toddlibby
9 August, 2022, Code PaLOUsa

Buy-In

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9 August, 2022, Code PaLOUsa

Buy-In

How do I get buy-in from stakeholders, clients, colleagues?

- **Support trickles down from C-suite & top level to managers, teams, and individuals.**

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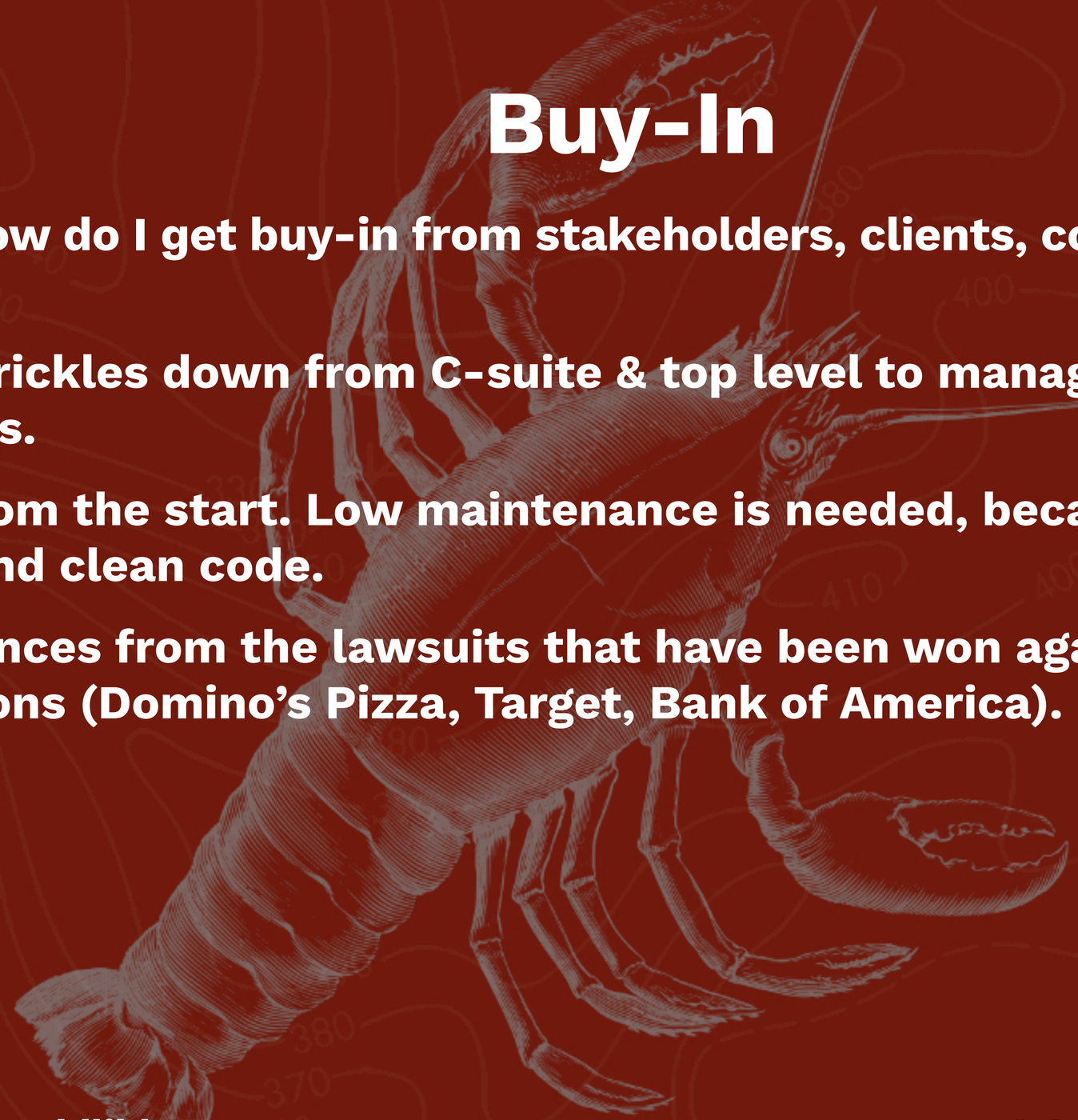

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- Live testing with disabled users recorded on video.

$8 Trillion

Worldwide of disposable income of individuals with disabilities

https://www.triplepundit.com/story/2022/investing-disability-inclusion/741416

$490 Billion

Disposable income of individuals with disabilities in the U.S.

https://diverseabilitymagazine.com/2018/09/buying-power-people-disabilities/

Advocates

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9 August, 2022, Code PaLOUsa

Organization Advocates

Teams or individuals that advocate in your organization

- **Having a person throughout each department or a team focused on accessibility as a liaison.**

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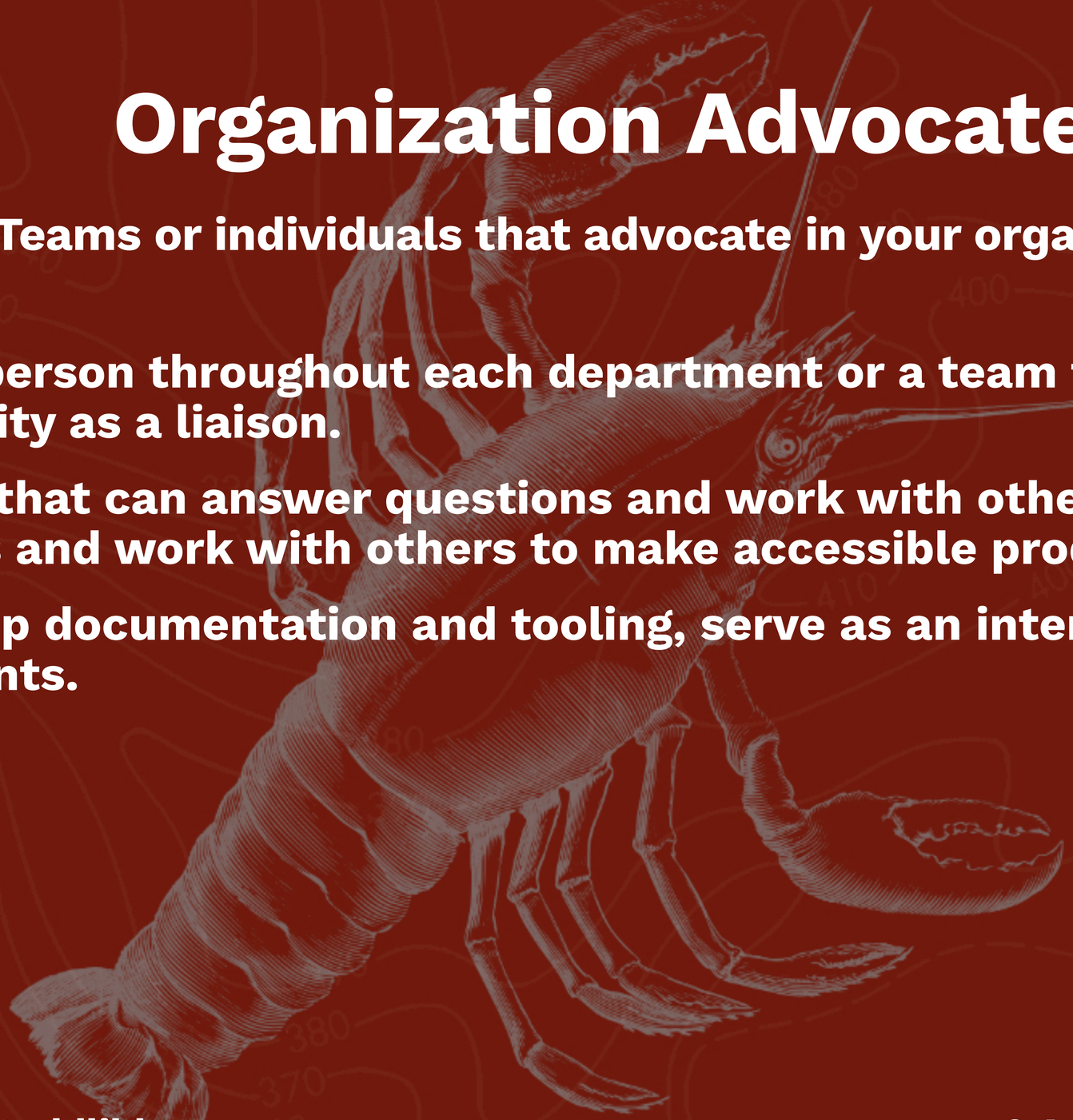

- Having a person throughout each department or a team focused on accessibility as a liaison.
- Someone that can answer questions and work with others to practice the guidelines and work with others to make accessible products.
- Help set up documentation and tooling, serve as an intermediary between departments.

Assessment

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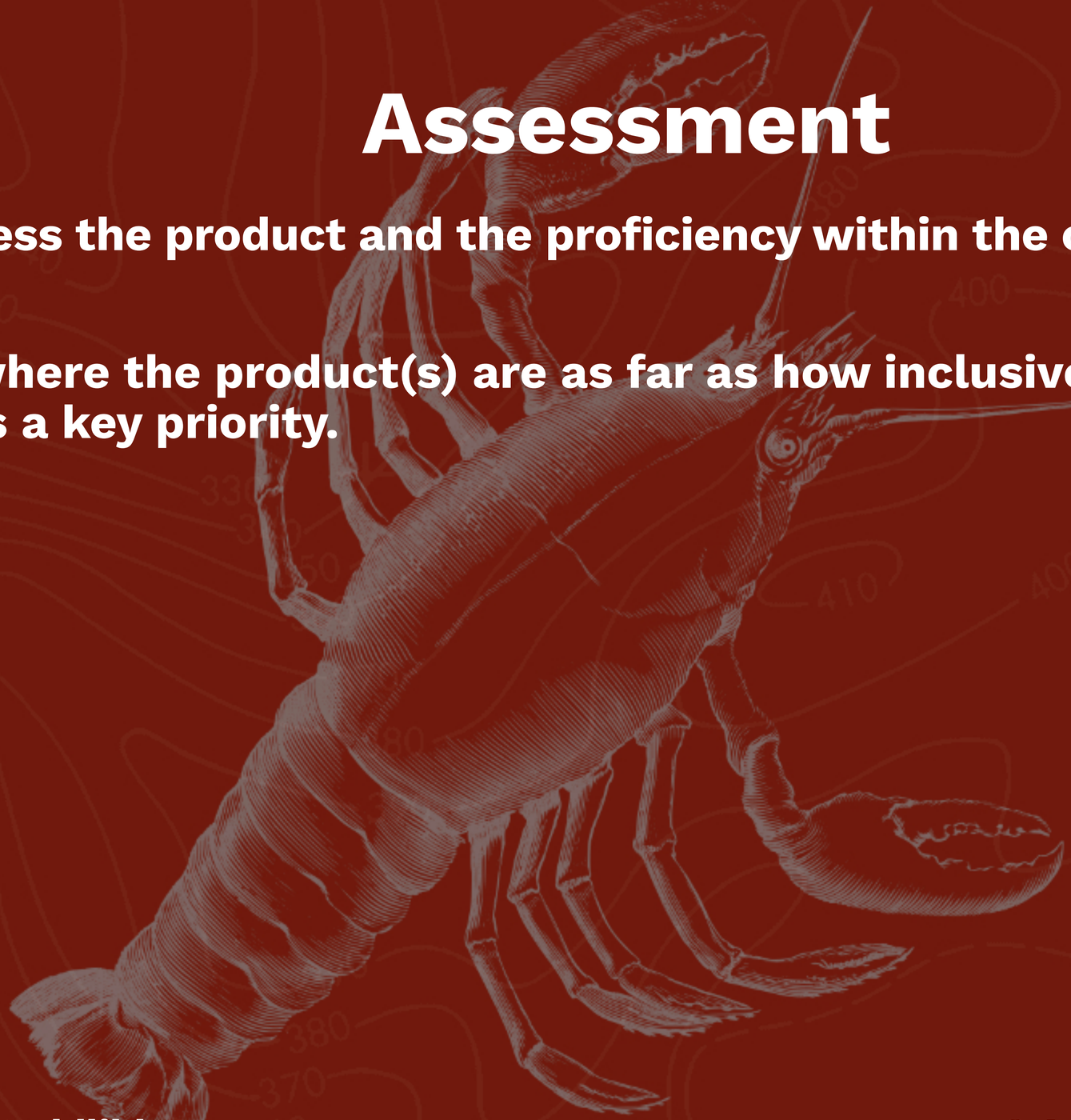
Assessment

Assess the product and the proficiency within the organization

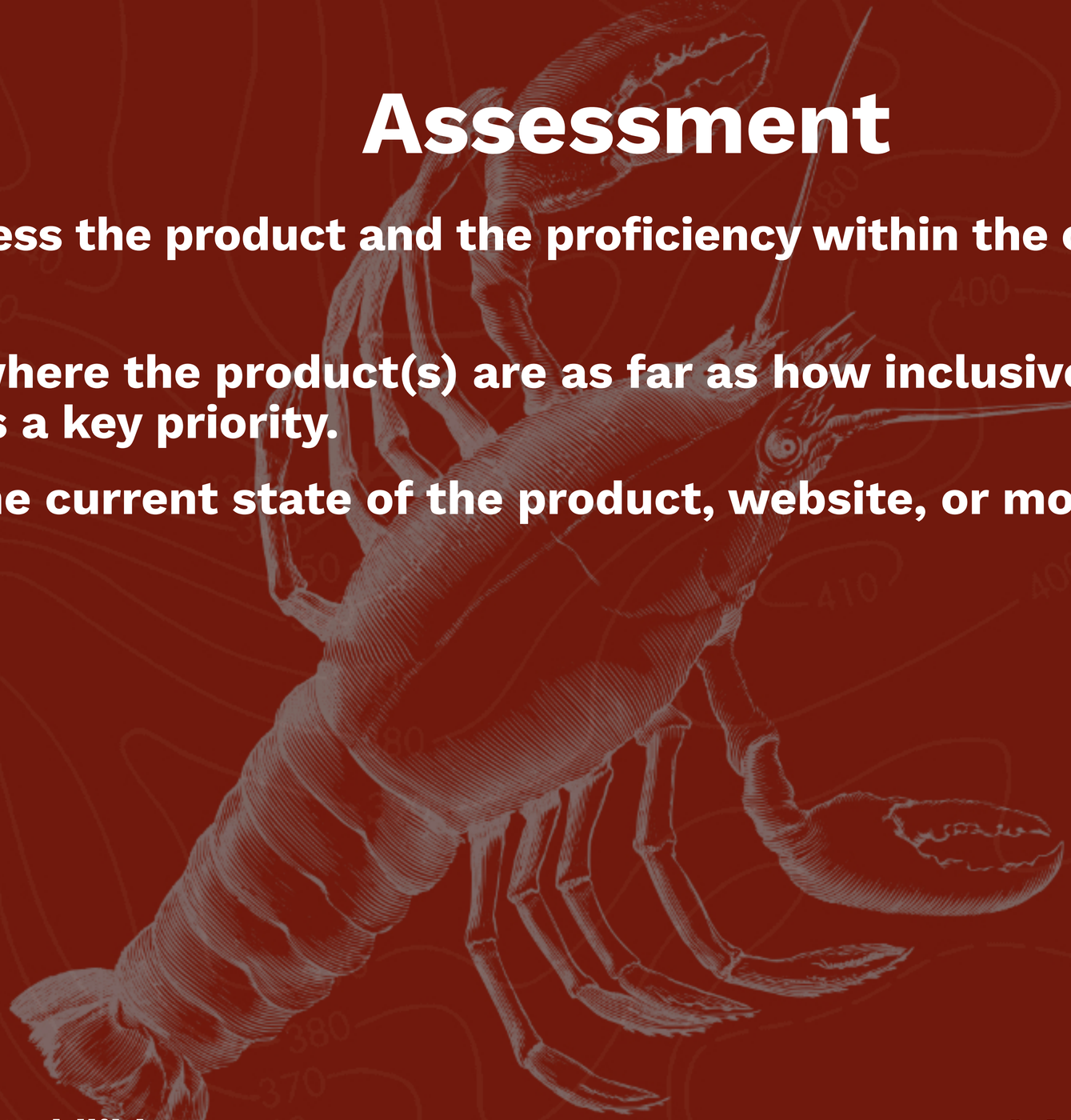
- **Gauging where the product(s) are as far as how inclusive and accessible they are is a key priority.**



Assessment

Assess the product and the proficiency within the organization

- **Gauging where the product(s) are as far as how inclusive and accessible they are is a key priority.**
- **What is the current state of the product, website, or mobile application?**



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- Getting the general idea of the level of knowledge that teams and people in the company currently have.
  - How versed are they in guidelines (WCAG) and practices?
  - How much training do you have and will you need?

Training

Todd Libby @toddlibby

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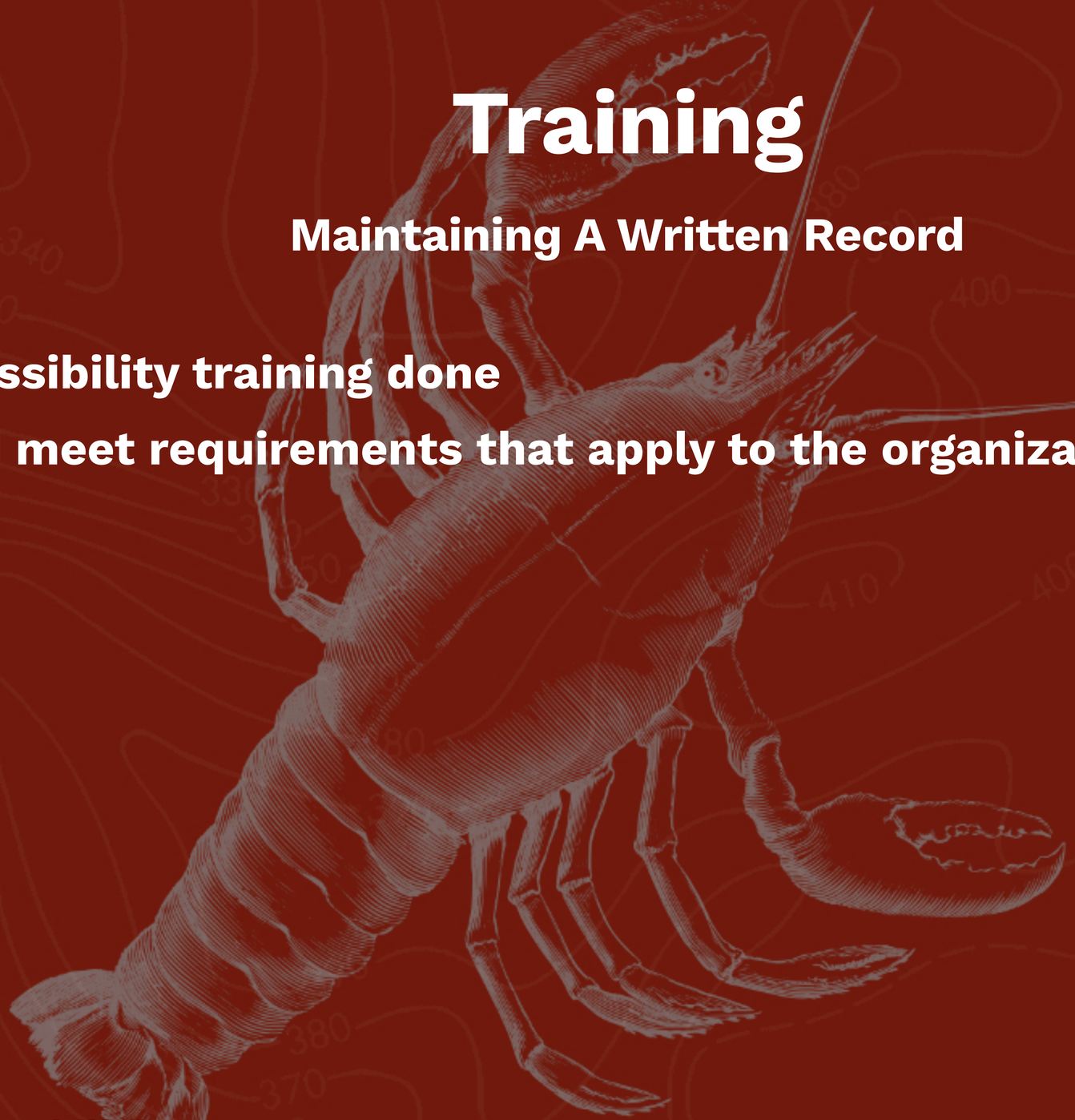
Training

Maintaining A Written Record



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Training

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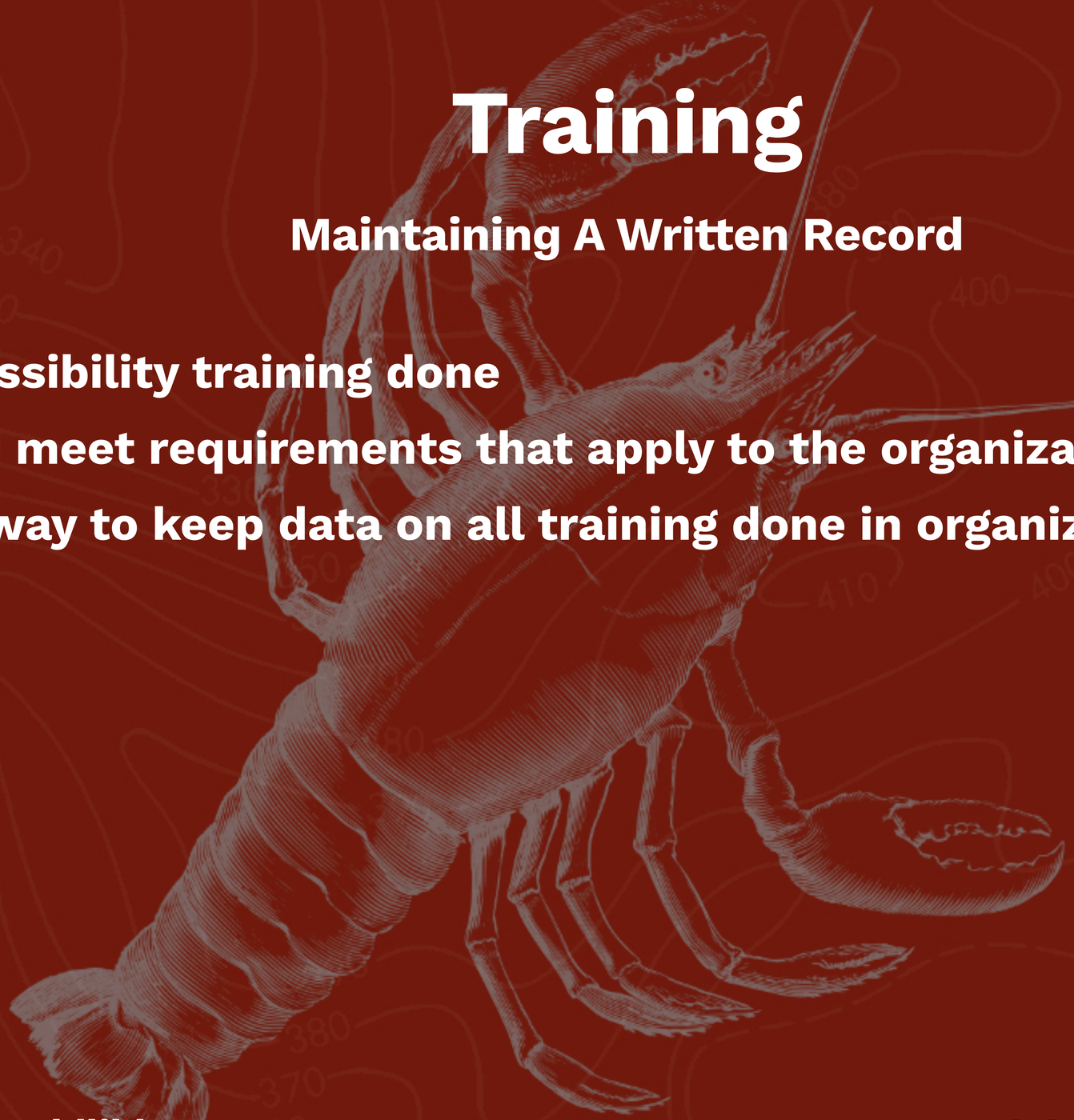
    - Great way to keep data on all training done in organization



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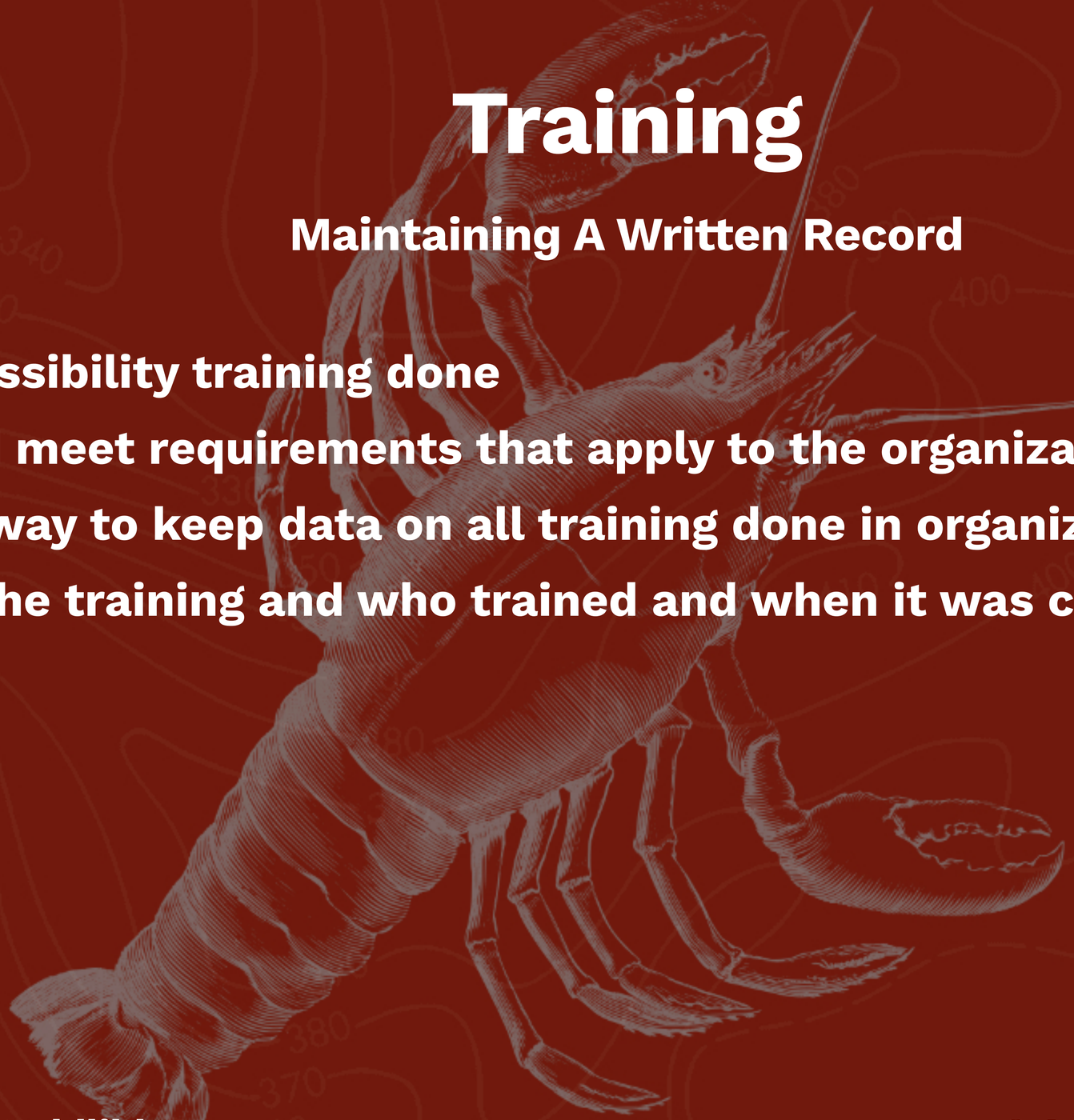

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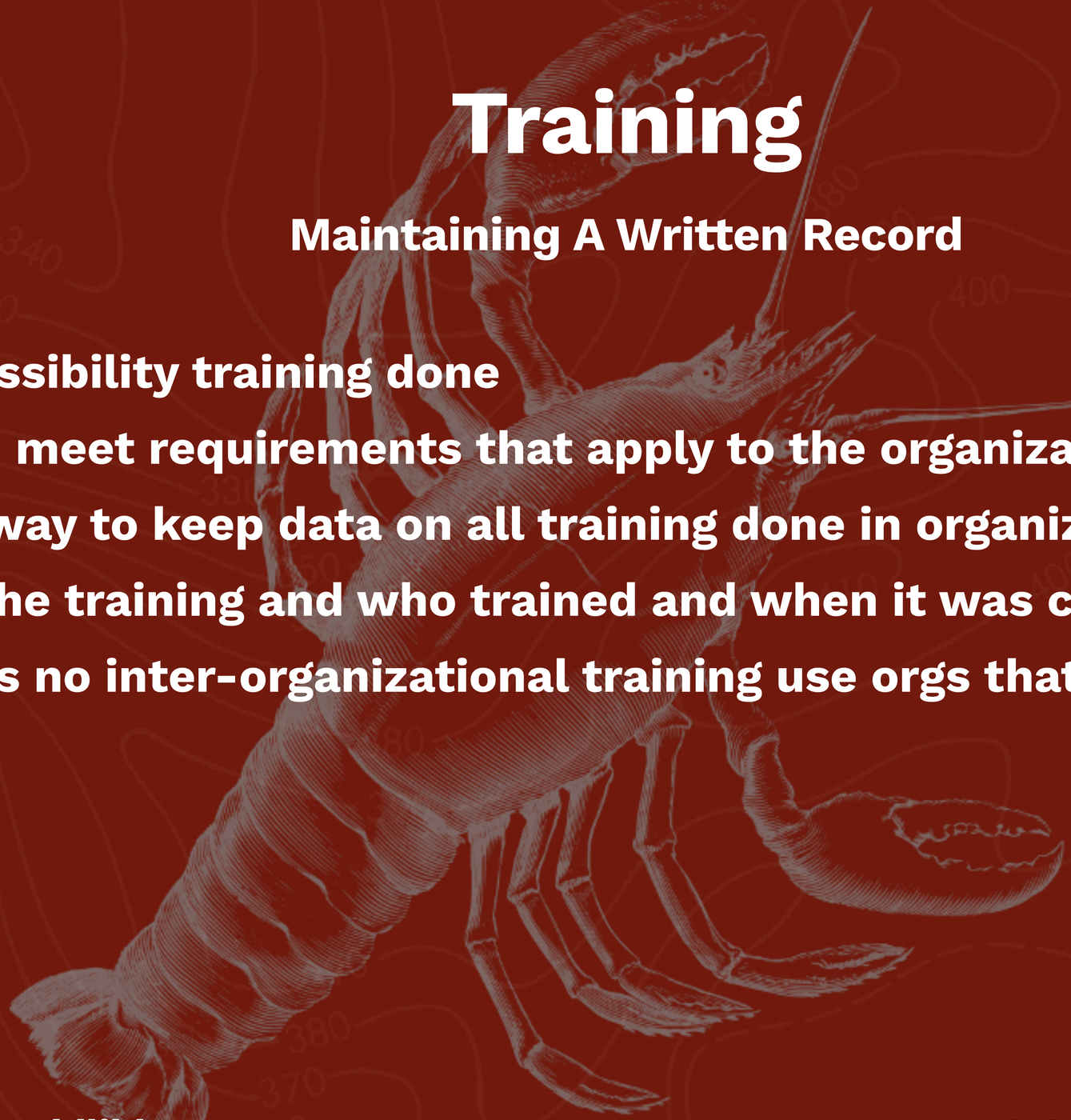

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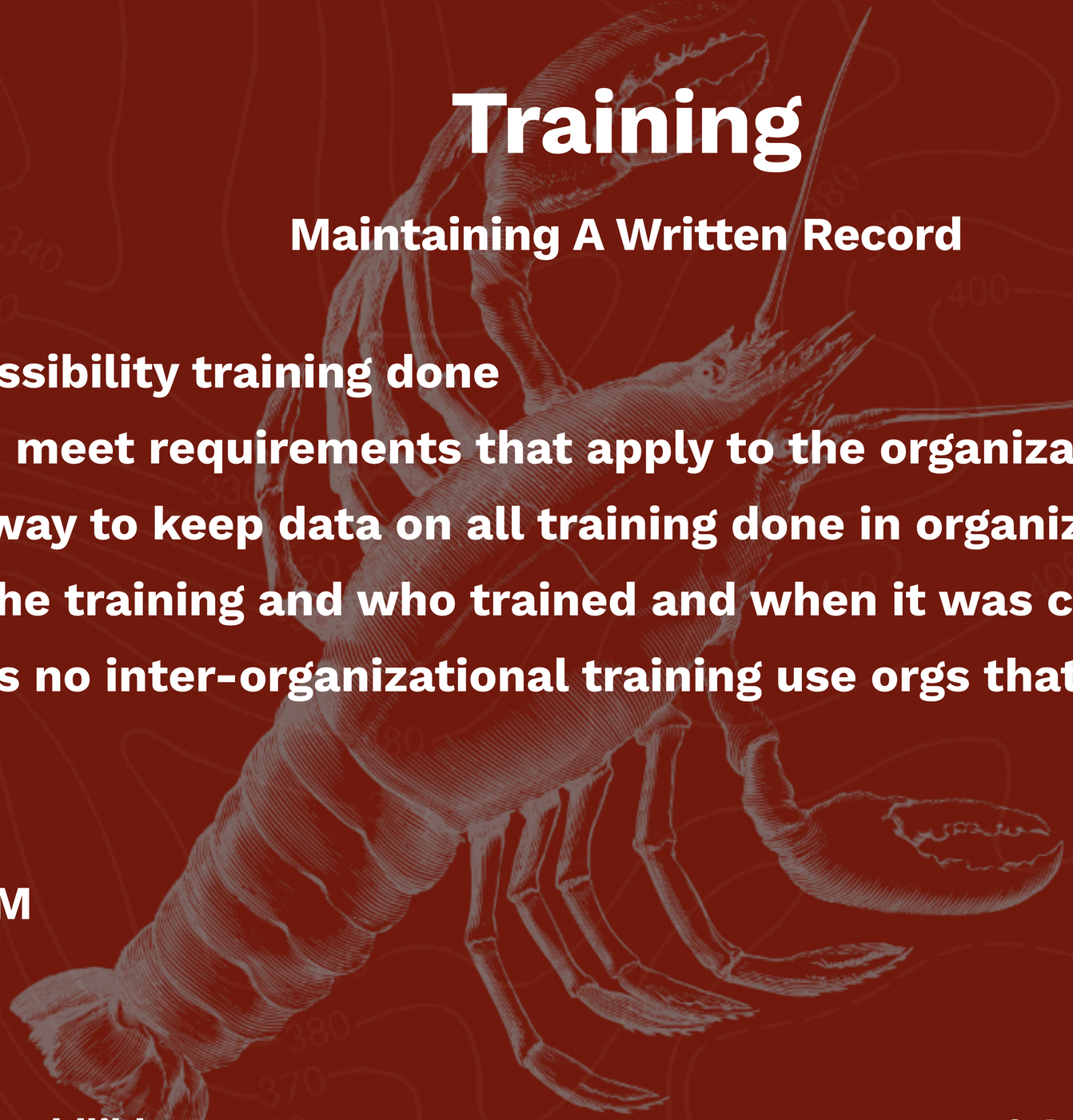
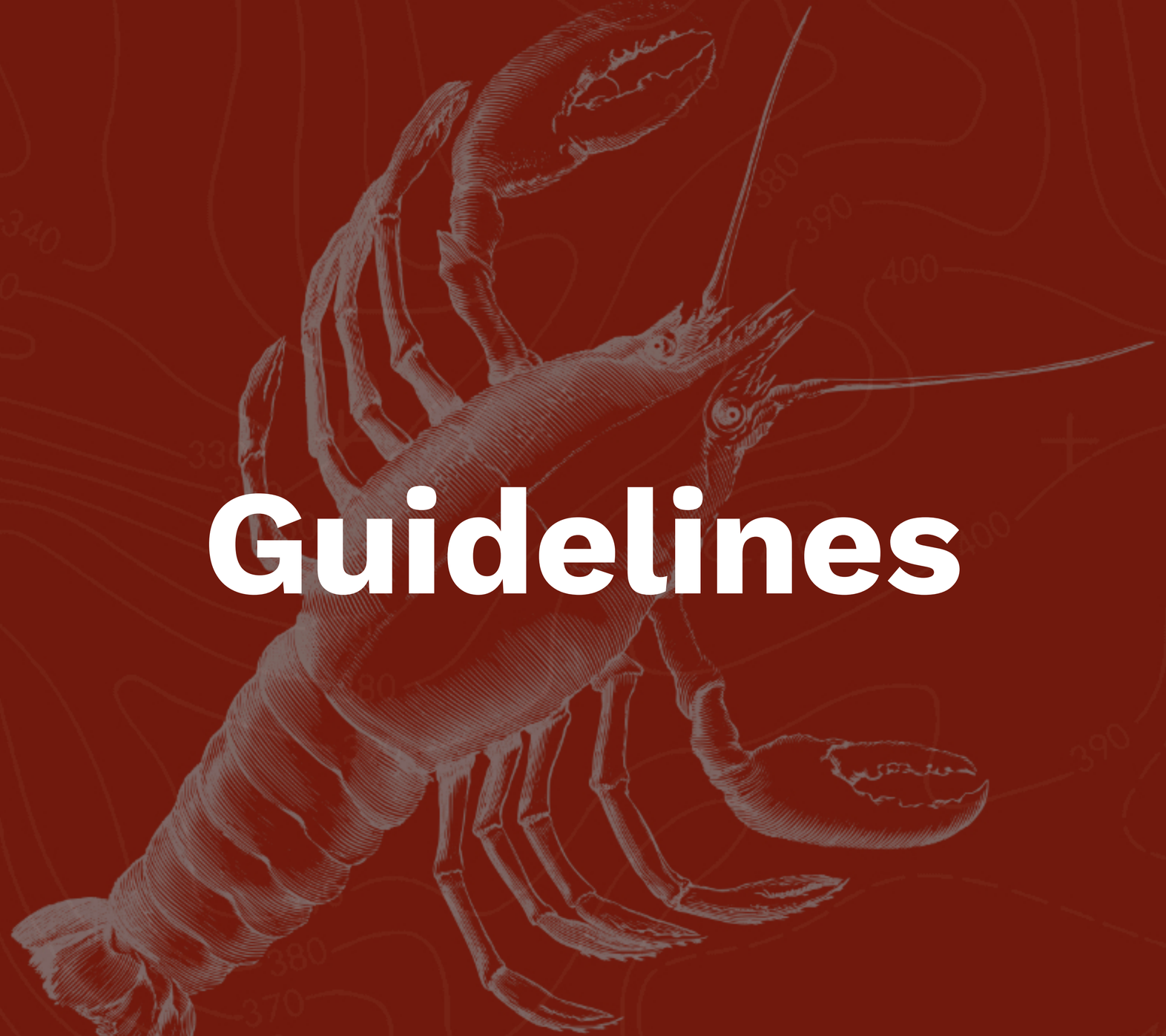
    - Deque
    - TPGi
    - WebAIM





Guidelines

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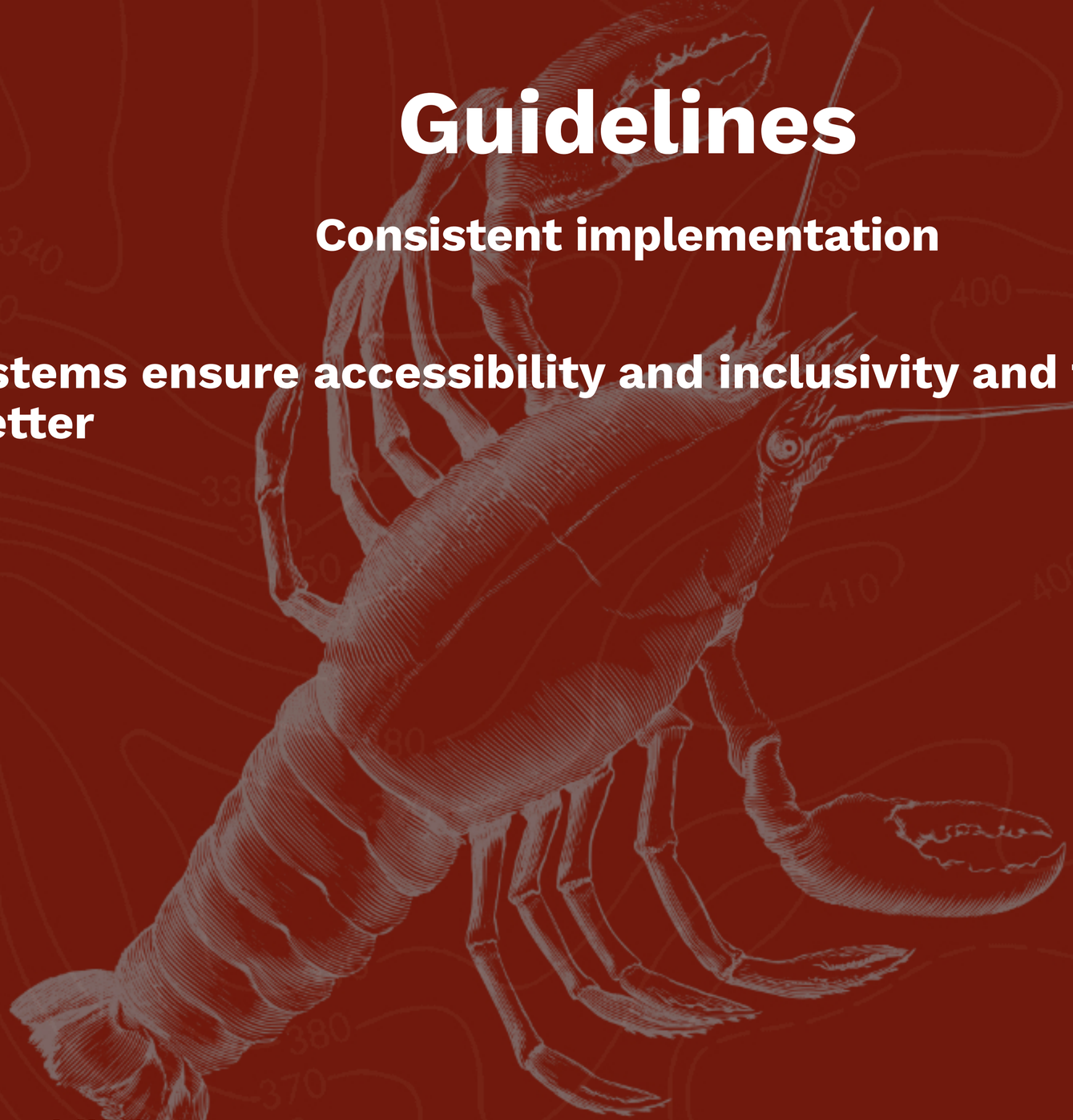
9 August, 2022, Code PaLOUsa

Guidelines

Consistent implementation

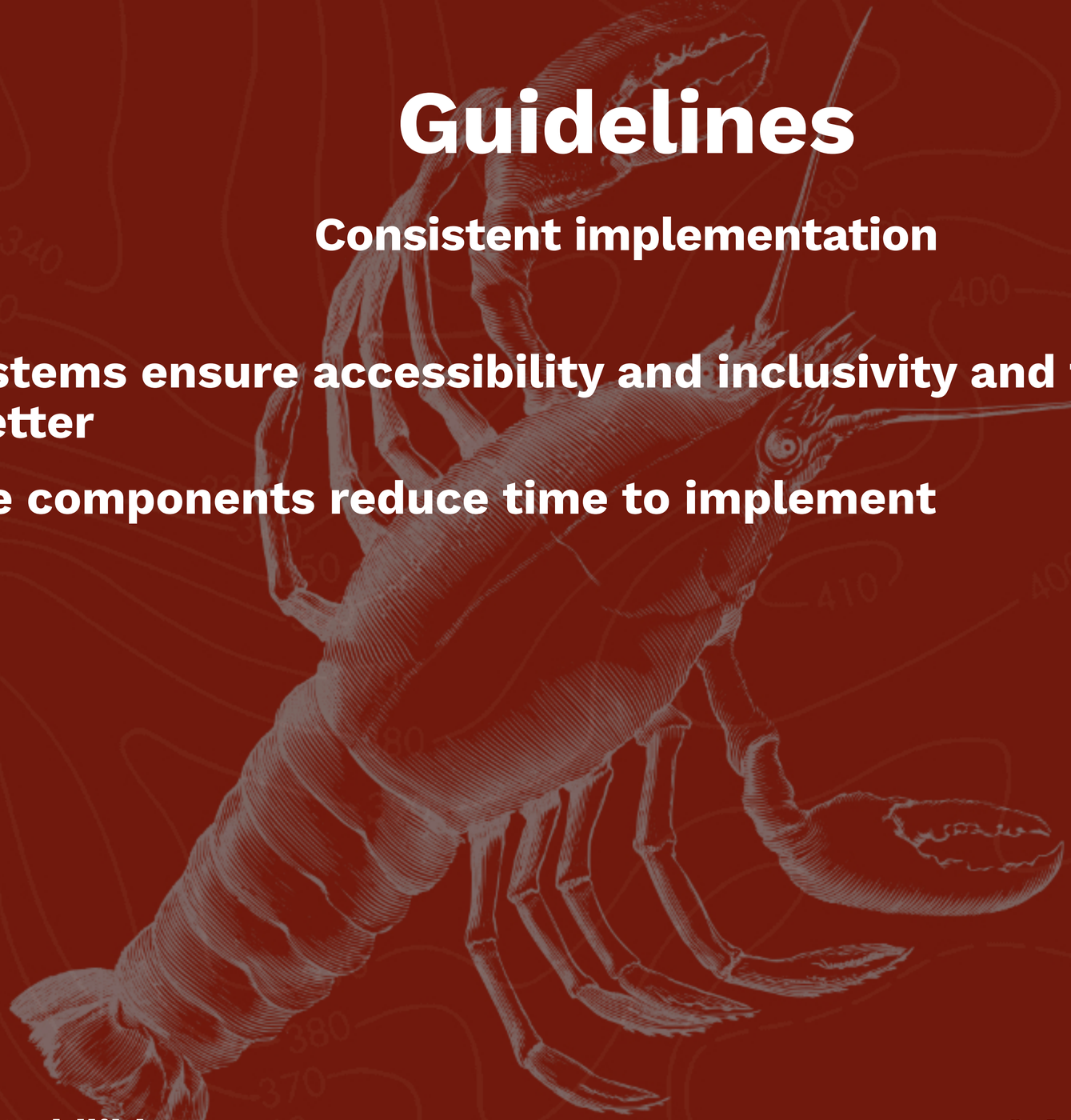
- Design systems ensure accessibility and inclusivity and the understanding of code better



Guidelines

Consistent implementation

- Design systems ensure accessibility and inclusivity and the understanding of code better
- Accessible components reduce time to implement



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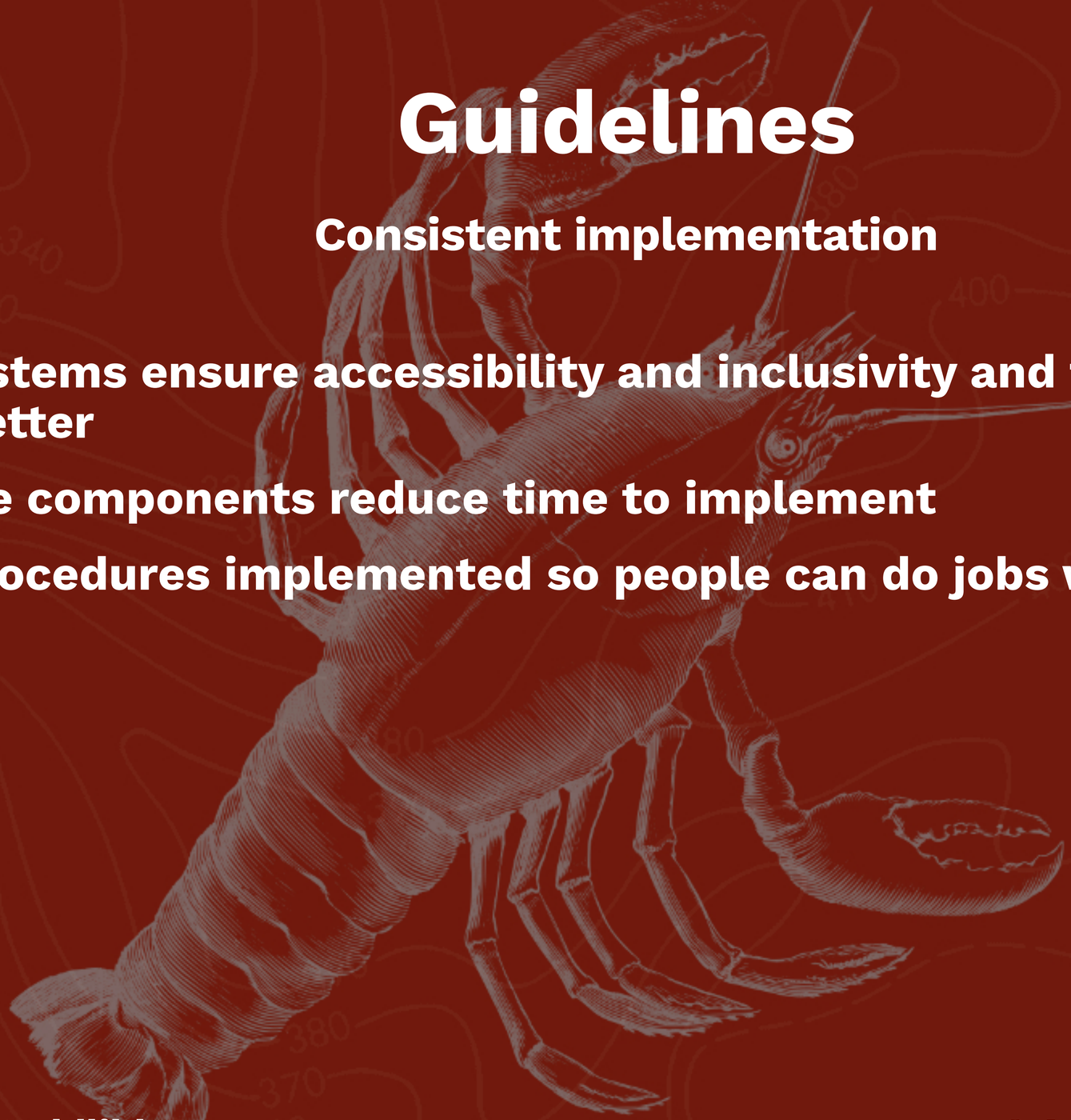
- Accessible components reduce time to implement
- Testing procedures implemented so people can do jobs well and efficiently



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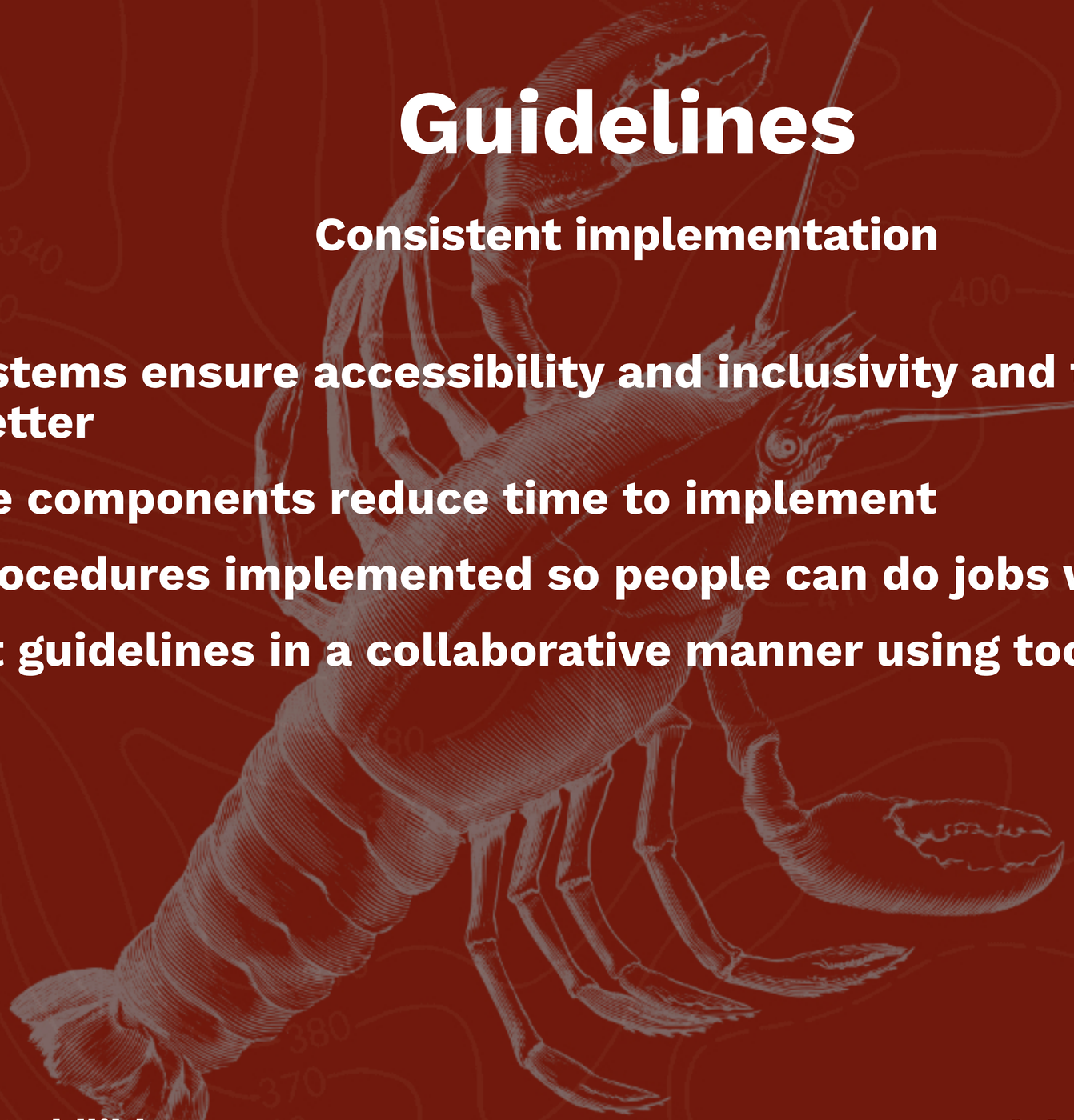
- Document guidelines in a collaborative manner using tools



Standards

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9 August, 2022, Code PaLOUsa

Standards

Guidelines from different countries

- American Disabilities Act (ADA), the Air Carrier Access Act (ACAA), and the Communications and Video Accessibility Act (CVAA) - United States
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- Accessible Canada Act (ACA), Accessibilities for Ontario’s with Disabilities Act (AODA) - Canada

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Standards

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- Convention on the Rights of Persons with Disabilities (CPRD)
  - Article 9
  - Article 21

Testing

Todd Libby @toddlibby

9 August, 2022, Code PaLOUsa

Use Cases/Testing

Hiring disabled people

- Test & record cases where disabled users are using the product

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- Test & record cases where disabled users are using the product
- Present to C-suite & top level people to colleagues/teams
- Outsource testing with companies:
  - Fable
- Hire disabled people!
  - Teaching and advocating. They have the lived experiences.

Accessibility Overlays

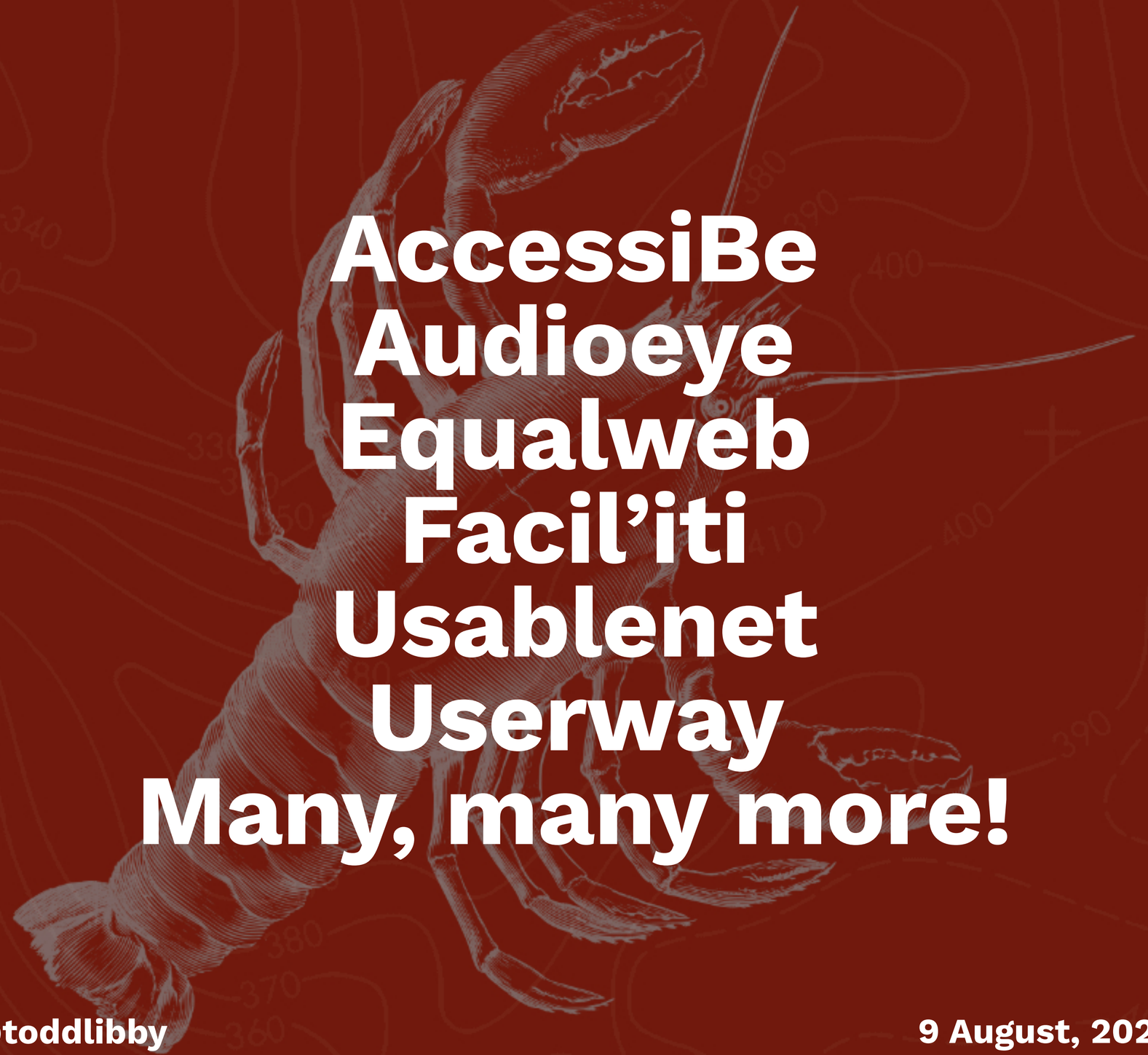
Todd Libby @toddlibby

9 August, 2022, Code PaLOUsa

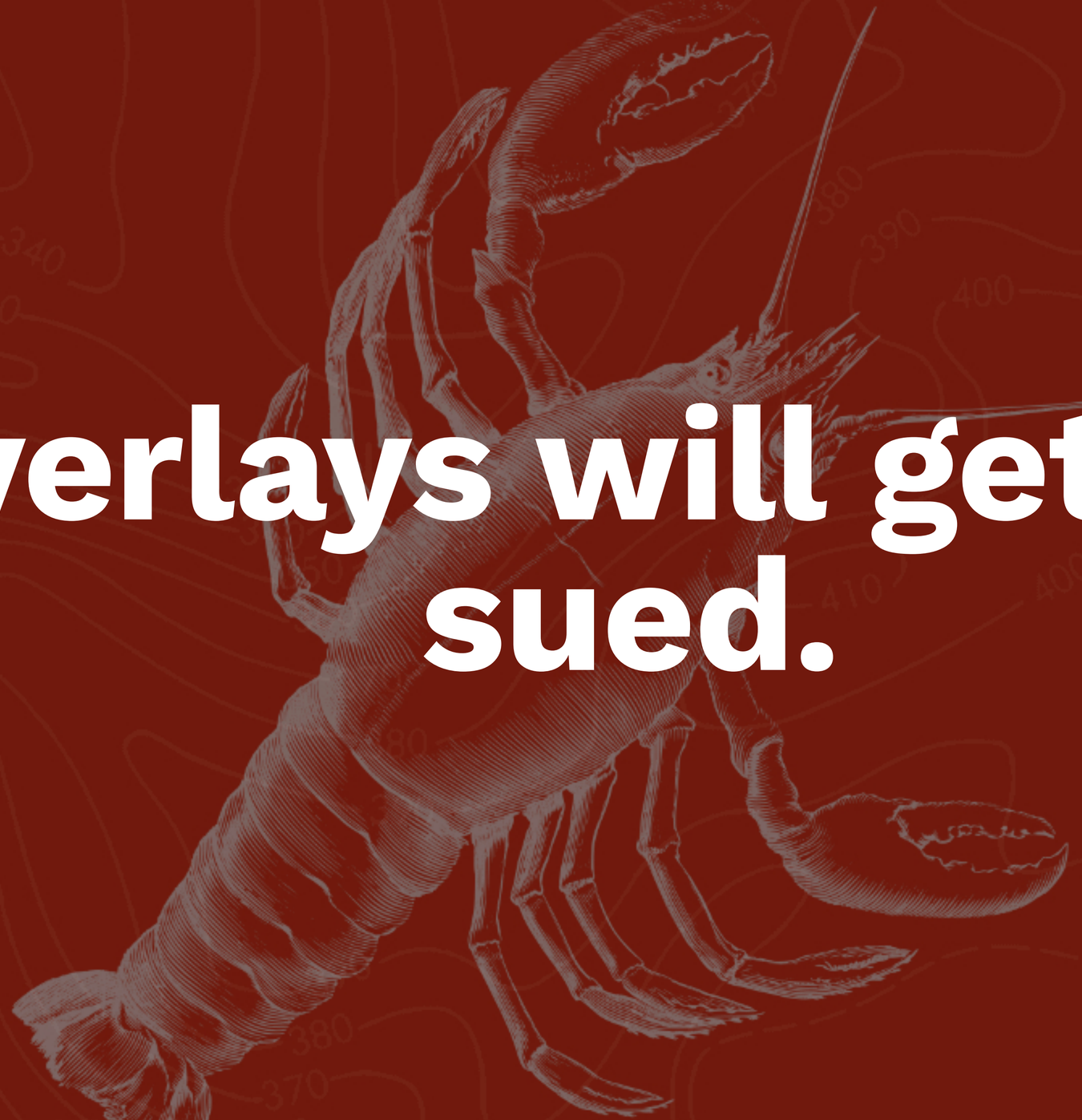
“We use an accessibility overlay. We’re okay.”

Todd Libby @toddlibby

9 August, 2022, Code PaLOUsa



AccessiBe
Audioeye
Equalweb
Facil’iti
Usablenet
Userway
Many, many more!



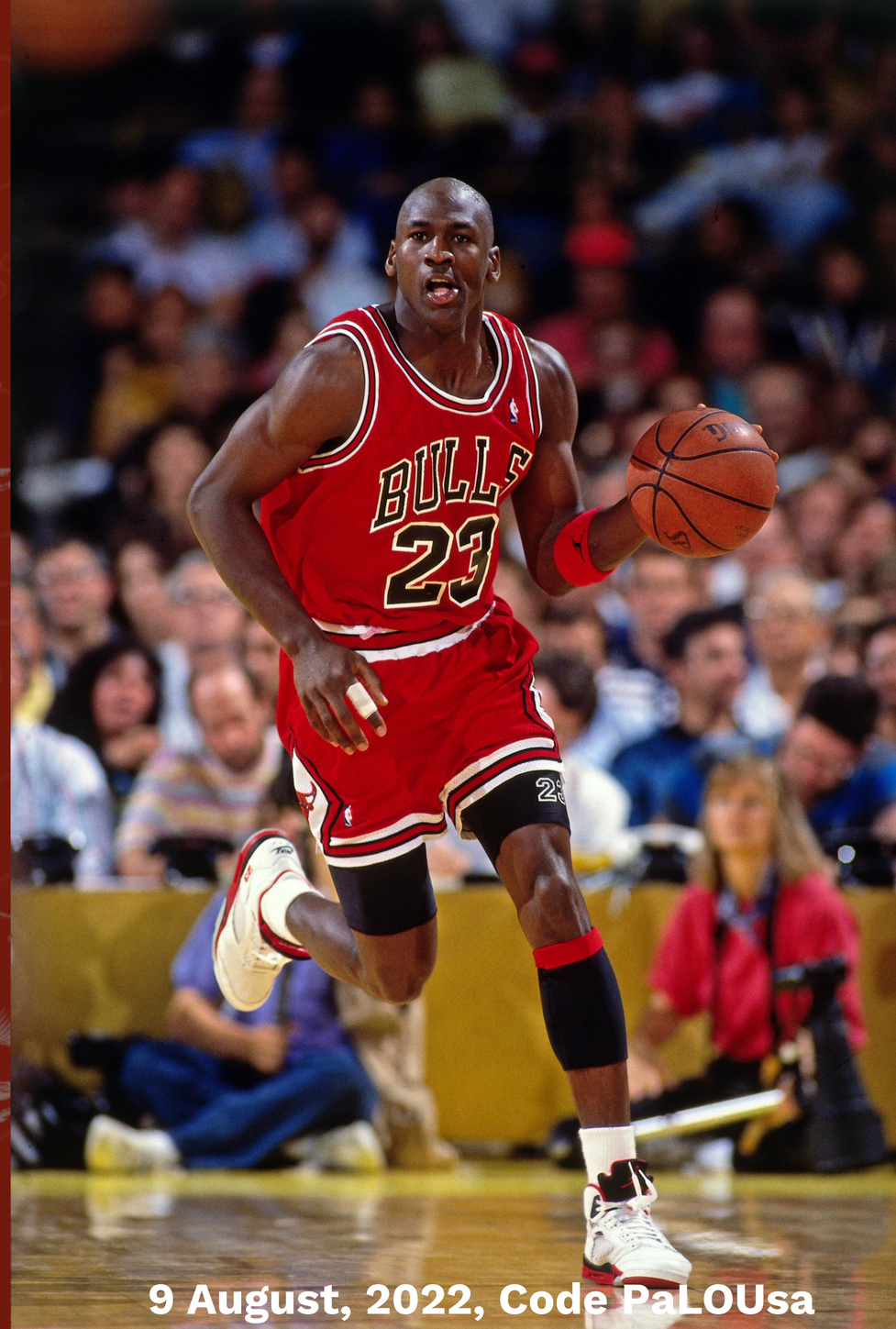
Overlays will get you sued.

Todd Libby @toddlibby

```
<script>(function(){ var s = document.createElement('script'), e = !
document.body ? document.querySelector('head') : document.body; s.src =
'https://acsbapp.com/apps/app/dist/js/app.js'; s.async = true; s.onload =
function(){ acsbJS.init({ statementLink : '', footerHtml : '', hideMobile :
false, hideTrigger : false, language : 'en', position : 'left', leadColor :
'#000000', triggerColor : '#000000', triggerRadius : '50%', triggerPositionX :
'left', triggerPositionY : 'center', triggerIcon : 'people', triggerSize :
'small', triggerOffsetX : 3, triggerOffsetY : 3, mobile : { triggerSize :
'small', triggerPositionX : 'left', triggerPositionY : 'center',
triggerOffsetX : 3, triggerOffsetY : 3, triggerRadius : '50%' } }); };
e.appendChild(s);}());</script>
```

Todd Libby @toddlibby

!==



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So what do we do?

Maintenance

Todd Libby @toddlibby

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Maintenance

Accessibility is never done

- Automated testing wherever possible with new releases or changes

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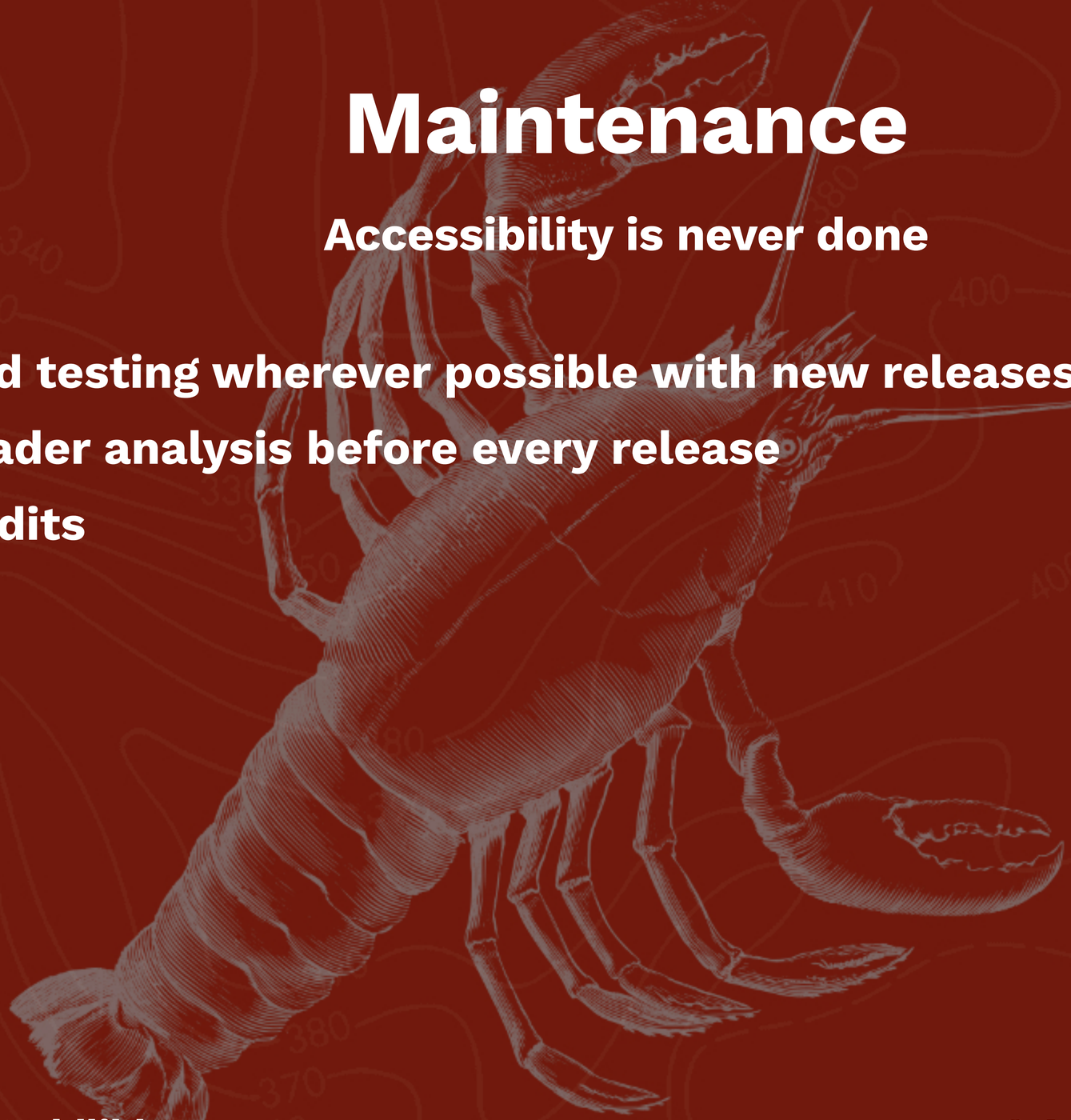

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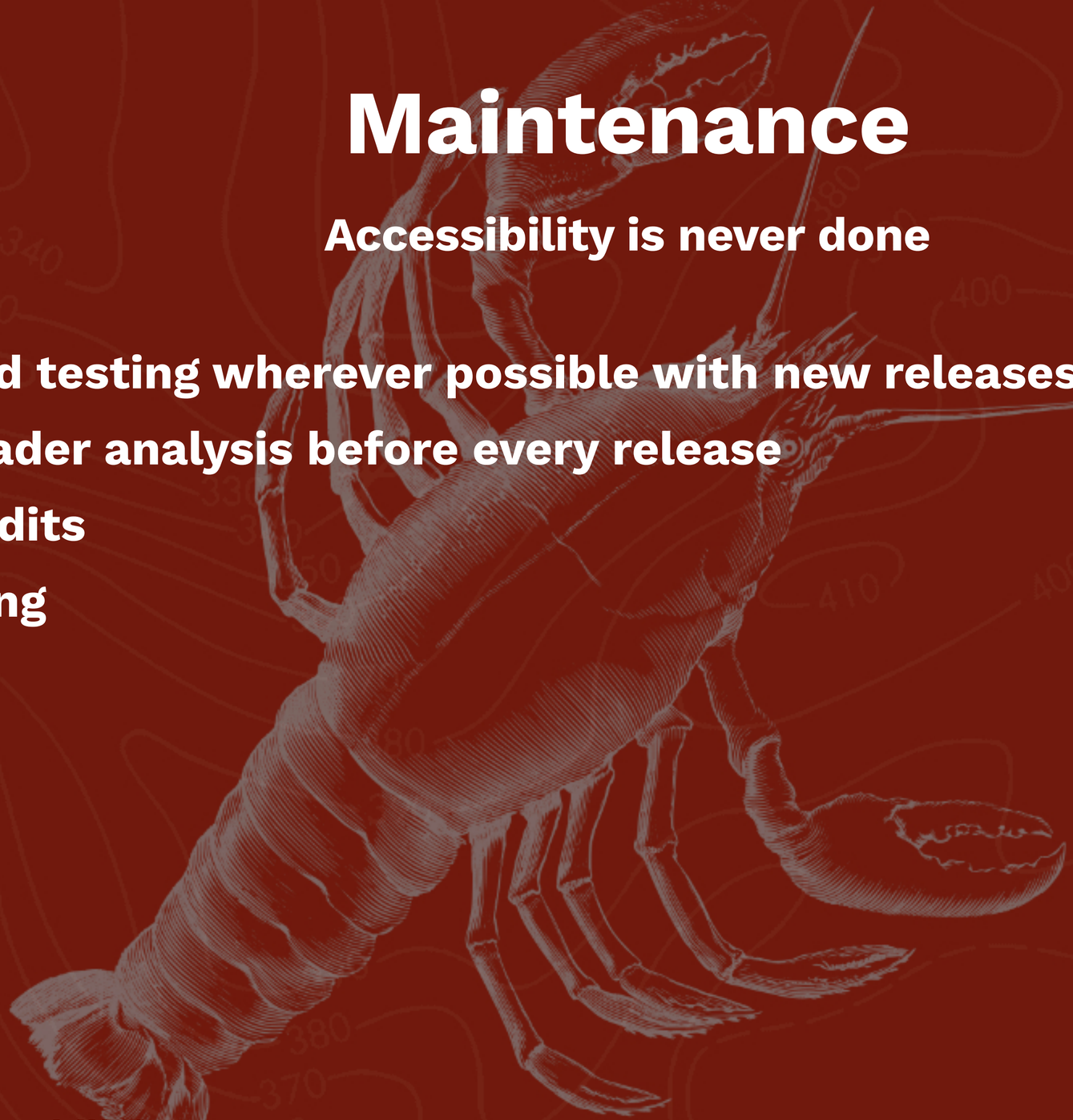

Maintenance

Accessibility is never done

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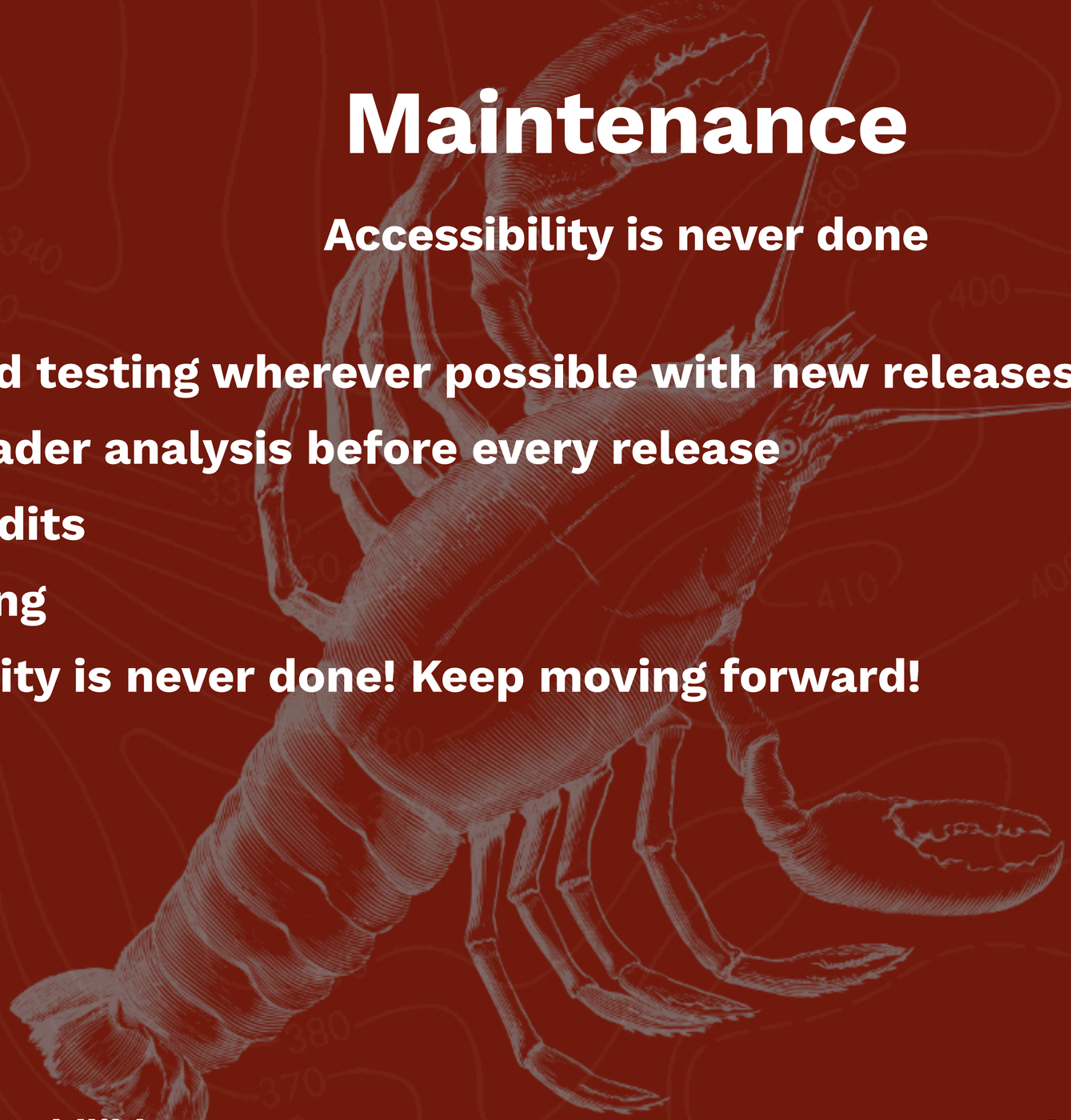
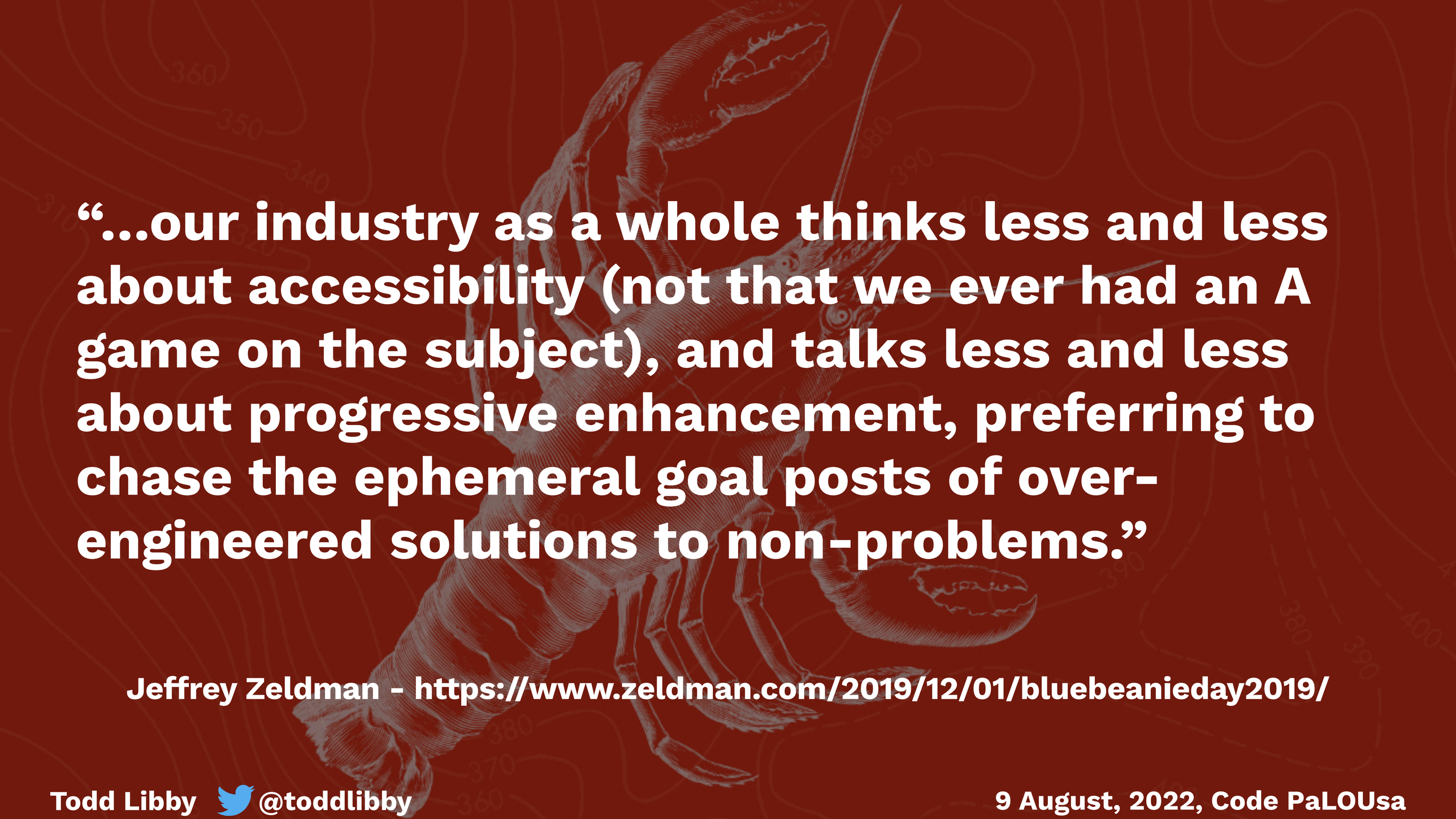
- Accessibility is never done! Keep moving forward!



Maintenance

Accessibility is never done

- Automated testing wherever possible with new releases or changes
- Screen reader analysis before every release
- Annual audits
- User testing
- Accessibility is never done! Keep moving forward!
- Like the web, accessibility is always evolving



“...our industry as a whole thinks less and less about accessibility (not that we ever had an A game on the subject), and talks less and less about progressive enhancement, preferring to chase the ephemeral goal posts of over-engineered solutions to non-problems.”

Jeffrey Zeldman - https://www.zeldman.com/2019/12/01/bluebeanieday2019/

Larene
@LareneLg
Unknown

Today, my dad cried over the phone, he wanted one week where he could use his computer without my help.

He's blind.

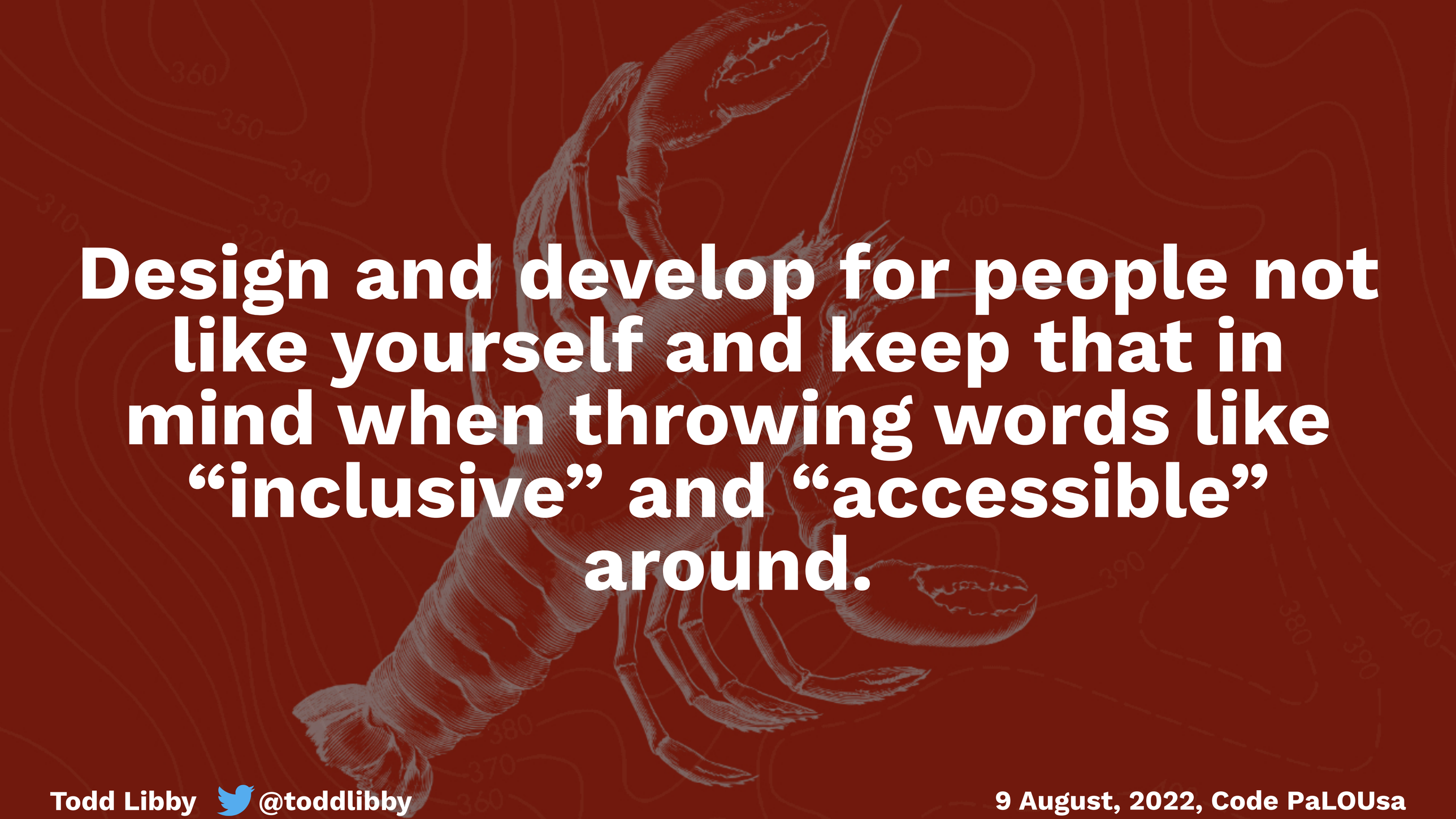
Each inaccessible webpage tells him, "you aren't welcome in this world."

If you don't know whether your website or app is accessible: it's not.

Start learning.

12:46 AM · Jun 10, 2020 · Twitter Web App

11.7K Retweets **570** Quote Tweets **43.4K** Likes



Design and develop for people not like yourself and keep that in mind when throwing words like “inclusive” and “accessible” around.

A11y is a right.
NOT a privilege.

https://cottonbureau.com/products/a11y-is-a-right#/5254640/

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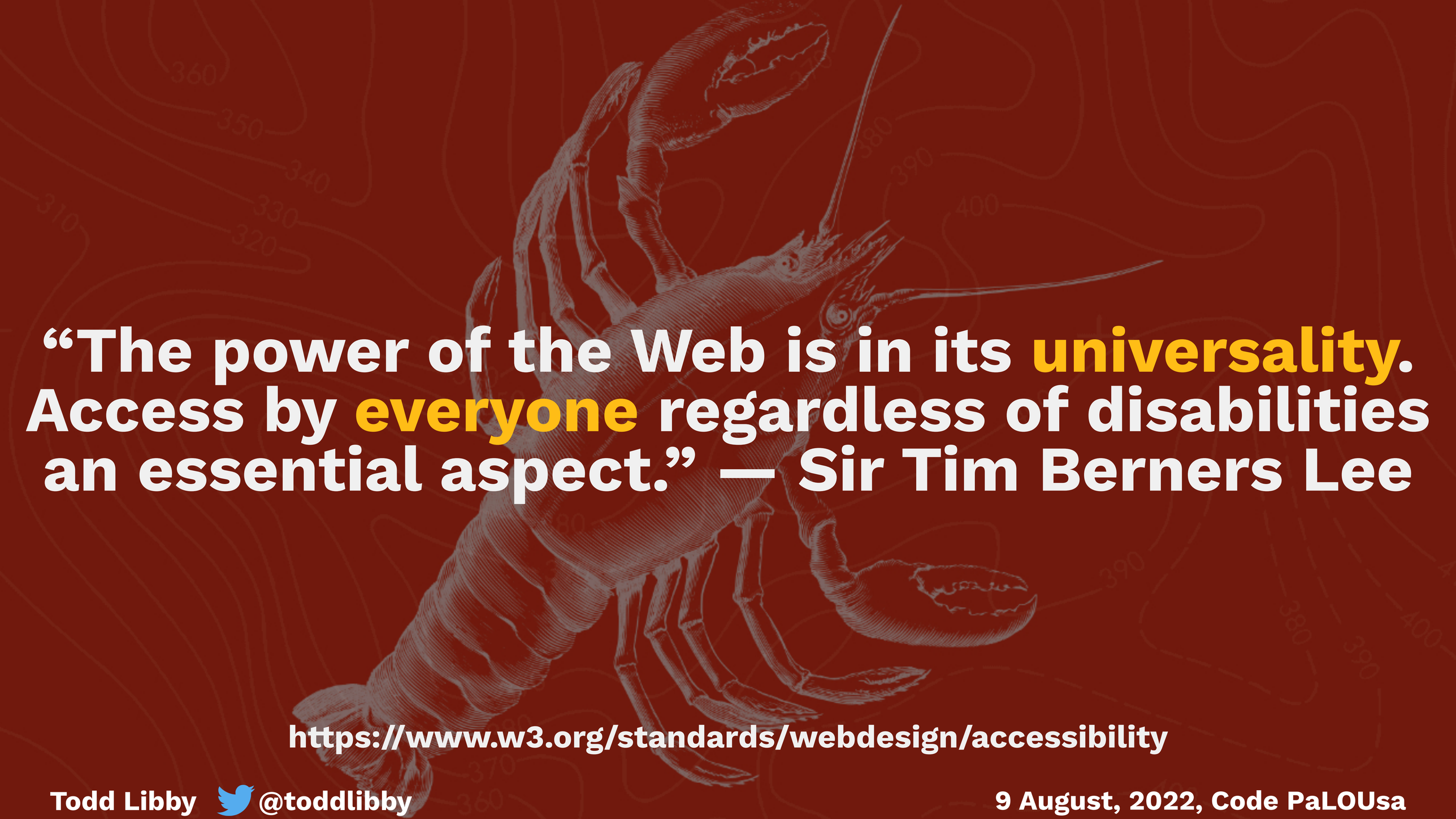

“The power of the Web is in its universality. Access by everyone regardless of disabilities an essential aspect.” — Sir Tim Berners Lee

https://www.w3.org/standards/webdesign/accessibility

Links

https://toddl.dev/slides/

@toddlibby on Twitter

LinkedIn - 🦞 Todd Libby

Thank you!