

Layers of Accessibility

For scale & profit

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First: Hello! Hi! Let's Catch Up!



Other things!!



Also!



HashiCorp

an IBM Company

Thank you, Joseph!



Helios Design System

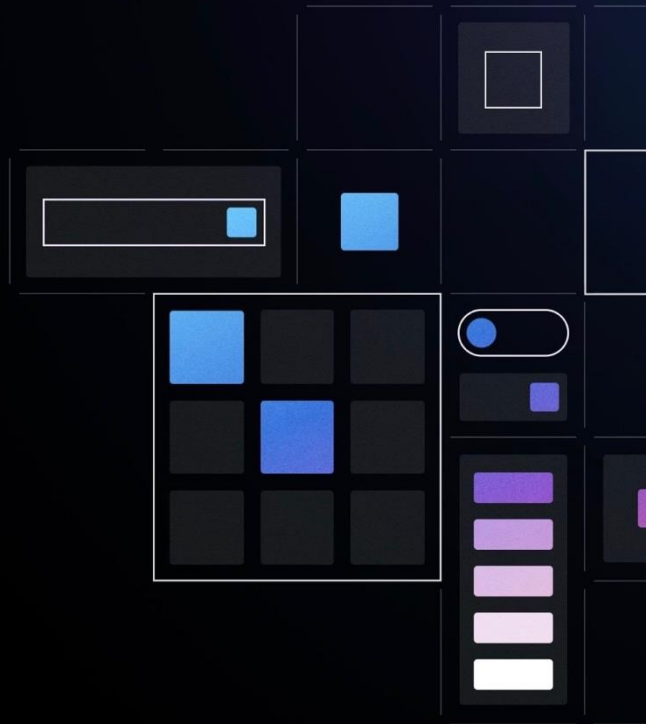
The Helios Design System from HashiCorp provides the open source building blocks to design and implement consistent, accessible, and delightful product experiences.

[Release Notes](#) →

[Helios Roadmap](#) ↗

[Share Feedback](#) ↗

<https://helios.hashicorp.design>



01

Where We Started



**Disclaimer: not our actual CTO*



**Disclaimer: not our actual VP of Design*



**Disclaimer: not our actual EM*



**Our actual Design Systems Team*



**Disclaimer: not our actual...anyone*







**Disclaimer: not actual cake*

YMMV.

02

The Layers



Foundation: Written Commitment

[RFC] DS-023: The Design System Accessibility Strategy

Summary: Outlining the way that the Design System Team will approach accessibility in the design system.

Created: Oct 22, 2021

Status: WIP | In-Review | **Approved** | Obsolete

Owner: Melanie Sumner

Contributors: design-systems@hashicorp.com

Other stakeholders: Brian Runnells

Approvers: ☒ Melina McLarty

Layer: Component Requirements Doc (CRD)

- Component is documented first
- Name, define, scope
- Accessibility requirements that apply to that component
- Define API (Figma API and Code API are the same)



Warning alert title

Warning alert title

button

Contract period

Jan 1, 2022 - Dec 31, 2022

h2 Contract details

h3 Available balance ⓘ

h3 Starting balance

h3 Status

h3 Start date

h3 Expiration date

h3 Support level ⓘ

h2 Product details

Product

Support level

Flex discount rate

Consul

Terraform

Vault

Silver

Silver

Silver

12%

12%

12%

accName

contact sales

action

This button opens a dialog box that houses sales rep information: phone number and email address. Link to dialog box design: url.com

h2 Alert heading

Though the alert is not a part of the main page content, it requires a heading style reflective of its hierarchy in order for assistive technology to properly display it to users.

Please [refer to this RFC](#) for additional details.

link ⓘ

Link details

url

accName

target

notes

Layer: Component Showcase

 Helios Design System **Components showcase**

Foundations

1. [Typography](#)
2. [Elevation](#)
3. [Focus ring](#)
4. [Breakpoints](#)

Internationalization

1. [Translation](#)

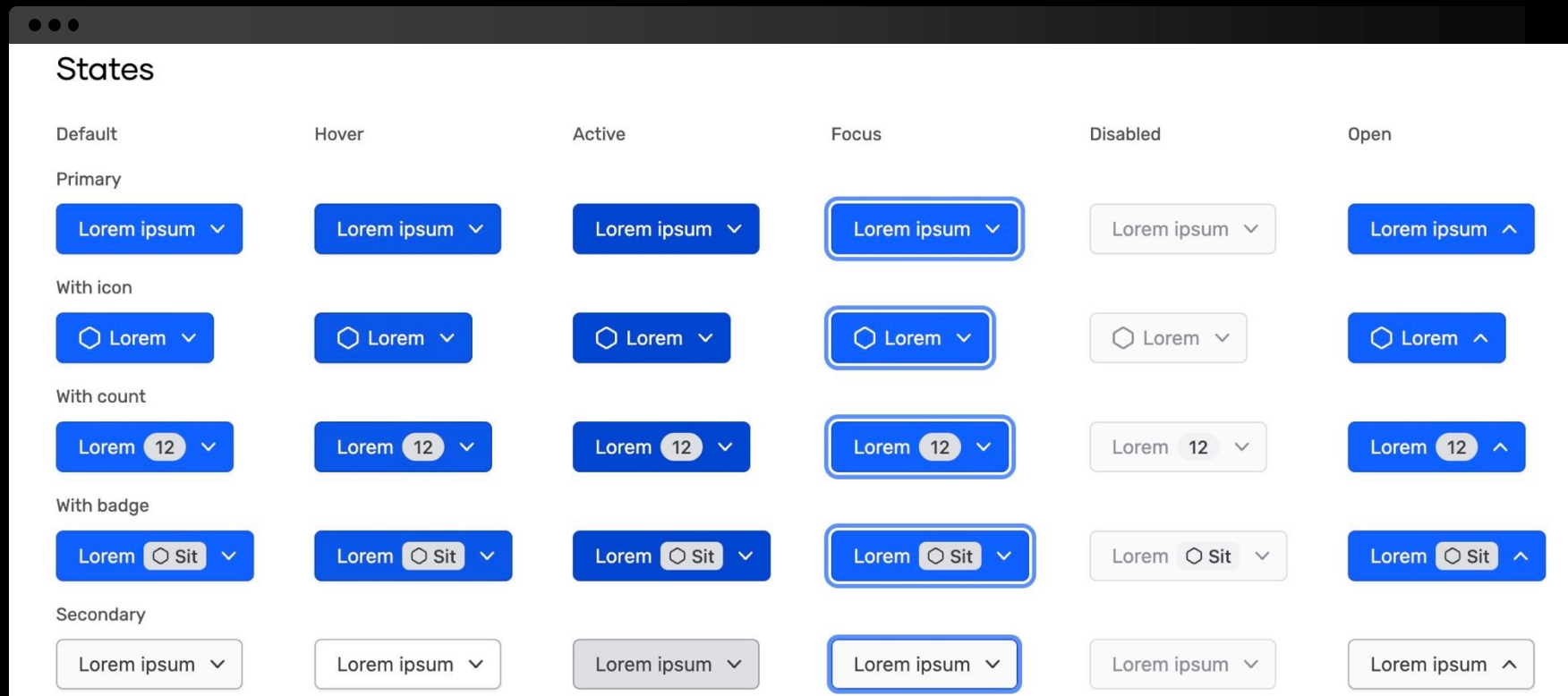
Components

1. [Accordion](#)
2. [AdvancedTable](#)
3. [Alert](#)
4. [AppFooter](#)
5. [AppHeader](#)
6. [AppSideNav](#)
7. [Application State](#)
8. [Badge](#)
9. [BadgeCount](#)
10. [Breadcrumb](#)
11. [Button](#)
12. [ButtonSet](#)
13. [Card](#)
14. [CodeBlock](#)

Form components

1. [Form / Layout](#)
2. [Form / Base elements](#)
3. [Form::Checkbox](#)
4. [Form::FileInput](#)
5. [Form::KeyValueInputs](#)
6. [Form::MaskedInput](#)
7. [Form::Radio](#)
8. [Form::RadioCard](#)
9. [Form::Select](#)
10. [Form::SuperSelect](#)
11. [Form::TextInput](#)
12. [Form::Textarea](#)
13. [Form::Toggle](#)

Layer: Component States Rendered



Layer: Accessibility Tests

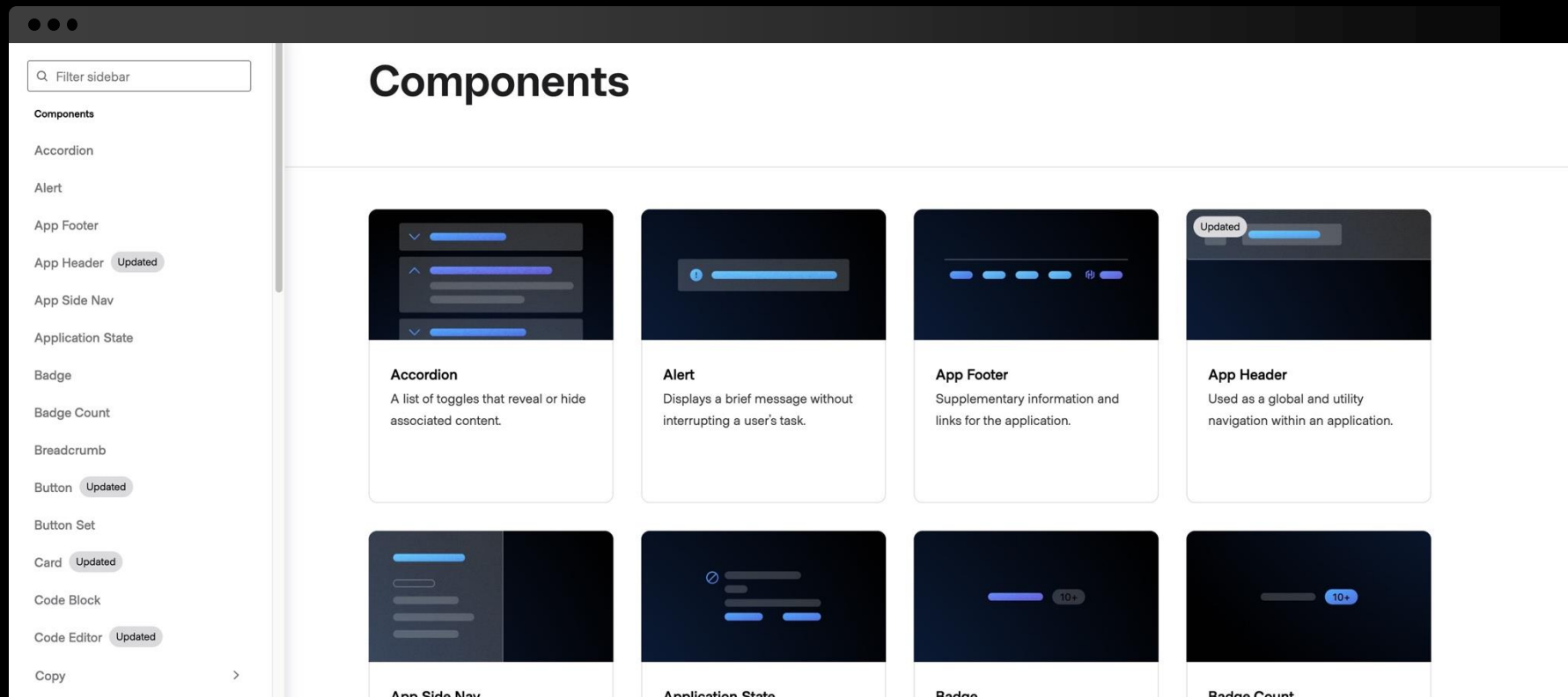
```
import { module, test } from 'qunit';
import { visit } from '@ember/test-helpers';
import { setupApplicationTest } from 'showcase/tests/helpers';
import { a11yAudit } from 'ember-a11y-testing/test-support';

module('Acceptance | Component | hds/dropdown', function (hooks) {
  setupApplicationTest(hooks);

  test('Components/dropdown passes a11y automated checks', async function (assert) {
    await visit('/components/dropdown');
    await a11yAudit();

    assert.ok(true, 'a11y automation audit passed');
  });
});
```

Layer: Relentless Documentation



Layer: Documentation (Guides)

Dropdown Updated in v4.23.0 [Figma](#) [GitHub](#)

Displays a list of actions or options revealed by a toggle button. Identifiable by the chevron icon in the button.

Guidelines Code Specifications Content Accessibility Version history

Take care to use dropdowns correctly. A crowded or overly complex dropdown can lead to a frustrating user experience, especially for assistive technology users. [Contact the Design Systems Team](#) to discuss alternative options if a dropdown feels too complex.

On this page:

- Usage**
- When to use
- When not to use
- Toggle
- Toggle types

A dropdown is a flexible component that displays a list of actions or

Layer: Documentation (Code)

Dropdown

Updated in v4.23.0

[Figma](#) [GitHub](#)

Display a list of options revealed by a toggle button. Identifiable by the chevron icon in the button.

[Guidelines](#) **[Code](#)** [Specifications](#) [Content](#) [Accessibility](#) [Version history](#)

How to use this component

The component uses the [Popover API](#) to display the dropdown list. A third-party library called [Floating UI](#) provides anchoring and positioning functionality.

To make the invocation more flexible and intuitive, we provide contextual components for Toggles, ListItems, Header and Footer. For example, `<Hds::Dropdown::ListItem::Separator />` would be contextually expressed as `<D.Separator />`.

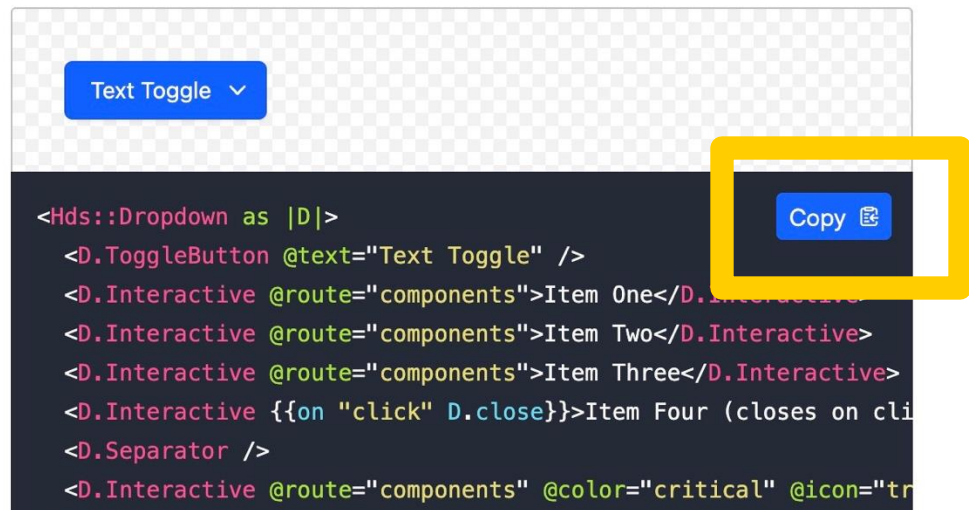
On this page:

- How to use this component
- [ToggleButton](#)
- [ToggleIcon](#)
- [List placement](#)
- [Collision detection](#)
- [List size](#)

Layer: Documentation (Code Sample)

ToggleButton

The basic invocation of `ToggleButton` requires `@text` to be passed. By default, it renders a primary button with a chevron icon.



On this page:

How to use this component

[ToggleButton](#)

[ToggleIcon](#)

[List placement](#)

[Collision detection](#)

[List size](#)

[List footer](#)

[Content rendering in DOM](#)

[ListItem::Interactive](#)

[ListItem::CopyItem](#)

[ListItem::Checkmark](#)

[ListItem::Checkbox](#)

Layer: Documentation (A11y)

The screenshot shows a documentation page for a 'Dropdown' component. At the top, the title 'Dropdown' is followed by a badge 'Updated in v4.23.0' and links to 'Figma' and 'GitHub'. Below the title is a descriptive sentence: 'Displays a list of actions or options revealed by a toggle button. Identifiable by the chevron icon in the button.' A horizontal navigation bar contains links for 'Guidelines', 'Code', 'Specifications', 'Content', 'Accessibility' (which is underlined and highlighted with a yellow box), and 'Version history'. Below the navigation bar, the 'Conformance Rating' section shows a 'Conditionally conformant' badge and a paragraph stating 'This component is conditionally conformant.' followed by two numbered points. On the right side, a 'On this page:' section lists various topics including 'Conformance Rating', 'Known issues', 'ToggleIcon with no chevron', 'Color blind users and critical actions', 'Keyboard navigation', 'Applicable WCAG Success Criteria', and 'Criteria'.

Dropdown

Updated in v4.23.0 [Figma](#) [GitHub](#)

Displays a list of actions or options revealed by a toggle button. Identifiable by the chevron icon in the button.

[Guidelines](#) [Code](#) [Specifications](#) [Content](#) [Accessibility](#) [Version history](#)

Conformance Rating

Conditionally conformant

This component is conditionally conformant.

1. When truncation occurs, a keyboard-only user cannot access the truncated content.
2. The component is no longer conformant if the chevron icon is removed from the ToggleButton.

On this page:

- Conformance Rating
- Known issues
 - ToggleIcon with no chevron
 - Color blind users and critical actions
- Keyboard navigation
- Applicable WCAG Success Criteria
- Criteria

Layer: Unified Accessibility Statement

Accessibility Statement

🕒 Last updated: 08/26/2024

Overview

This is an accessibility statement from HashiCorp, Inc. ("HashiCorp", "us", or "we").

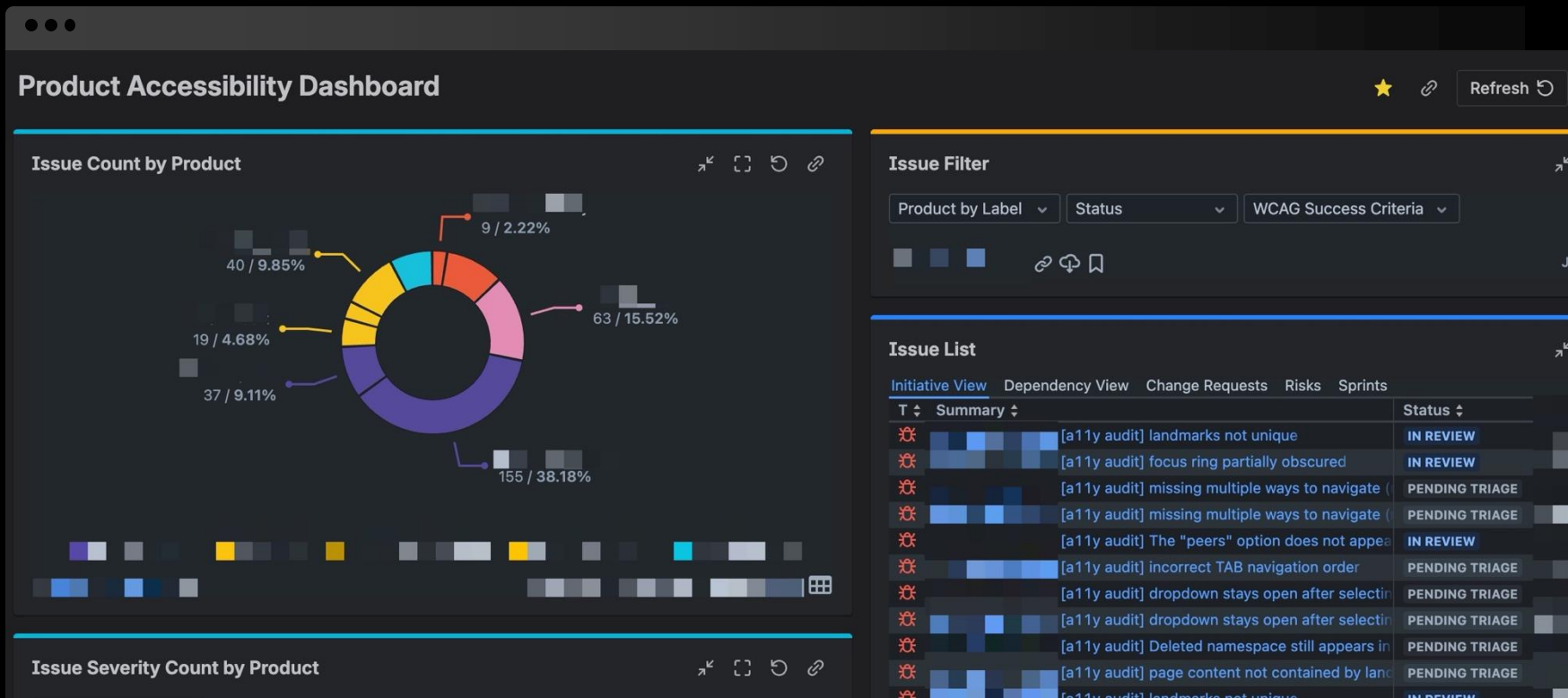
HashiCorp is committed to digital accessibility for people with disabilities. We are continually improving the user experience, and striving to apply the relevant accessibility standards and regulations as appropriate.

Measures to support accessibility

Layer: Public Accessibility Conformance Reports

Accessibility Product Report	Release Date
HCP Waypoint ↗	October 2024
HCP Vault Secrets ↗	August 2024
Consul Enterprise ↗	April 2024
HCP Boundary ↗	March 2024
Boundary Enterprise ↗	March 2024
HCP Terraform ↗	January 2024
Vault Enterprise ↗	January 2024
HCP Vault Dedicated ↗	December 2023
Terraform Enterprise ↗	September 2023

Layer: Product Accessibility Dashboard



Layer: Pairing and Support for Product Teams

- Help with design system adoption
- Design sessions to explore integration
- Helped getting ember-a11y-testing and ember-template-lint turned on
- Lots of feedback cycles!



Layer: Integration into Product Lifecycle Process

- Understanding Accessibility requirements in discovery phase
- Planning and checking accessibility in the delivery stage
- A11y audit in the launch phase

Layer: Standardizing User Journeys

CUJs

What are the critical user journeys for our user personas?

A11y testing

What does a user typically need to accomplish in an application?

Reliability

How do we track the uptime of our high-priority functions?

Standardization

(Future) Layer: Internal Apps

The screenshot shows a web application titled "Critical User Journey management hub". The header area is dark blue with a large title and a welcome message. To the right of the text is a graphic of a person icon with a blue circle above it, and a series of blue dots connected by lines, suggesting a user journey. Below the header is a white section titled "Search and filter CUJs" with a blue button labeled "+ Create new record". This section contains four dropdown menus: "Products" (set to "All products"), "CUJ Type" (set to "Web UI"), "Jobs-to-be-done" (set to "All JTBDs"), and "Personas" (set to "All personas"). Below these filters is a table with columns: "Product", "CUJ", "JTBD", "Persona", and an empty column. The first row of data is partially visible, showing "HCP Boundary" for the Product, "As a security engineer, I want to sign in to Admin" for the CUJ, "When I need to manage my networked resources, I want to" for the JTBD, and "Security Engineer" for the Persona.

Critical User Journey management hub

Welcome to your hub for exploring and managing the Critical User Journey (CUJ) across HashiCorp products. Discover how we can enhance user experiences!

Search and filter CUJs [+ Create new record](#)

Products All products **CUJ Type** Web UI **Jobs-to-be-done** All JTBDs **Personas** All personas

Product	CUJ	JTBD	Persona	
HCP Boundary	As a security engineer, I want to sign in to Admin	When I need to manage my networked resources, I want to	Security Engineer	

03

Start Where **You** Are

**“Accessibility a technical
problem with a technical
solution.”**

Acknowledge: What We Can Control

...and what we can't

Software Engineers don't get to control:

- The business decisions that are made about the products they work on by the people who write their paychecks
- New features
- The people they work with
- The attitudes towards accessibility or disabilities in general (esp. held by the other people they work with)

Software Engineers CAN control:

- The code they write
- Their use of semantic HTML
- Their knowledge of accessibility requirements
- The communication skills they learn that improve how well they work with designers and other parts of the business



Technical products
require technical
solutions for all people.

Fearlessness Required



Trying Fearlessness

It's about progress, not perfection

- Try assertive, not aggressive.
- Try curious, not blaming.
- Try making it the way we work instead of making it an afterthought.
- Try including all users, not just the ones with fast connections and beautiful displays
- Try to have the conversation because it's part of the expert you were hired to be...or the one you will become.



04

Comfortable With Uncertainty

Then: The Future is Now!



...Three Minutes Later



HashiCorp

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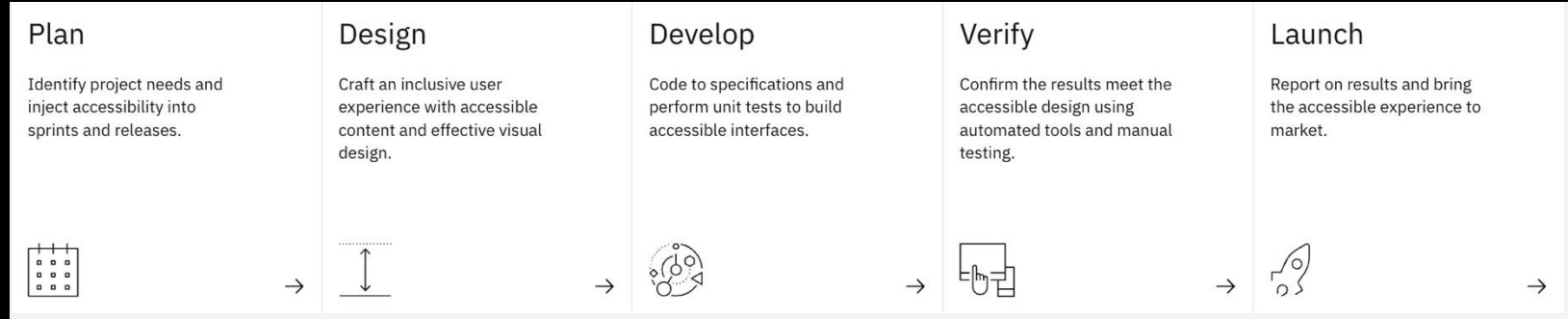
Wait, what?!



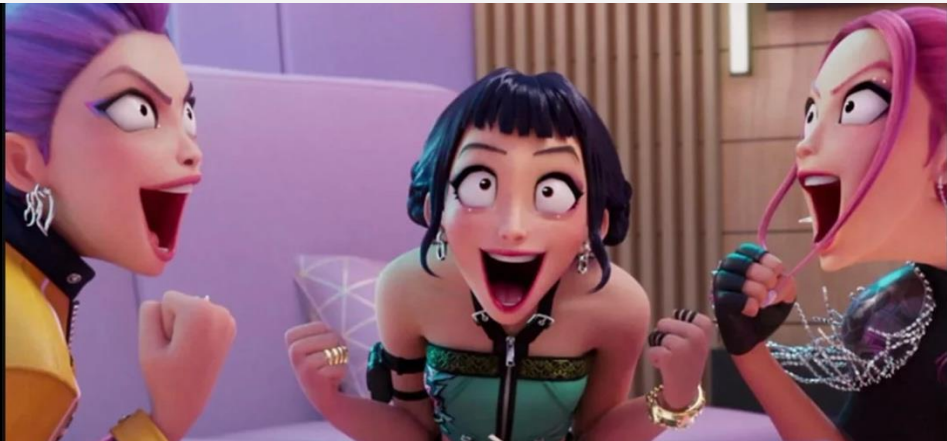
But We Just Figured This Out!!!



IBM Process



**My “oh wait, we’re already mostly kind of doing this” face...*



No matter what's next...
it's okay.

TL;DR



You do not require
permission to create
accessible code.