

The Four Principles of the A“POUR”calypse

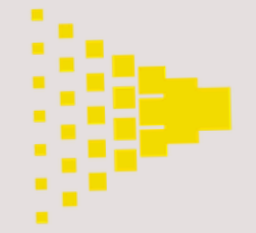
The harbingers of accessibility

Thanks!

Thank you!



Thank you!

LaunchDarkly →  **Headspring**
Part of **Accenture**

 **Architect.io**

Okta

 **Progress**



Todd Libby  @toddlabby

8 August, 2022, KCDC

Thank you!



Me, Explained.



About Me

- Phoenix, AZ – Portland, ME
- Lobster rolls & lobsters
- Making the Web accessible



Work

What I do

- **Accessibility Team Lead at WebstaurantStore**
- **Accessibility Engineer at the Centre for Inclusive Design**
- **Accessibility Consultant**
- **W3C Invited Expert - WCAG3**
- **Advocate for Accessibility**







Death

Famine

War

Conquest

Four Horsemen of the Apocalypse, an 1887 painting by Viktor Vasnetsov.



Four Principles

History

2001

Public Working Draft

2003

Technical Reports (TR) Working Draft



“The overall goal is to create Web content that is perceivable, operable, navigable, and understandable by the broadest possible range of users and compatible with their wide range of assistive technologies, now and in the future.”

- **Navigable** - Facilitate content orientation and navigation.
- Key to effective use of Web content is the ability to obtain and keep one's and the ability to efficiently move about the site, document or application.

<https://www.w3.org/TR/2003/WD-WCAG20-20030429/#navigation>

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- **Navigable** - Facilitate consistent orientation and navigation.
 - Key to effective use of Web content is the ability to obtain and keep one's and the ability to efficiently move about the document or application.

2008

Working Draft (CR) Candidate Recommendation

WCAG 2.1

2018

Recommendation published, 5 June

13

Guidelines

78

Success Criteria

WCAG 2.2

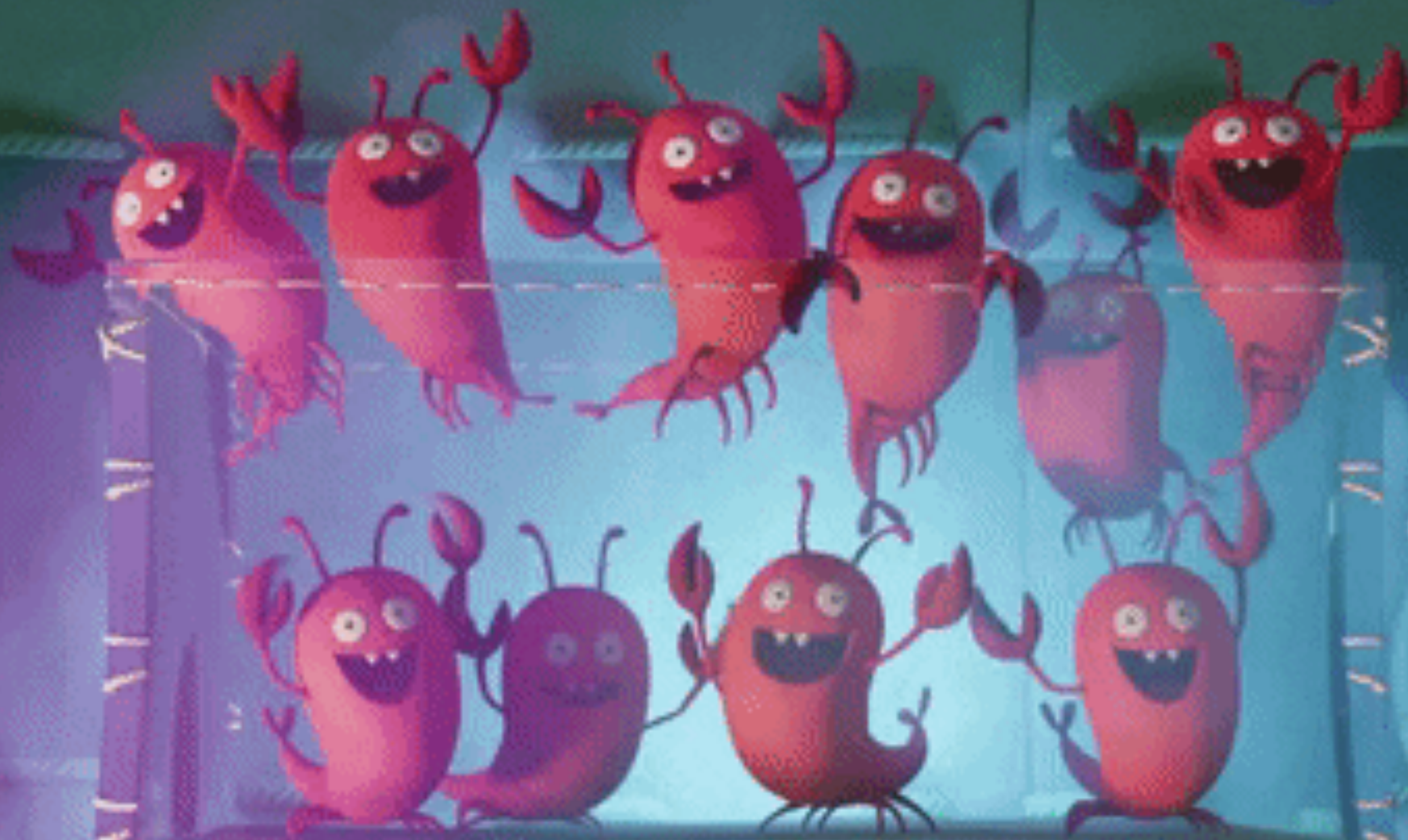
9 **NEW** Success Criteria

2022

September







The Four Principles

- **Perceivable** - Information and user interface components must be presented to users in a way that they can perceive. Users must be able to comprehend the information being presented.
- **Operable** - User interface components and navigation must be operable.
- **Understandable** - Information and the operation of a user interface must be understandable.
- **Robust** - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

The Four Principles

Perceivable

- **Text alternatives:** Provide text content for all non-text content so it can be converted into other forms of content.
- **Time-based media:** Provide alternatives for time-based media.
- **Adaptable:** Create content that can be presented in different ways without losing information or structure.
- **Distinguishable:** Make it easy for users to hear and see content.

The Four Principles

Operable

- **Keyboard Accessible:** Make all functionality available via keyboard.
- **Enough Time:** Provide users enough time to read and use content.
- **Seizures & Physical Reactions:** Do not design content that can cause seizures or physical reactions
- **Navigable:** provide ways to help users navigate, find content, and determine where they are
- **Input Modalities:** Make it easier for users to operate functionality through various inputs other than the keyboard.

The Four Principles

Understandable

- **Readable:** Make text content readable and understandable.
- **Predictable:** Make Web pages appear and operate in predictable ways.
- **Input Assistance:** Help users avoid and correct mistakes.

The Four Principles

Robust

- **Compatible:** Maximize compatibility with current and future user agents, including assistive technologies.

Why?

Accessibility

Why do we create accessible content?

- **Ethical:** Create accessible content for disabled people to improve their lives.
- **Economic:** Accessible content attracts business from a wider audience.
- **Law:** Laws are in place for content to be accessible to disabled people.
- **Inclusive:** The Web was not created for a certain group of people. The Web is not a barrier to people with disabilities.

Examples

The Four Principles

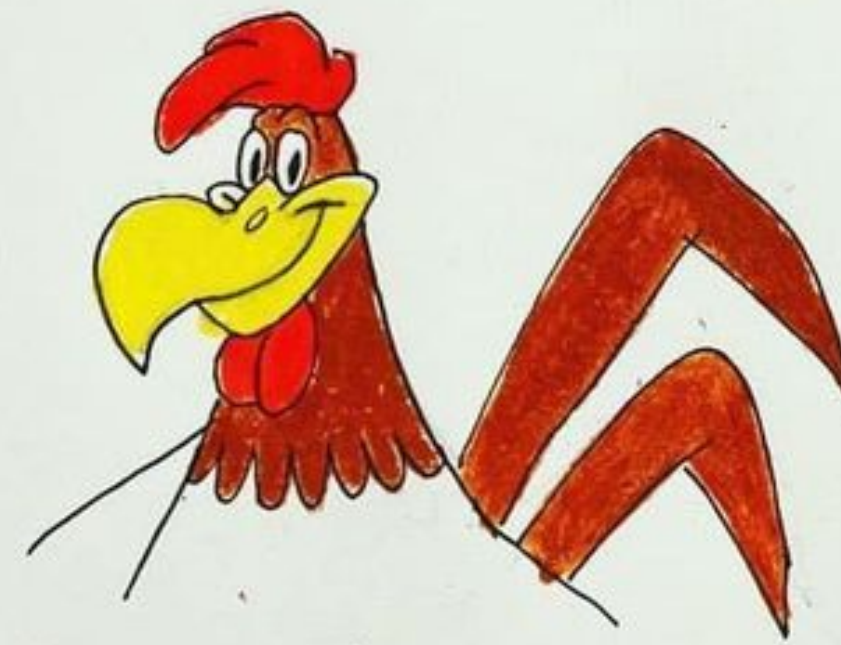
Perceivable

- **Text alternatives:** Alternative text of images.
- **Time-based media:** Captions in videos, transcriptions for podcasts.
- **Adaptable:** Required form fields, DOM order matches visual order.
- **Distinguishable:** Underlining links, sufficient contrast of text, resizing text.

Alternative Text

alt="A title which reads, 'Famous chickens' and in four panels you see Foghorn Leghorn, A bucket of Kentucky Fried Chicken, the Kellogg's Corn Flakes rooster, and a caricature of Missouri's own Josh Hawley running away from danger."

FAMOUS CHICKENS



JOUQUETTE

Captions/Subtitles

Video, audio. Live or closed

- Indicators for content for the Deaf, Hard of Hearing
- Contrast of text sufficient with dark background.
- Readability
- Optional way for disabled users to be able to understand the content.



I was actually gonna go into asking you, you know, what, what do we have

Form Fields

Required form fields or error messages.

STUDENT 1 DETAILS

Student Number (if known)?

First name

Last name

Postcode

Address Line 1

Address Line 2

Home Phone

Work Phone

Mobile Phone

Email

Date of Birth (dd/mm/yy)

Use of color

Text formatting, color, design, UX mistakes

Equipped with only one skill, who will succeed in life?

The person who masters the power of inquiry.

... of leadership, management, science, innovation, entrepreneurship
... transformation, effective relationships, communications and s

Inquiry

... life and business most master a path of judgment and conclusion

Successful leaders master the Discipline of Inquiry

What have you and your organization mastered?

... is a unique management consulting, business consulting, business
... growth organization, dedicated to the Discipline of Inquiry™, the m
... manager or entrepreneur. We are a learning organization and teach

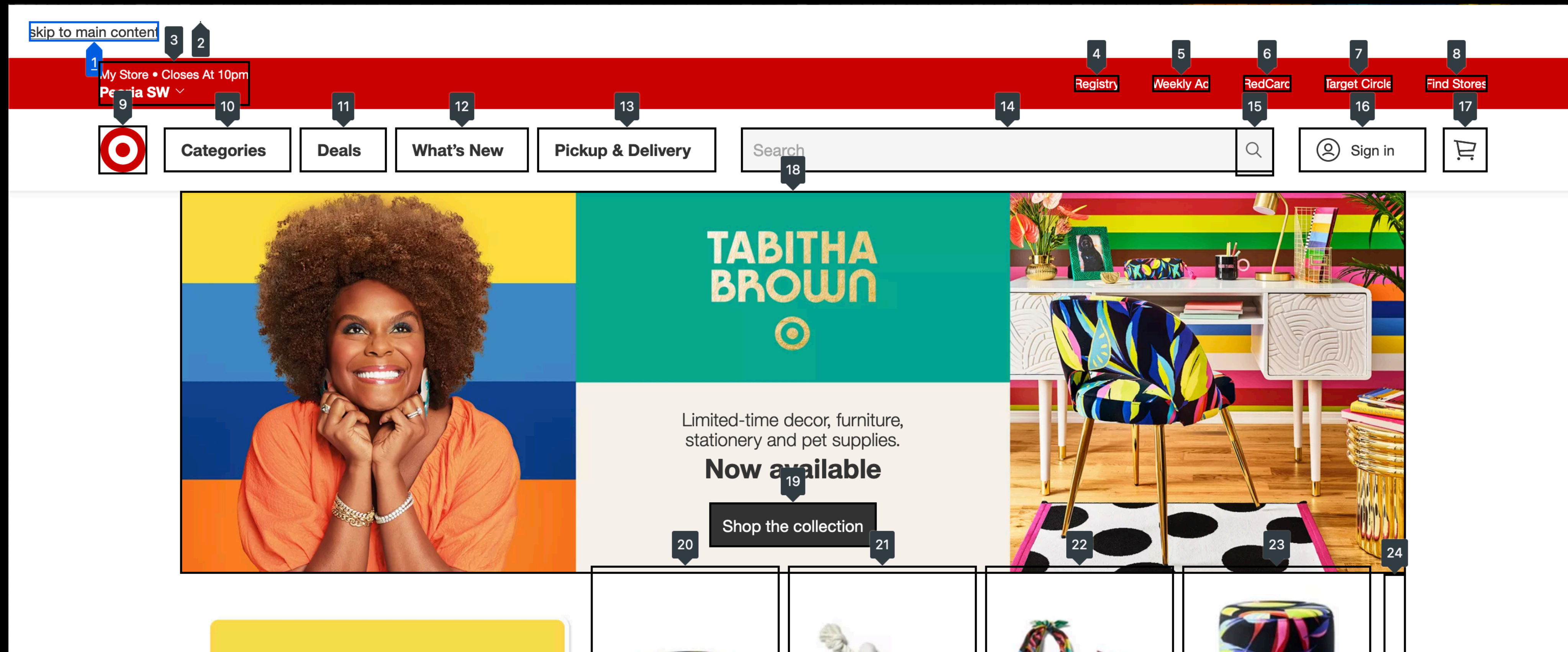
The Four Principles

Operable

- **Keyboard Accessible:** Navigation with TAB key, no keyboard traps.
- **Enough Time:** Stop or pause mechanisms, sufficient time to complete tasks.
- **Seizures & Physical Reactions:** Flashing content/animation that does not cause vestibular issues.
- **Navigable:** Visible focus indicators, logical focus order.
- **Input Modalities:** Labels that include text presented visually, sufficient target size on mobile.

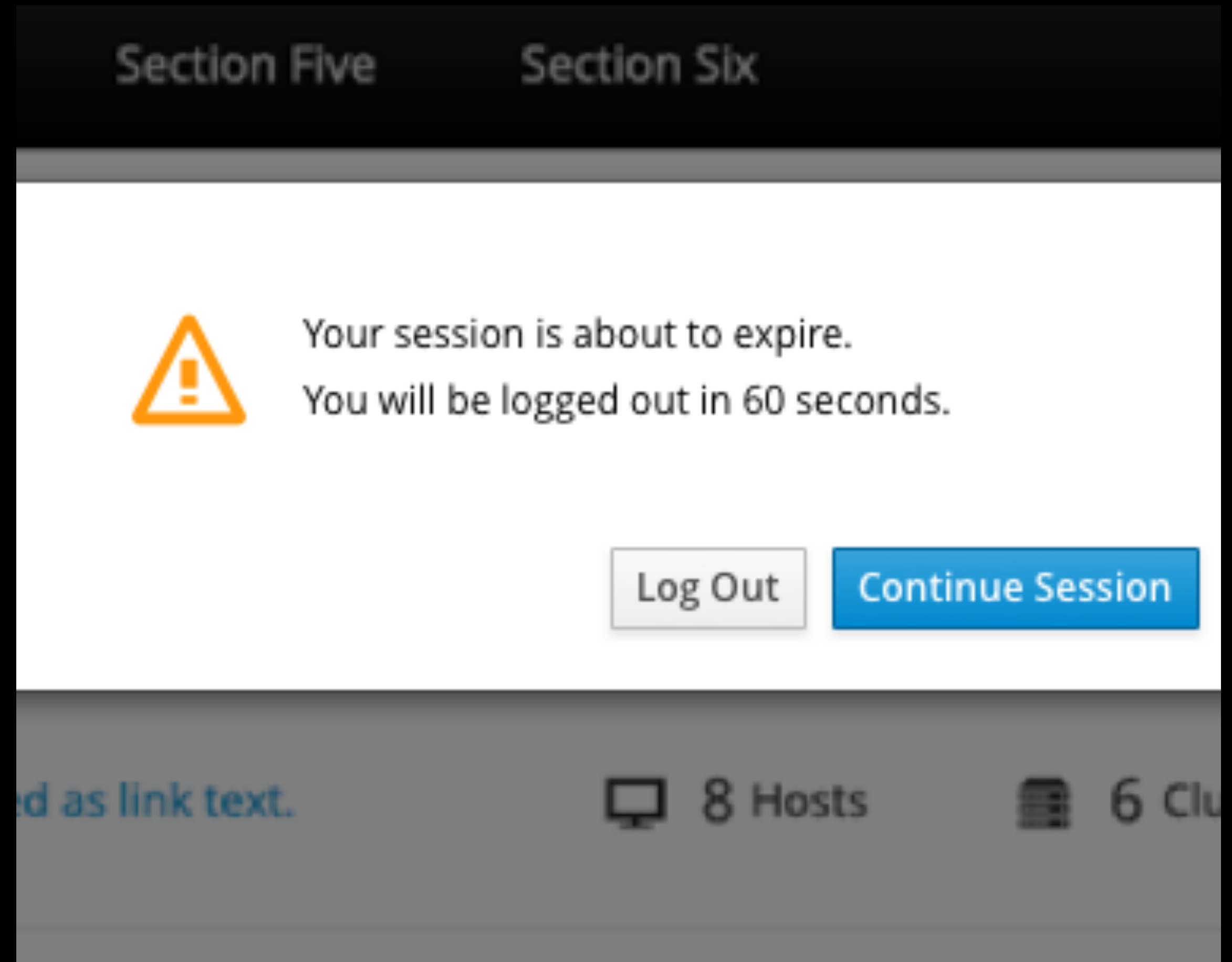
Keyboard Navigation

Using other methods rather than the mouse



Notifications

Extending time for users



Rage Against the Content

Flashing content exceeding three flashes per second



Navigation

Visible focus indicators and
a logical tab order



Blog

Labels

Visible text and
programmatically large
enough to view.

First name

Fred

Last name

Fredburger

Company (optional)

Address

555 North 71st Avenue

Apartment, suite, etc. (optional)

City

Phoenix

State

Arizona



Placeholders

Are not labels



The Four Principles

Understandable

- **Readable:** Mechanisms to identify abbreviations/jargon, default human language programmatically determinable.
- **Predictable:** Changes of context not initiated by focus or change of settings, consistency with navigation/components.
- **Input Assistance:** Identifiable error messages, labels or instructions.

Abbreviations

Non-English speaking



Hover

Content does not change on focus or on input.

Unexpected changes are a failure.

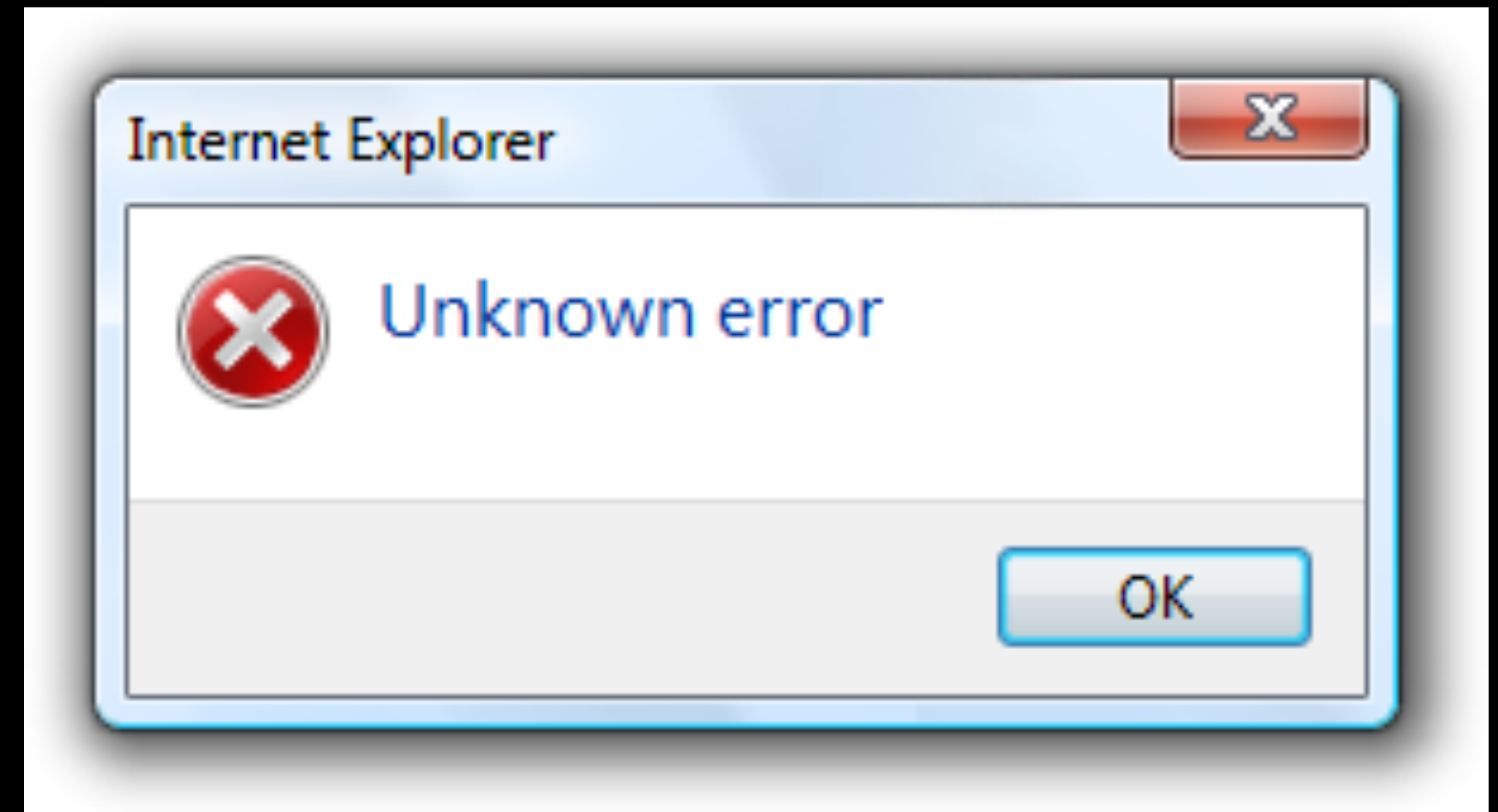
Web page Language

Options

- English
- French
- German
- Spanish

Error Messages

Identifiable error messages



The Four Principles

Robust

- **Compatible:** Accessible APIs, status messages/state during progress, code that uses start and end tags, unique IDs, and elements that do not contain duplicate attributes.

Semantic HTML

```
<html>
  <body>
    <header>
      <h1>Dogs: They are good</h1>
    </header>
    <main>
      <h2>Why are dogs good?</h2>
      <p>All dogs are good, they are the goodest doggies.</p>
      <figure>
        <img href="dog.png" alt="A golden retriever" />
        <figcaption>Michaelangelo AKA "Jello"</figcaption>
      </figure>
    </main>
  </body>
</html>
```

**Accessible websites accomplish
all of the goals of POUR**

Web accessibility is achieved when we think of the “people on the other side of the glass”

**The needs of the disabled user should
be considered first and foremost**

A11y is a right. **NOT** a privilege.

Thank you!

Eat more lobster! 🦞

**Slides: [https://noti.st/
colabottles/eHPdIN](https://noti.st/colabottles/eHPdIN)**

