DIGITAL WEB SERVICES NETWORK

DWS N

Bringing together digital product managers, designers, and engineers.

cdt.ca.gov/dwsn

DWSN Quarterly Forum

Thursday, April 20, 2023

California
DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

CA.GOV

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…………………………………………………………………………Blaine Wasylkiw (5 minutes)

Google Analytics 4 Update…………………………………………………………..…..David Goebel (5 minutes)

GitHub Best Practices...…………………………………………………….………… Harjeet Singh (20 minutes)

State Digital Equity Plan……………………………………………………….……Cole Przybyla (15 minutes)

State Web Template V6 Update……………………………………………………………… Art Khomishen (15 minutes)

Accessibility Updates……………………………………………………………...Greg Duncan (5 minutes)

Open Discussion……………………………………………………………Koji Kumpulainien (20 minutes)

Suggested Future Topics / Closing Remarks……………………………………… Blaine Wasylkiw (5 minutes)

Google Analytics 4 (GA4) Update

David Goebel
Google Analytics and Search Administrator
California Department of Technology

cdt.ca.gov/dwsn

Google Analytics 4 (GA4) Update

❖ Universal Analytics' sunset date is currently July 1, 2023.

❖ Standard (free) UA properties can access historical data up until December 31, 2023.

❖ Optimized (paid) UA 360 properties can access historical data up until December 31, 2024.

❖ The Analytics team is continuing to build new GA4 properties and contact state agencies.

❖ You can reach out directly to analytics@state.ca.gov to request your new GA4 account/property.

❖ For more information, please visit https://webstandards.ca.gov/transition-from-universal-analytics-to-google-analytics-4/

GitHub Best Practices

DIGITAL
WEB
SERVICES
NETWORK

Harjeet Singh
DevSecOps Manager
California Department of Technology

California DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

cdt.ca.gov/dwsn

CA.GOV

Agenda

- What is GitHub?

- GitHub Features used by ODS

- GitHub Roles in CDT GitHub Enterprise

- GitHub Services offered by ODS

- GitHub Best Practices

- Demo

What is GitHub?

GitHub is a web-based collaborative platform to build, scale, and deliver secure software. It is owned by Microsoft, offering both free and paid plans with various features and storage limits.

Features of GitHub

- Share code files using private or public repositories
- Collaborate in real time
- Simple and robust access control to code files
- Best platform to work on open-source projects

Benefits of GitHub

- Cost saving and easy implementation on GitHub Advanced Security
- Easy to migrate repos to GitHub
- Mark down level documentation
- It makes easy to contribute to your open source projects
- Track changes in your code across versions

GitHub Features used by Office of Digital Services

Github Enterprise

- Enables you to manage billing and settings, enforce policy and audit the people with access to enterprise's resources
- We have one GitHub Enterprise account that contains multiple GitHub Organizations. Within each organization, there are repos and teams.

Integration with Azure DevOps

- Streamline development process and make it easier to manage your code across both platforms.
- Use Azure Boards app for GitHub to access ADO Board, Use Azure Pipelines app for GitHub to run CI/CD .

Single-Sign-On with Azure AD

- Which allows users to authenticate and access GitHub with their Azure AD credentials.
- This integration provides a more streamlined and secure authentication experience for users and simplifies the management of user access to GitHub

GitHub Advanced Security

- Provides a rich set of capabilities for securing every part of your software development
- Code scanning identifies and prevents code vulnerabilities, Secret Scanning identify secrets like tokens and connections strings when committed to code

Dependabot

- GitHub identifies and alerts as for third-party vulnerabilities in the code.
- Creates pull request to fix your identified dependency problems

GitHub Actions

- GitHub Actions is a powerful automation tool that allows as to define workflows using YAML files.
- Currently using for GitHub Advanced Security workflow

GitHub Issues

- We are using GitHub issues to track work in our open-source projects.

GitHub Roles in CDT GitHub Enterprise

Enterprise Administrator

- Enforce enterprise security policy
- Help configure Single Sign-On (SSO) for GitHub organizations

Organization Administrator

- Manage organization settings
- Organize members into teams
- Manage organization security
- Approve outside collaborators

Repository Administrator

- Access management
- Inviting a team or person
- Managing pull request reviews
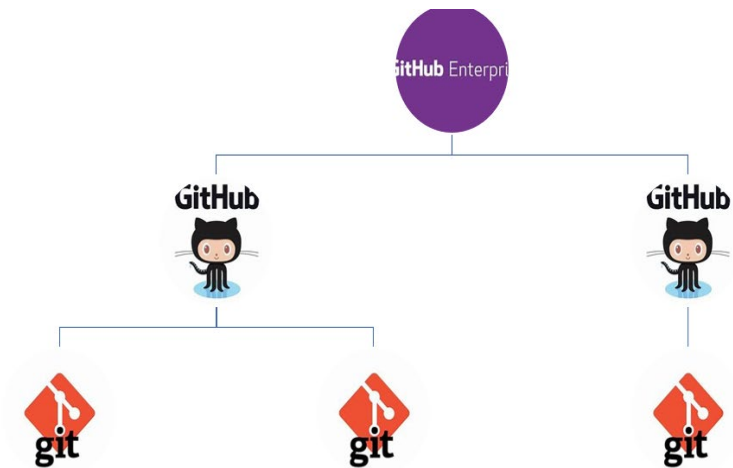
GitHub Services provided by ODS

GHAS
- Scanning and protecting code in repositories, detecting secrets, securing your software supply chain
- Train developers on reviewing the Scan results

Actions
- Use GitHub Actions for CI/CD pipeline and other workflows
- Improve productivity by automating every phase of the software development workflow
- Currently using for GHAS code scan workflow

Organization
- Create and configure organization
- CI/CD yaml templates
- Develop an Inner Source strategy
- Help configure SAML single sign-on
- Training GitHub Organization owners
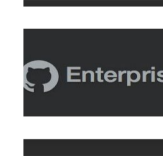
GitHub Enterprise
- Enforce enterprise policies that will manage the policies for all the organizations owned by the enterprise.
- Enforce Two-factor authentication enterprise-wide
- Research and recommend best practices

GitHub Best Practices (cont.)

GitHub Repo	Github Action	GitHub Organization	Github Enterprise
Create a README file	Review and restrict changes to workflow files	Assign multiple owners	Use policies to enforce business rules and regulatory compliance
Use GitHub branch protection rules	Limit risks associated with secrets	Use teams	Minimize the number of organizations.
Use Git LFS to track large files	Mitigate script injection attacks	Consider using SAML single sign-on (SSO) authentication	Avoid extensive collaboration in user-owned repositories.
Use CODEOWNERS file	Using OpenID Connect to access cloud resources	Enforce Two-factor Authentication	Use human-readable usernames.
Protect sensitive files	Mitigate the risks associated with third-party actions	Enable GitHub security tools by default for repositories	Enforce Two-factor Authentication for all GitHub accounts accessing to your GitHub Enterprise.
Configure automated security checks	Hardening self-hosted runners	Periodically review access controls	

Demo-Use GitHub branch protection rules

As a repo admin, I want to protect important branches, in order to maintain the quality of those branches.

- Create a branch protection rule

- Require a pull request before merging

- Require status checks to pass before merging

- Apply rules to people with admin permissions to the repository or custom roles with the "bypass branch protections" permission

GitHub FAQ

Why should I use GitHub for repos?

- Security feedback early within the development workflow
- Developer familiarity
- Starter Templates
- Integration with third party tools is easy
- Benefits of open-source culture, practices, and tools

Should I use GitHub Actions rather than Azure Pipelines?

- Either works well.

How to contact ODS DevSecOps Team?

- CIOODSDevSecOps@state.ca.gov
- https://services.cdt.ca.gov/sp?id=sc_cat_item&sys_id=28f5f1971b4e81d81e0985dae54bcb2b

Link for Best Practices Documents

- https://webstandards.ca.gov/2023/04/19/github-best-practices/

Questions

State Digital Equity Plan

DIGITAL WEB SERVICES NETWORK

Cole Przybyla
Broadband Access and Deployment Advisor
California Department of Technology

cdt.ca.gov/dwsn
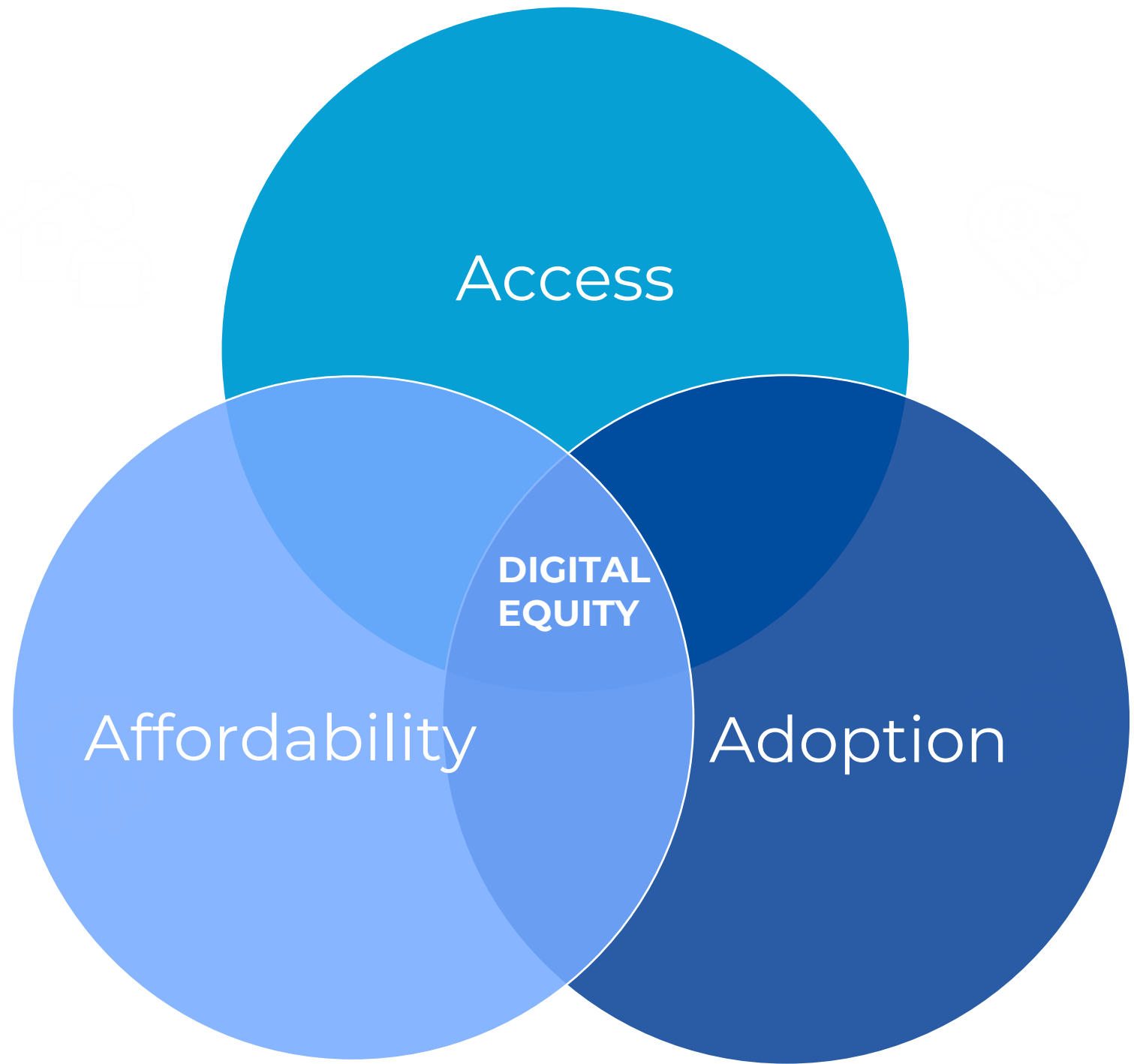
California DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

CA.GOV
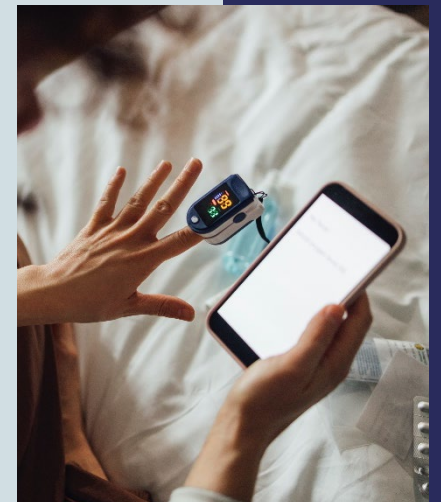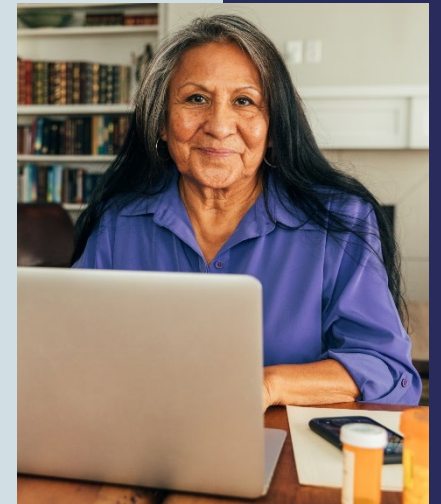
"Californians' ability to access and use broadband is the difference between being able to fully engage in life and being cut off."
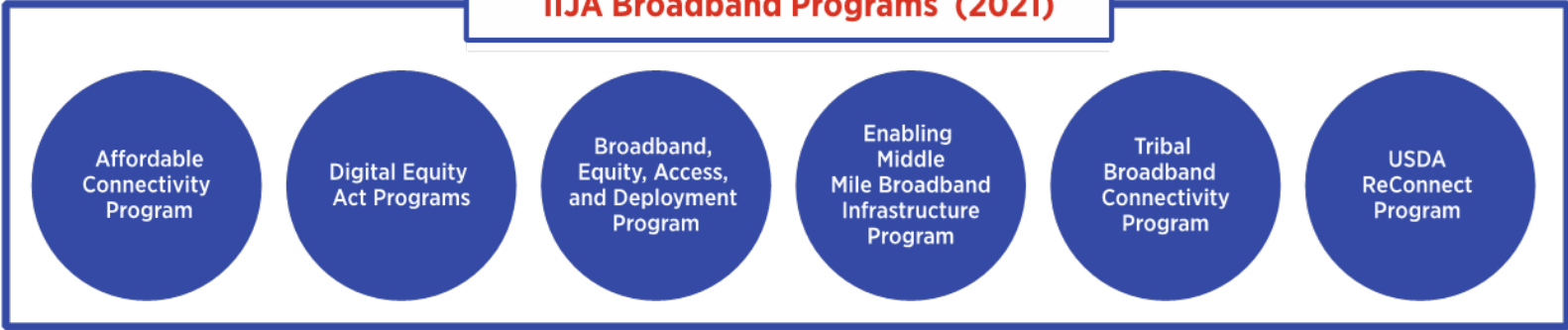
Infrastructure Investment and Jobs Act (IIJA)

The IIJA invests roughly $65 billion to support broadband deployment and adoption and promote digital equity in states.

Broadband Equity, Access, and Deployment (BEAD)

$42.45B

Digital Equity Planning, Capacity, and Competitive Grants

$2.75B

SDEP AND BEAD Plan Coordination

- CDT administering entity for Digital Equity Planning program

- CPUC administering entity for Broadband Equity, Access and Deployment program

- Planning processes will be coordinated

- Extensive statewide and local engagement and input

- When completed, both plans will be integrated and unlock hundreds of millions of additional dollars to achieve Broadband for All

Covered Populations

The Digital Equity Act prioritizes investments for eight "Covered Populations"

1 **Individuals living in covered households** with an income at or below 150% Federal Poverty Level

2 **Aging individuals** (60+)

3 **Incarcerated individuals** other than individuals who are incarcerated in a Federal correctional facility

4 **Veterans**

5 **Individuals with disabilities**

6 **Individuals with language barriers** including individuals who Are English learners; and have low levels of literacy

7 **Members of a racial or ethnic minority group**

8 **Individuals who primarily reside in a rural area**

9 **Women**

10 **LGBTQI+**

Specifically called out in the BEAD notice of funding opportunity

SDEP PLANNING APPROACH
PLANNING COMPONENTS

The planning process will consist of five components:

- Statewide Planning Group (SPG)

- Outcome Area Working Groups (OAWGs)

- California Digital Equity Survey(s)

- Broadband for All, Digital Equity & BEAD Regional Planning Workshops

- Statewide Public Engagement

What we've learned thus far

Takeaways from February Meeting:

1. **Defined digital equity**: access to information, benefits from government services, equal amounts of effort for all users

2. **Common digital equity barriers**: broadband access, affordability, and adoption, language access, mistrust due to historical harm, transportation, childcare needs

3. **Strategies**: universal web design standards, accessibility toolkits, intergovernmental collaboration, remote governmental meetings, partnering with community-based organizations

Takeaways from March Meeting:

1. **Define essential services**: utilities and day-to-day needs, education, health and human services, social safety net programs, financial systems, safety and emergency services

2. **Define civic engagement**: city council meetings, school board meetings, justice system hearings

3. **Disparate outcomes**: essential service usage, employment, access to information including governmental meetings, emergency preparedness and recovery

WE NEED YOUR HELP

Digital Equity Ecosystem Mapping (DEEM) Tool

THE DEEM ISP TOOL IS LIVE!

The Digital Equity Ecosystem Mapping (DEEM) ISP tool tracks **Digital Equity** programs, plans, services, and resources throughout California. The mapping tool identifies:

- What programs are being offered, where they're being offered and to whom, and what is missing in each region.

- Barriers to achieving digital equity in every California county.

Scan the QR code using your mobile device or visit us at **bit.ly/DEEMSurvey**

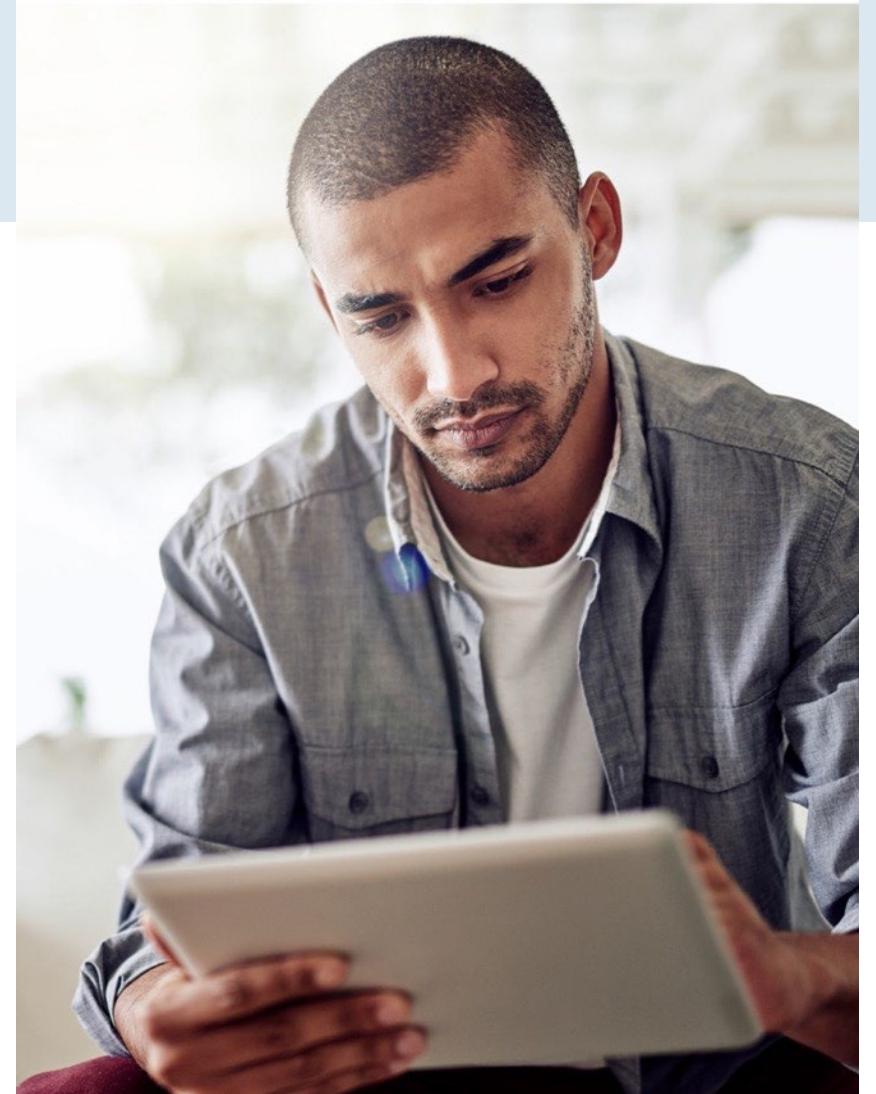CALIFORNIA ALL | **Broadband for All**

SCAN ME

Share the Digital Equity Public Survey

The State is distributing a statewide **Digital Equity Public Survey in 14 languages** to residents of California to identify barriers to digital equity, especially for Covered Populations.

The survey captures information about internet access, internet affordability, and internet adoption for residents in California households.

Link to toolkit with QR code for promoting the Public Survey will be shared in the coming weeks

COMING SOON: Q2 2023

CALIFORNIA ALL | **Broadband for All**

Broadband for All, Digital Equity and BEAD Regional Planning Workshops

- Friday, April 14, Merced
- Saturday, April 15, Fresno
- Friday, April 21, San Diego
- Thursday, April 27, Chico
- Friday, April 28, Santa Rosa
- Wednesday, May 3, Eureka
- Friday, May 5, San Jose
- Thursday, May 11, Sacramento
- Friday, May 12, Grass Valley

- Tuesday, May 16, Inland Empire
- Friday, May 19, Los Angeles
- Saturday, May 20, Long Beach
- Wednesday, May 24, Santa Ana
- Tuesday, May 30, Tuolumne
- Thursday, June 1, Santa Maria
- Friday, June 2, Seaside
- *To Be Announced: Oakland*

Scan the QR code using your mobile device or visit us at
bit.ly/CADigitalEquityPlanEvents

CALIFORNIA ALL | **Broadband for All**

SCAN ME

Upcoming State Digital Equity Planning & BEAD Virtual Events

Statewide Digital Planning Group Meeting

- [Wednesday, April 26, 2023](#)
- Wednesday, July 26, 2023

Outcome Area Working Group Meetings

- May 16 – Education
- May 16 – Tribal Collaboration
- May 17 – Digital Literacy & Inclusion
- May 17 – Workforce and Economic Development
- May 18 – Health
- May 18 – Essential Services, Accessibility, and Civic Engagement

To RSVP, visit
bit.ly/CADigitalEquityPlanEvents

CALIFORNIA ALL | **Broadband for All**

Contact Us

Digital Equity Planning General: digitalequity@state.ca.gov

**California Department of Technology
Office of Broadband and Digital Literacy**

Cole Przybyla
Broadband Access and Deployment Advisor
cole.przybyla@state.ca.gov

CALIFORNIA ALL · BROADBAND FOR ALL

State Web Template V6 Update

DIGITAL WEB SERVICES NETWORK

Artem Khomishen
Web Design and Development Manager
California Department of Technology

California DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY

cdt.ca.gov/dwsn

CA.GOV

Template Update overview

- New Components (2 minutes)
- New Patterns (5 minutes)
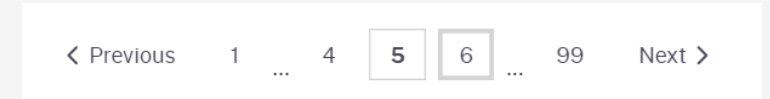- Template source code (5 minutes)
- Quick Q&A (3 mins)

New components

Pagination
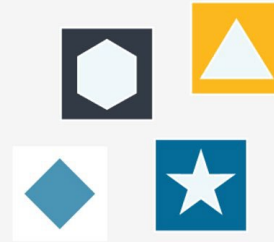Controls that allow you to move forward or backward or go directly to a specific page

Executive profile
Several versions available including a default solid background, and two transparent options optimized for light and dark backgrounds.

New page level patterns

Newsroom

A landing page for the latest news articles

List of articles

A list of articles or content that are published regularly

Article

A page layout for a news article or press release

Template source code

(HTML)
Source code version repo
- Static files needed to start a new web project or web update
- Uncompressed and extracted version of the core template
- Pre-compiled core template files including Sass and separated js
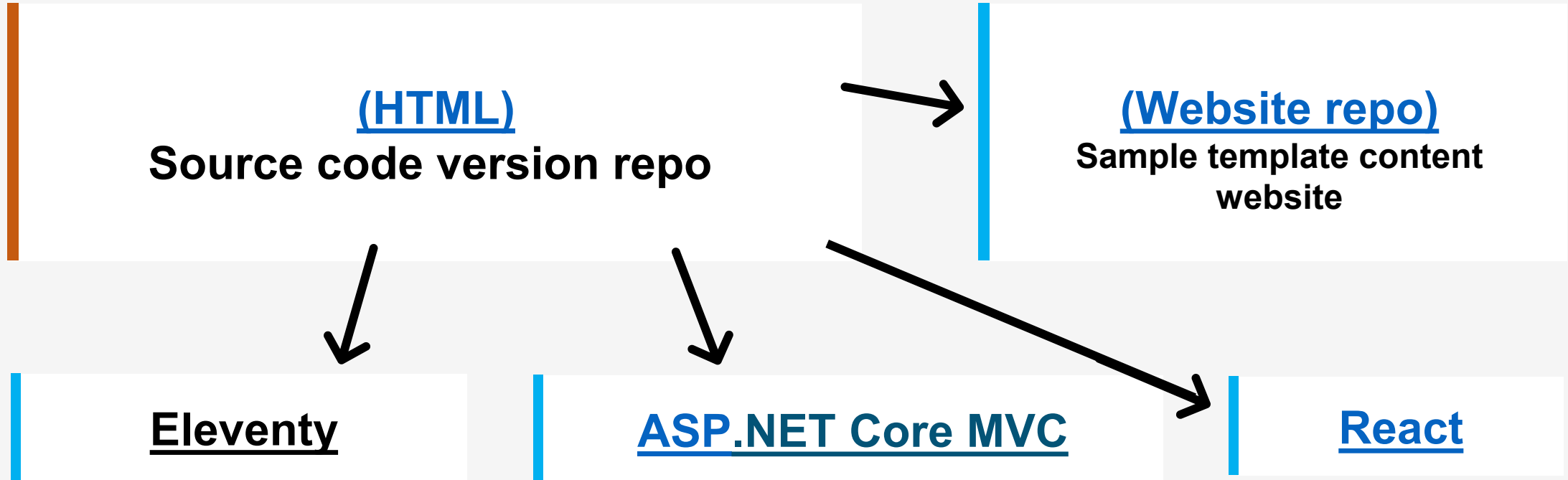
Eleventy
Static site generator framework
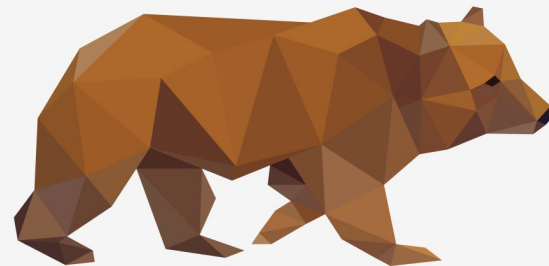
ASP.NET Core MVC
Server side web application framework

React
Front end user interface framework

Template source codes

(HTML)
Source code version repo

(Website repo)
Sample template content website

Eleventy

ASP.NET Core MVC

React

Questions?

Accessibility Update

- Reminder July 1st 2023 - Certifications need to be Posted on Websites

- WCAG 2.2 update has been pushed back to May 2023

- Update SIMM 25 Resources Guide

- Updated Certification Template Language

New Certification Language

The undersigned certify that, as of _____the website of the _____ is designed, developed, and maintained to be accessible. This means being in compliance with the following:

- California Government Code Sections 7405, 11135, and 11546.7

- Web Content Accessibility Guidelines 2.1 published by the Web Accessibility Initiative of the World Wide Web Consortium

- A minimum Level AA success criteria

Open Discussion

DIGITAL WEB SERVICES NETWORK

Koji Kumpulainien
Web Consulting Manager
California Department of Technology

cdt.ca.gov/dwsn

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.