



**DIGITAL
WEB
SERVICES
NETWORK**

Bringing together digital product
managers, designers, and engineers.

cdt.ca.gov/dwsn

DWSN Quarterly Forum

Thursday, April 21, 2022



California
DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY



Digital Web Services Network

- Welcome to the DWSN forum, we will begin shortly.
- For the best experience, please use your computer to join the meeting.
- Mute your audio.
- Turn off your video.
- Use the raise hand button or the meeting chat for comments and questions.

DWSN Forum Agenda

Opening Remarks(Koji Kumpulainen) - 2 min

Big Ideas

- Introduction(Koji Kumpulainen) - 3 min
- Web Components(Aaron Hans) - 5 min
 - a. Open Discussion(All) - 10 min

Design System (45min)

- Opening statements(Yesenia Gutierrez) - 2 min
- Next Steps and Vision(Yesenia Gutierrez & Artem Khomishen) - 10 min
- Research(Sarah Letson) - 15 min
- Design Updates(Adam Little) - 5 min
- Engineering and Integrations(Chach Sikes & Timothy Shambra) - 10 min
 - a. Website audit
- What's Coming / Closing statements(Yesenia Gutierrez) - 3 min

Suggested Future Topics / Closing Remarks (Koji Kumpulainen) - 2 min



**DIGITAL
WEB
SERVICES
NETWORK**

Opening Remarks

Koji Kumpulainen

California Department of Technology



**DIGITAL
WEB
SERVICES
NETWORK**

Big Ideas Introduction

Koji Kumpulainen
California Department of Technology

Big Ideas Web Components



**DIGITAL
WEB
SERVICES
NETWORK**

Aaron Hans

California Office of Digital Innovation



**DIGITAL
WEB
SERVICES
NETWORK**

Big Ideas

Open Discussion

ALL

California Design System

Spring '22 update for DWSN

April 21, 2022
CDT & ODI



Next steps and vision

What we have been up to

- NYU student contribution to issues and documentation

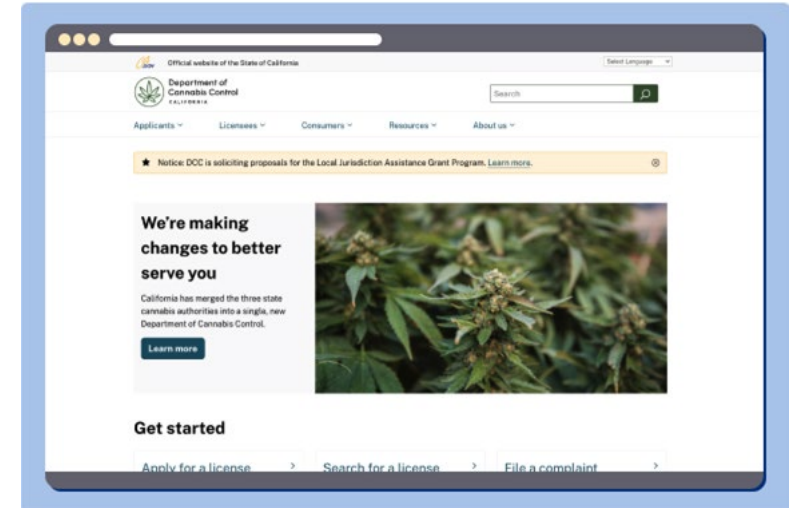
Contact request: Would love to contribute to project! #754

Open

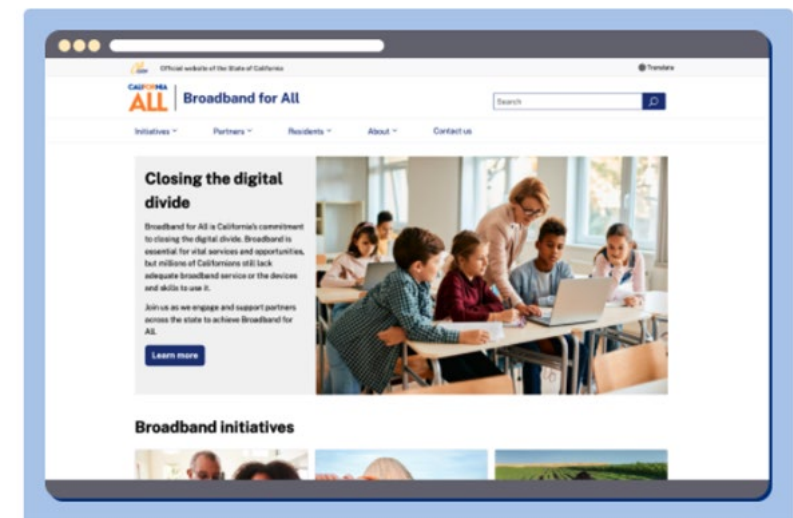
opened this issue 16 days ago · 2 comments

New issue

- Research insights to foster maturity from recent Design System website implementations
 - Department of Cannabis Control
 - Broadband for All
- Considering paths to DS adoption and supporting implementations as needs arise
- v6 release of State Web Template which will have a similar look and feel as the Design System
 - State Web Template Transition Plan
- Design System Roadmap



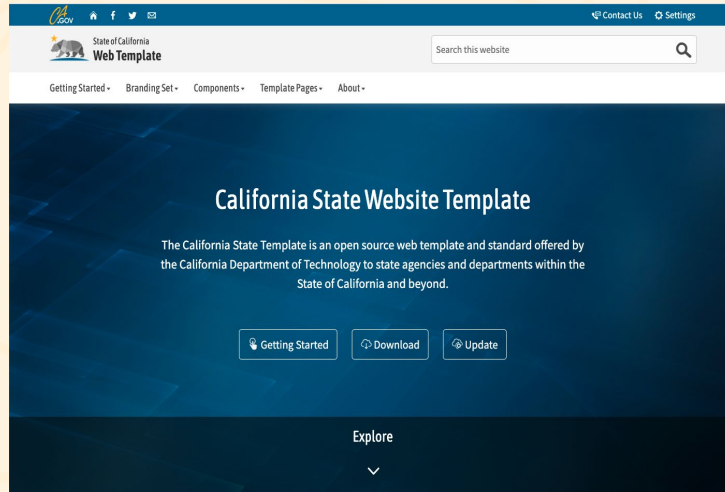
Department of Cannabis Control



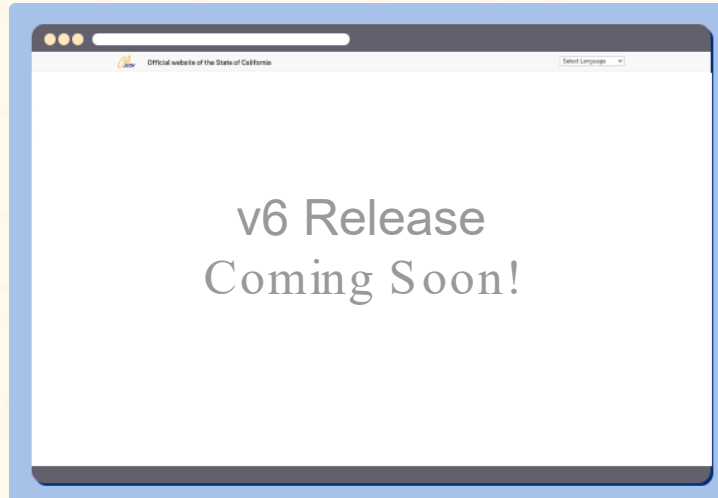
Broadband for All

Next steps and vision

State Web Template Transition Plan



v5 State Web Template
(currently in production)



v6 of the State Web Template
(last major version release)



Design System v1
(first production ready release)

- Restructure information architecture
- Audit all content pages
- Align component pages to Design System
- Re-design content and page patterns

Spring '22 update for DWSN

Design System Roadmap

State Web Standards

- Update and revise statewide web standards based on Design System direction
- Revamp and update webstandards.ca.gov portal to reflect new direction and strategy

CA Design System

- Establish equivalent or better functionality and features found in the state web template
- Create a migration strategy for transition from state web template
- Create and evolve style guides and playbooks for content creation, design, engineering and more
- Identify common UX patterns across CA.gov websites

CA Web Publishing Integration

- Create a WordPress theme option to enable use of Design System and new page editing experience

Poll

How does this plan sound to you?

What might this mean for your work?



Type in the chat!

Keep sharing your thoughts

<https://github.com/cagov/design-system>

<https://designsystem.webstandards.ca.gov/contact-us>

How interested are you in adopting the Design System on your state site?

1. **Very interested**
Would adopt as soon as it's ready
2. **Interested**
Would adopt after a few more sites do/at a more appropriate time
3. **Might be interested**
Need more information/time/buy-in
4. **Likely not interested**
5. **Will likely never be interested**
6. **Other (share in chat)**

What we've learned

Research share out

What we've learned

Thanks for talking with us!

CalData

California Department of Technology Broadband for All Team

California State Library

Commission on POST

Department of Toxic Substances Control

Franchise Tax Board

Symsoft

and more...

What we've learned

We heard from you...

You want:

- Ability to customize components
- Streamlined code & option to use only certain components
- Easy version updates, flexible integrations with module bundlers and plugins
- Components that work with web applications and pages, interact well with each other, fit into pre-existing layouts, work across platforms, and inspire the viewer

Your work environment includes:

- Collaboration & communication challenges within departments & between the CDT Web Template team and departments
- Resistance to change & insular cultures

For you to adopt a new design system, you'd need:

- To prove new features' value to leadership
- To fit adoption into your existing work

Next up in our learning plan

1. Which components the Design System should include or remove
2. How we can best support state teams in adopting the Design System

Poll

Which Web Template components give you the most trouble?

What could we change to improve them?



Type in the chat!

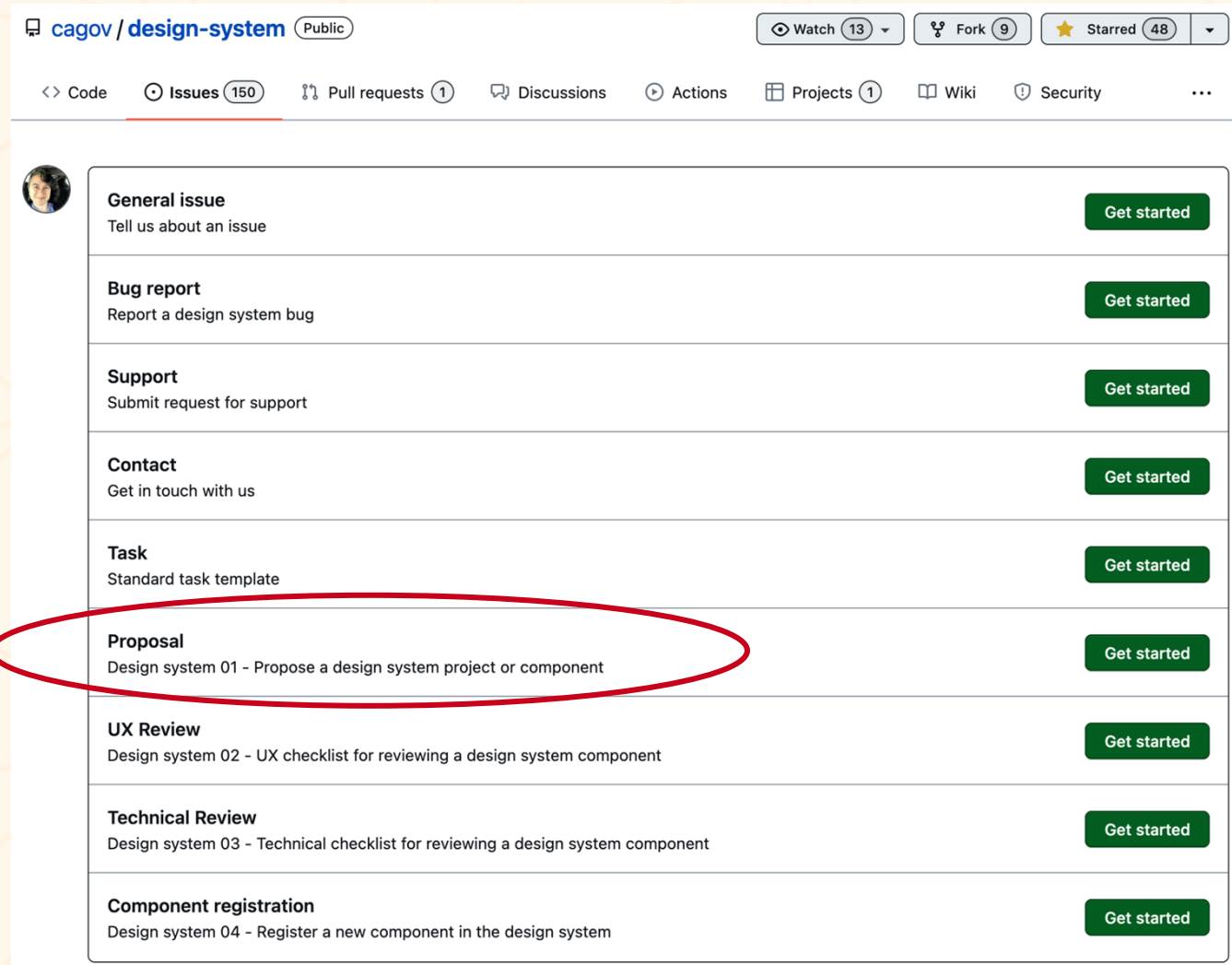
Keep sharing your thoughts

<https://github.com/cagov/design-system>

<https://designsystem.webstandards.ca.gov/contact-us>

New Issue Template to Propose a Component

<https://github.com/cagov/design-system/issues/new/choose>



The screenshot shows the GitHub interface for the 'cagov / design-system' repository. The 'Issues' tab is active, displaying a list of issue templates. A red circle highlights the 'Proposal' template, which is described as 'Design system 01 - Propose a design system project or component'. Other templates include 'General issue', 'Bug report', 'Support', 'Contact', 'Task', 'UX Review', 'Technical Review', and 'Component registration'. Each template has a 'Get started' button.

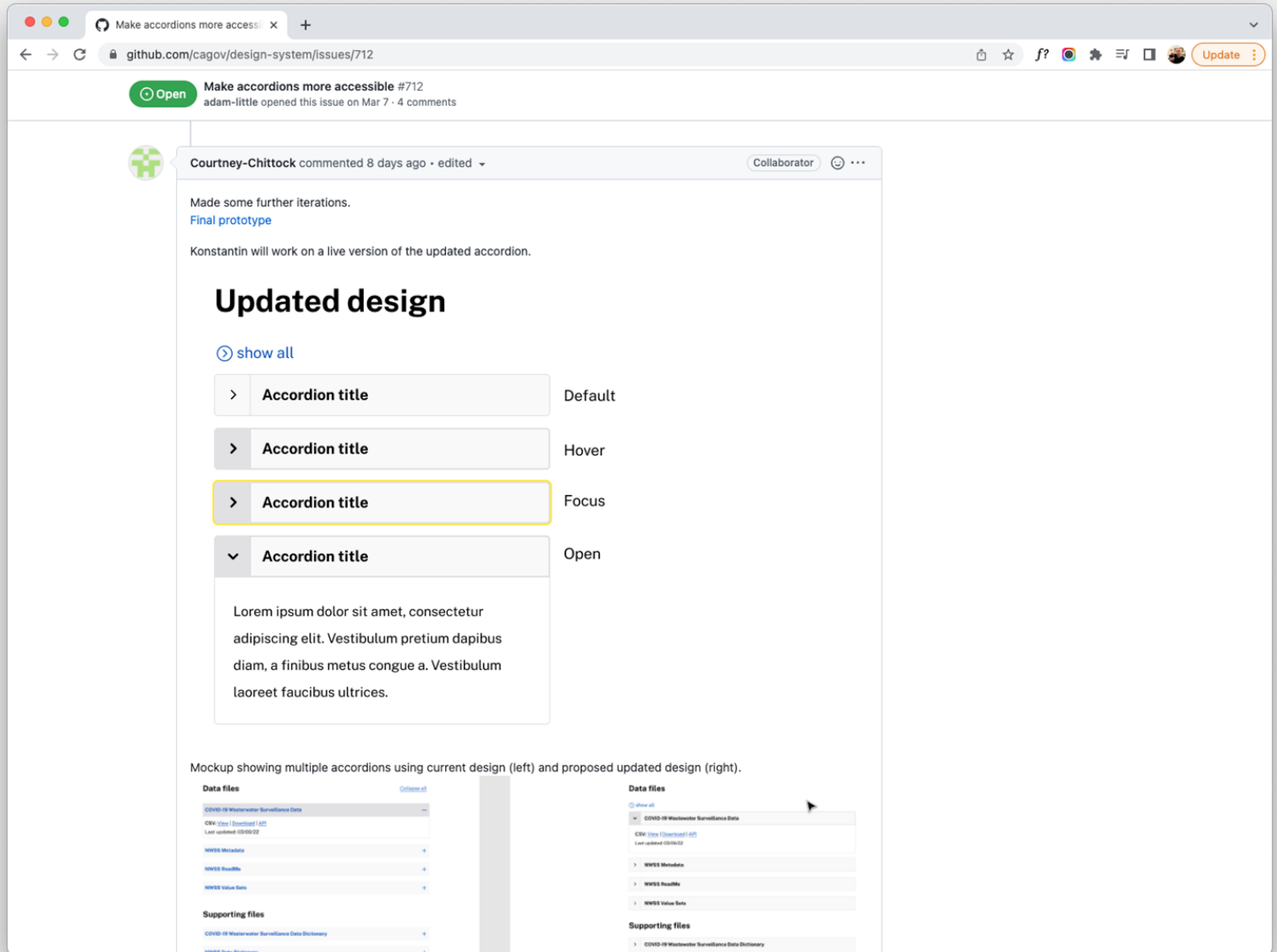
Issue Template	Description	Action
General issue	Tell us about an issue	Get started
Bug report	Report a design system bug	Get started
Support	Submit request for support	Get started
Contact	Get in touch with us	Get started
Task	Standard task template	Get started
Proposal	Design system 01 - Propose a design system project or component	Get started
UX Review	Design system 02 - UX checklist for reviewing a design system component	Get started
Technical Review	Design system 03 - Technical checklist for reviewing a design system component	Get started
Component registration	Design system 04 - Register a new component in the design system	Get started

Design updates

What's new

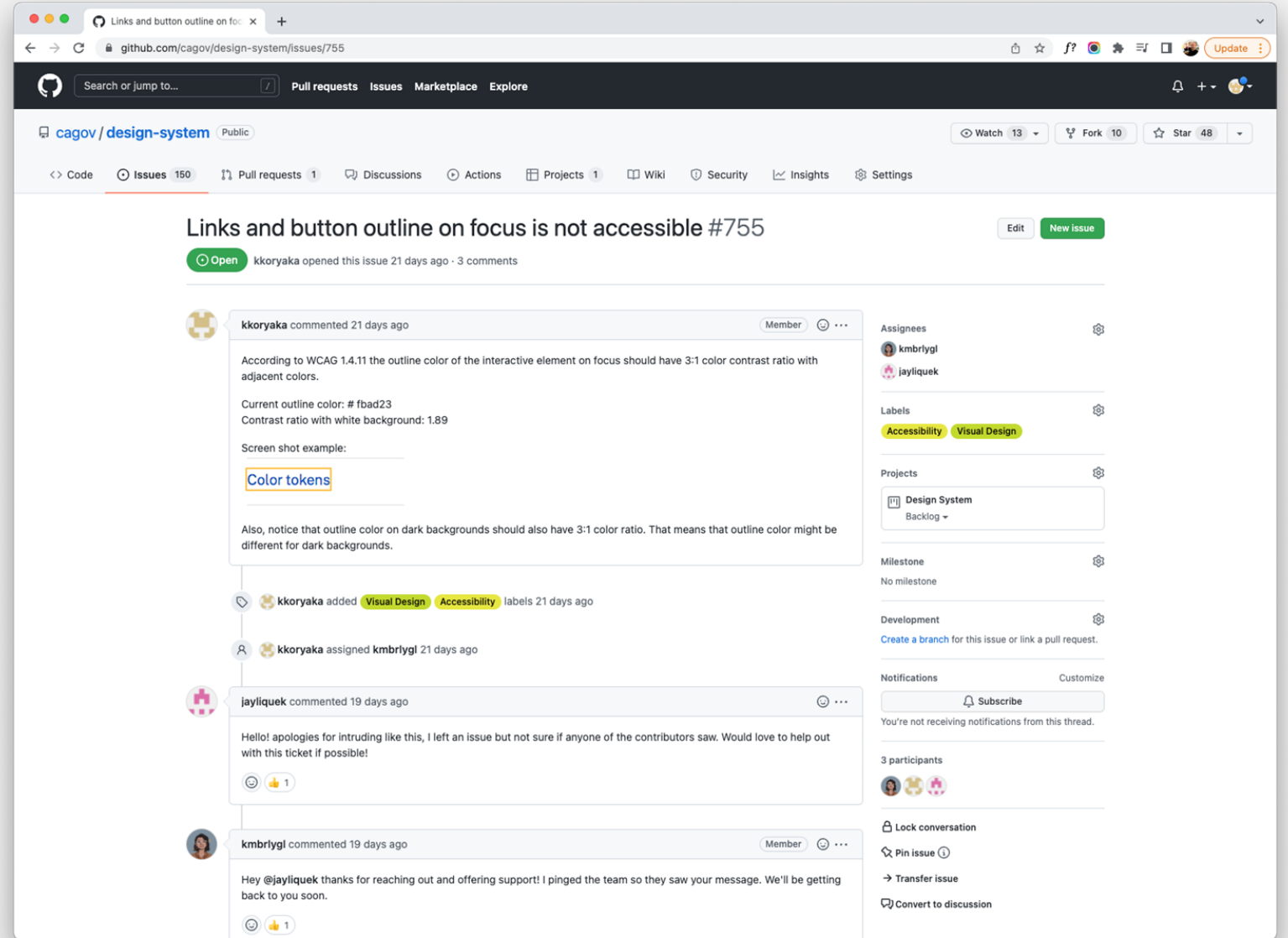
Improvements to components

- Improving accessibility (e.g. Accordion component)



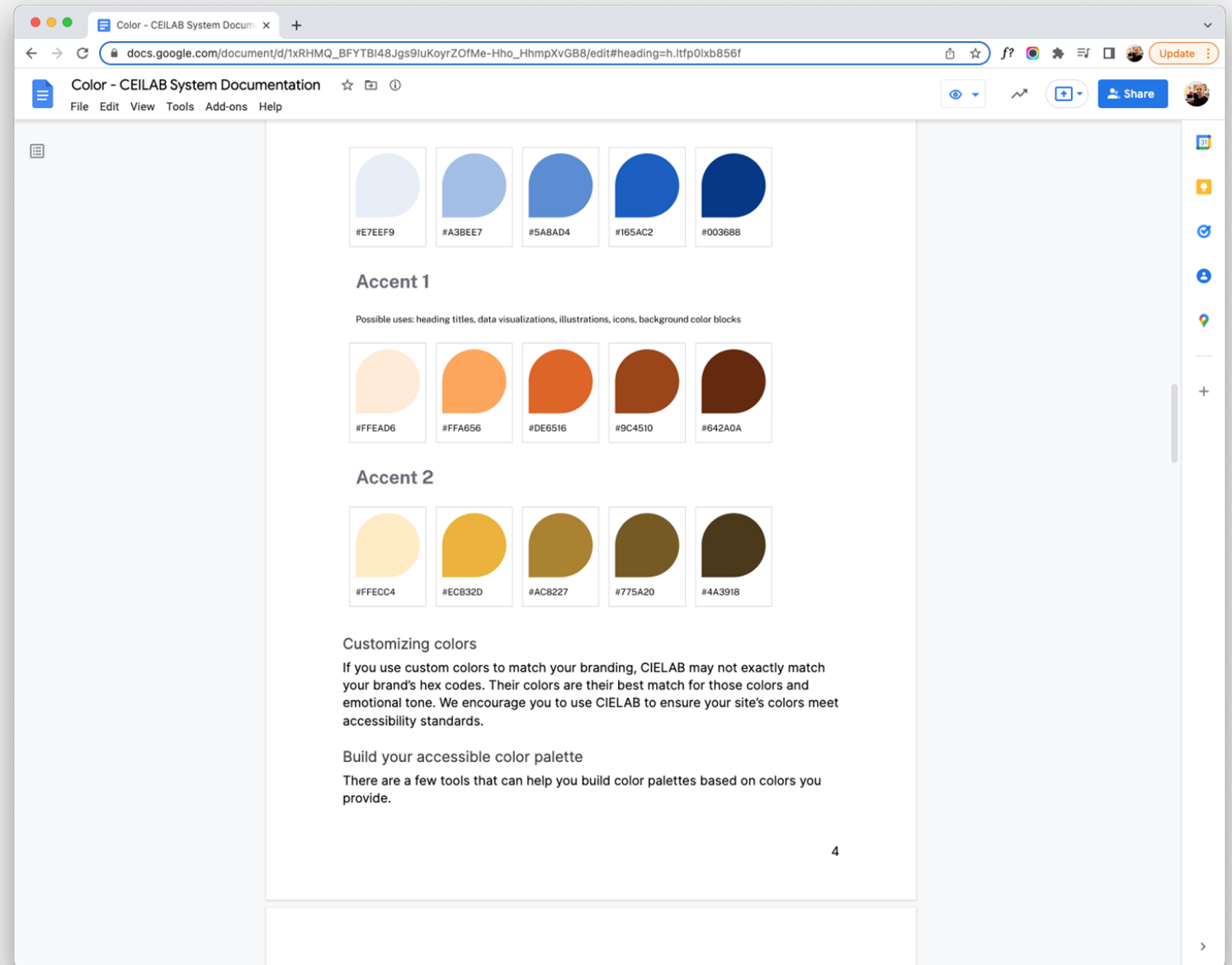
Improvements to components

- Improving accessibility (e.g. Accordion component)
- Collaborating with the community (e.g. improved button styles)



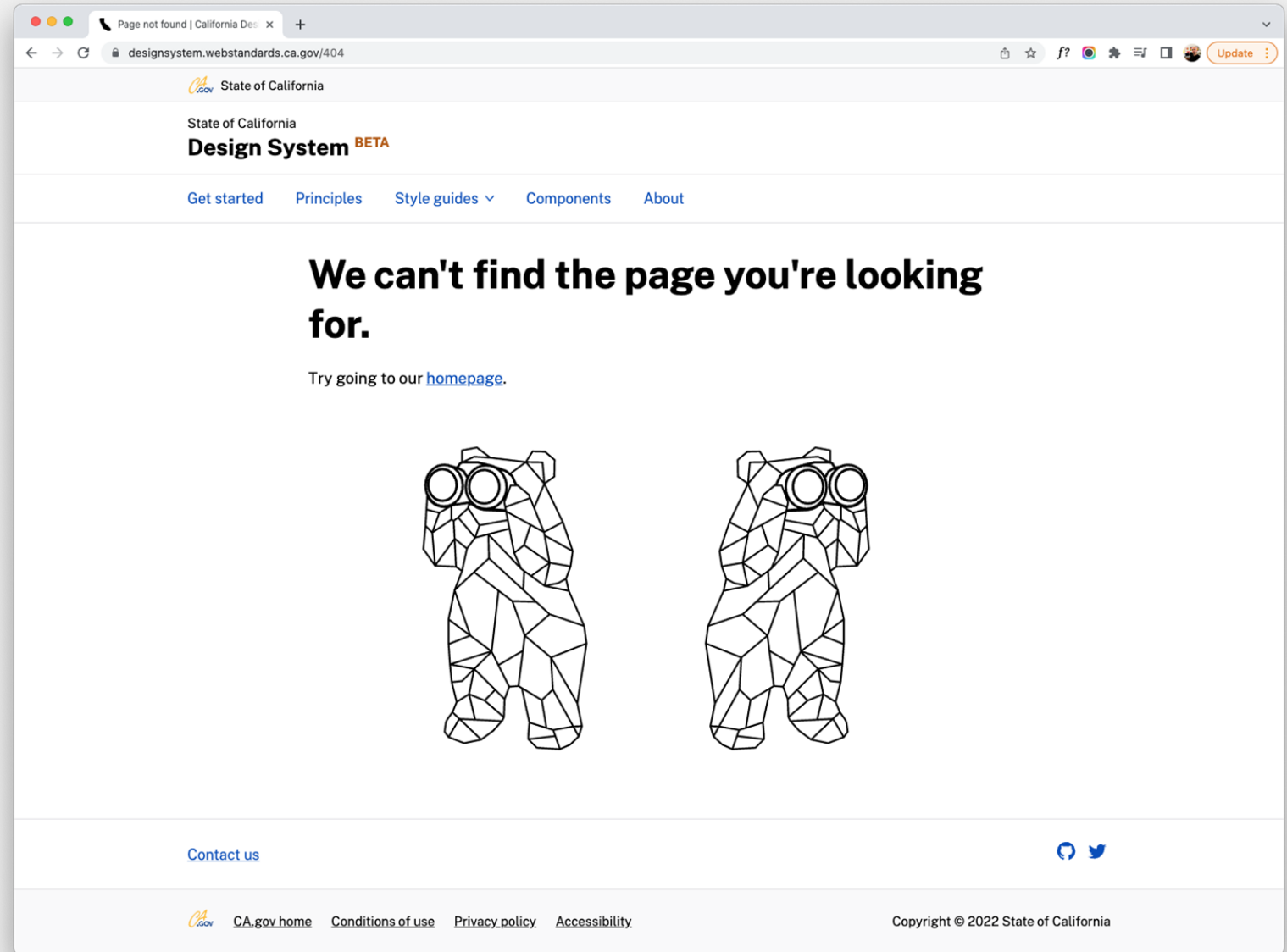
Improvements to components

- Improving accessibility (e.g. Accordion component)
- Collaborating with the community (improved button styles)
- Creating more options and opportunities for personalization (e.g. color palette)



Improvements to components

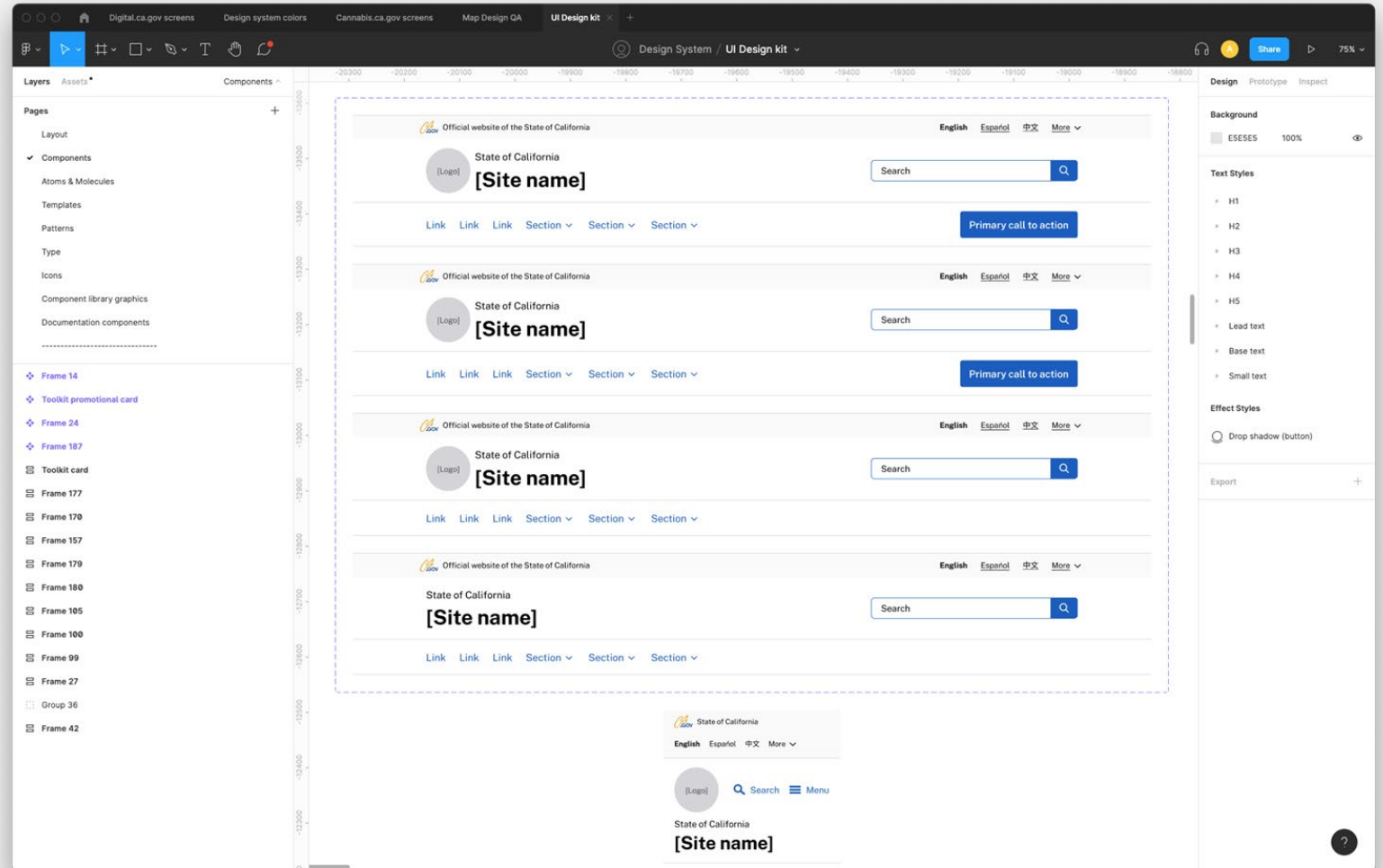
- Improving accessibility (e.g. Accordion component)
- Collaborating with the community (improved button styles)
- Creating more options and opportunities for personalizations (e.g. color palette)
- Finding opportunities for more personality (e.g. 404 bears)



Design updates

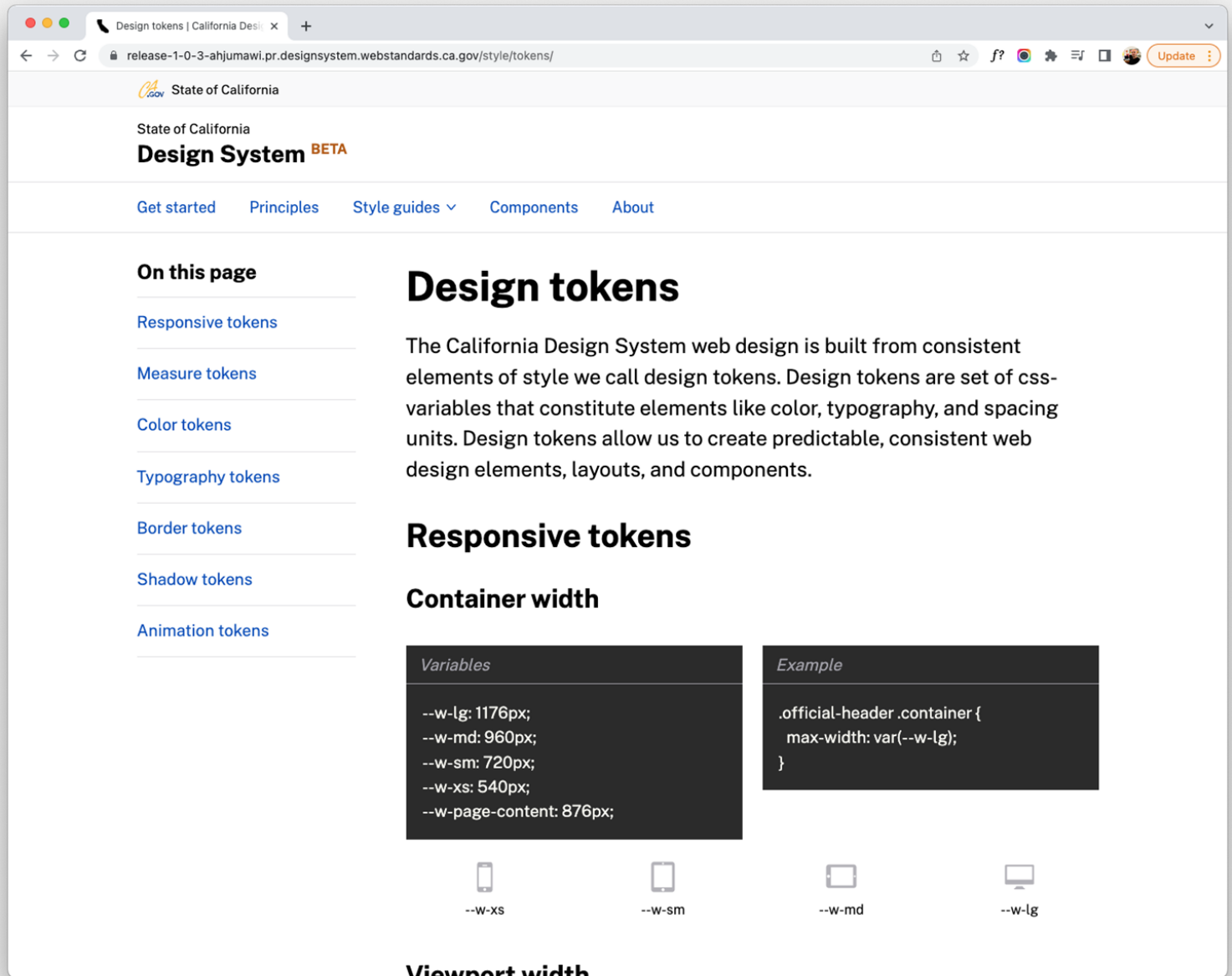
Process improvements

● Figma UI kit



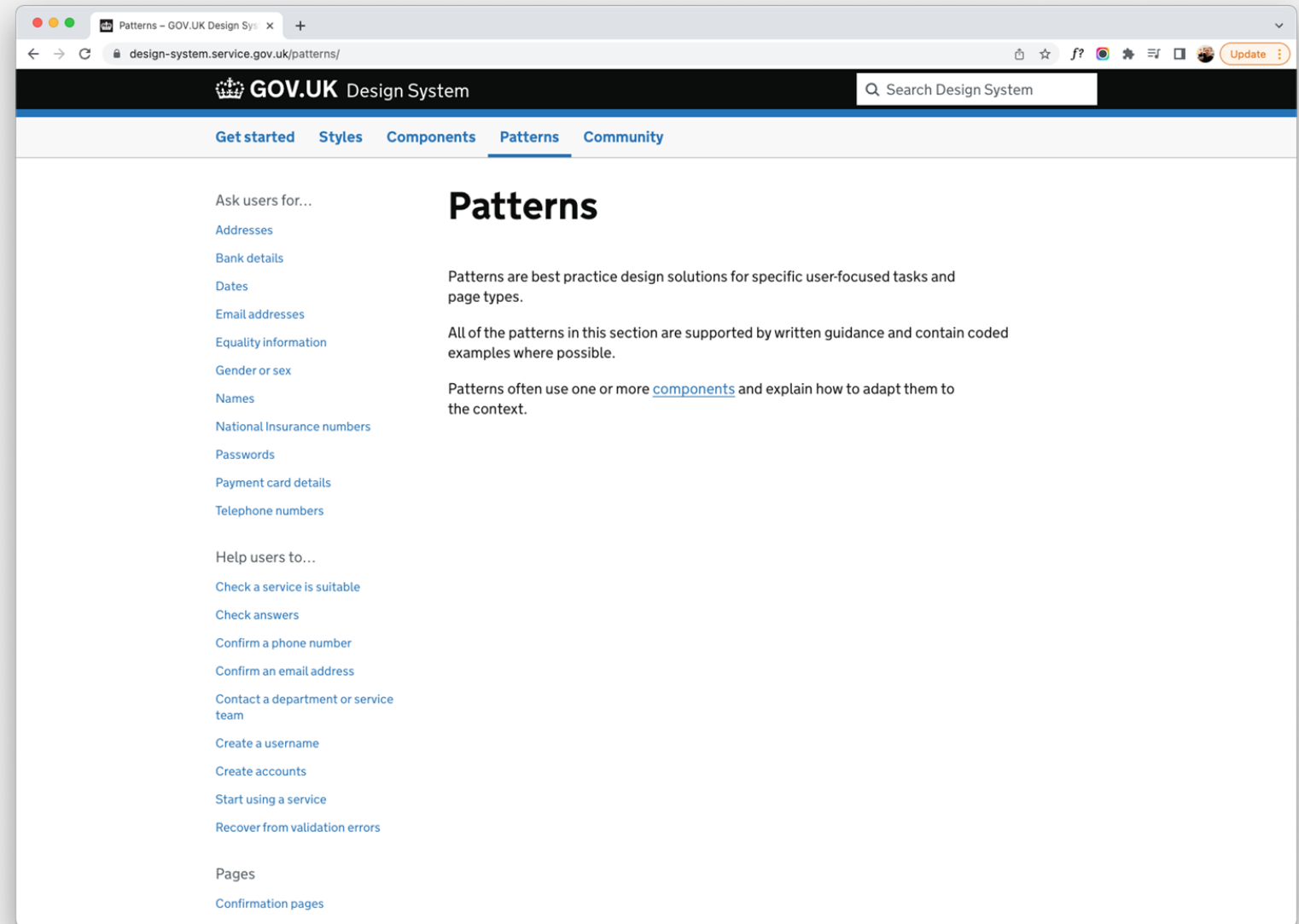
Process improvements

- Figma UI kit
- Design tokens



Process improvements

- Figma UI kit
- Design tokens
- From components to patterns



Engineering and integrations

Understanding ca.gov tech stacks

- Open source contributions
- ca.gov tech stack research

Open-source contributions

- Kurtis from FTB shared input on simplifying the accordion component.
- Students from an open source class at NYU chose our project for their coursework. We hope to encourage more students from California to do the same.



We seek feedback and contributions.

Submit feedback or pull requests:

<https://github.com/cagov/design-system>

```
HTML
<cagov-accordion>
  <div class="cagov-accordion-card">
    <button
      class="accordion-card-header accordion-alpha"
      type="button"
      aria-expanded="false"
    >
      <div class="accordion-title">Lorem ipsum</div>
      <div class="plus-minus">
        <cagov-plus>
          <div class="accordion-icon" aria-hidden="true">
            <svg viewBox="0 0 25 25">
              <title>Plus</title>
              <line
                x1="9"
                y1="12.5"
                x2="19"
                y2="12.5"
              />
              <fill>none</fill>
              <stroke>currentColor</stroke>
              <stroke-width>6</stroke-width>
              <stroke-linecap>round</stroke-linecap>
              <vector-effect>non-scaling-stroke</vector-effect>
            </line>
            <line
              x1="9"
              y1="12.5"
              x2="19"
              y2="12.5"
            />
            <fill>none</fill>
            <stroke>currentColor</stroke>
            <stroke-width>6</stroke-width>
            <stroke-linecap>round</stroke-linecap>
            <vector-effect>non-scaling-stroke</vector-effect>
          </line>
        </cagov-plus>
      </div>
    </button>
    <div>
      <cagov-plus>
        <div class="accordion-icon" aria-hidden="true">
          <svg viewBox="0 0 25 25">
            <title>Minus</title>
            <line
              x1="9"
              y1="12.5"
              x2="19"
              y2="12.5"
            />
            <fill>none</fill>
            <stroke>currentColor</stroke>
            <stroke-width>6</stroke-width>
            <stroke-linecap>round</stroke-linecap>
            <vector-effect>non-scaling-stroke</vector-effect>
          </line>
        </cagov-plus>
      </div>
    </div>
  </cagov-accordion>
```

```
HTML
<cagov-accordion>
  <details>
    <summary>Title 1</summary>
    <div class="accordion-body">
      <p>A couple buttons are included inside this accordion to demonstrate t<
      <p><button class="btn-primary">Button 1</button></p>
      <p><button class="btn-primary">Button 2</button></p>
    </div>
  </details>
</cagov-accordion>
```

After

Before

What tools do you use to share code with your team and partners?

1. Azure DevOps
2. BitBucket
3. GitHub
4. FTP
5. None
6. Other (share in chat)

New datasets about the ca.gov tech stack

- Wanted to understand what's come before to inform our approach to supporting adoption and integration of the Design System - to help meet State agencies where they are.
- Had long list of all ca.gov domains, ever (~2500) - with about ~950 currently active web sites
- Used diagnostic web tools and custom scrapers to collect information on all ca.gov domains
- This includes sites created in-house as well as from vendors

State Template Adoption

State Template version	Domains	Year launched
6.0.x	10	2020
5.5.x	117	2018
5.0.x	129	2016
Design System	4	2022
Still determining	683	2007 - Present

Source: ca.gov analysis of 943 active ca.gov sites using custom web scrapers (April 2022)

Most common web publishing tools on ca.gov sites

Publishing stack	Domains	Notes
ASP.net	207	
WordPress	205	
Not obvious	177	Bespoke code, unclear provenance
Other “Modern” stack	82	Flexible, performant, scalable
Dreamweaver	62	
Drupal	51	
*Other	< 40 each	

Other*

SiteCore

DNN

Sharepoint

“Dinosaur” (very old HTML)

Microsoft Word

Salesforce

Adobe Experience Manager

Rails

Wix

Squarespace

Concrete CMS

Cold Fusion

JavaServer Faces

Ckan

Source: Office of Digital Innovation analysis of 941 active ca.gov sites using data from off-the-shelf web diagnostic tool, Wappalyzer (February 2022)

What's next?

- Better understand publishing patterns and needs
 - Support design flexibility
 - continuous responsiveness to community feedback
 - speedy content changes
 - fully accessible workflows
- Continued community-building, collaboration and code-sharing with State technologists
- Long-term: publish aggregated data on key web metrics (performance, Design System adoption, readability, accessibility)
 - Requires that we consolidate a shared list of active and inactive web domains to use as key for domain analysis

What's coming

CA Design System

In Progress:

- v6 release of State Web Template 6.0 Content & Design Strategy
- UI updates in progress to v6 State Web Template website to have same look and feel as Design System site
- Component Research planning and strategy

Upcoming Releases:

- All cards will include clickable images and text (except the homepage hero card)
- New illustration for 404 error page (bear with binoculars)
- Bug fixes to base-css preview
- Add icons - component documentation
- Add icon component illustration icon for documentation page link
- Removed "Download" from library links

Thank you

Design System BETA

<https://designsystem.webstandards.ca.gov>



**DIGITAL
WEB
SERVICES
NETWORK**

Suggested Future Topics
Closing Remarks

Koji Kumpulainen

California Department of Technology

Thank you

Post conference materials will be published on the [DWSN Website](#).

For questions, please write to: DigitalWebServicesNetwork@state.ca.gov



Bringing together digital product managers, designers, and engineers.



Bringing together digital product managers, designers, and engineers.

Next DWSN Quarterly Forum Thursday, July 21, 2022