Treasury Board of Canada Secretariat
Secrétariat du Conseil du Trésor du Canada

Canada

Government of Canada Design System

Documentation plan

Sep 18, 2019

Documentation plan objectives

- Deliver a minimum viable design system for the next iteration of WET and GC web guidance
- Plan MVP feature/component development
- Establish documentation layouts to support ease of use
- Establish navigation to make documentation easy to find

Documenting page layouts (templates), patterns and components

Objective

Objective: Determine how best to document components, styles and design patterns to make them easy to understand and use

- Review approaches other design systems have used
- Consider how to allow for experimentation and quicker improvements to live services
- Express thoughts on the design system as a stand-alone site or part of Canada.ca, its navigation system and labels
- Review template examples for components and suggest possible user issues or gaps that could prevent easily consolidating various current documentation systems
- Discuss ways the community might be able to engage and gaps in facilitating engagement
- Plan timelines towards a live production of the Design System documentation

Expected audiences/top tasks

Developers

Publishers:

- What's available
- HTML to copy
- Using beta design

Contributors:

- Submitting new code
- New documentation
- Experimentation criteria
- Adding variants (ie react)

Maintainers:

- Updates
- Breaking changes

Designers

Communicators:

- What's available
- Constraints + what is mandatory
- When to use
- Writing style
- How to display choices or data meaningfully
- Theming (apps, intranets, etc)

Researchers/designers:

- Known limitations
- Research and testing
- More on styles

3rd parties

Collaborators:

- Opportunities to reuse research
- Designs and code
- Contacting both GC theme and specific services

External WET community:

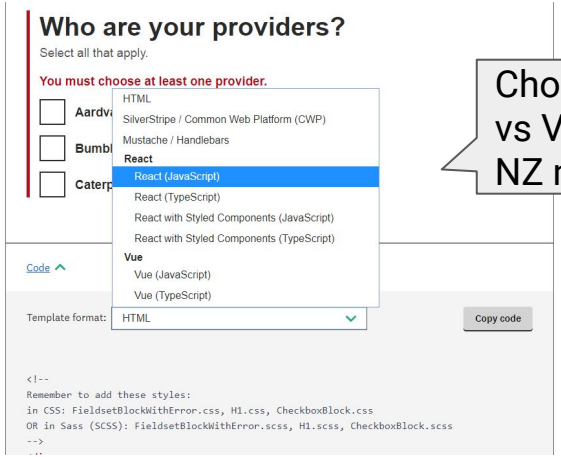
- Using or contributing as a non-GC theme partner
- Theming
- Adding variants

Documenting components and patterns

Principles

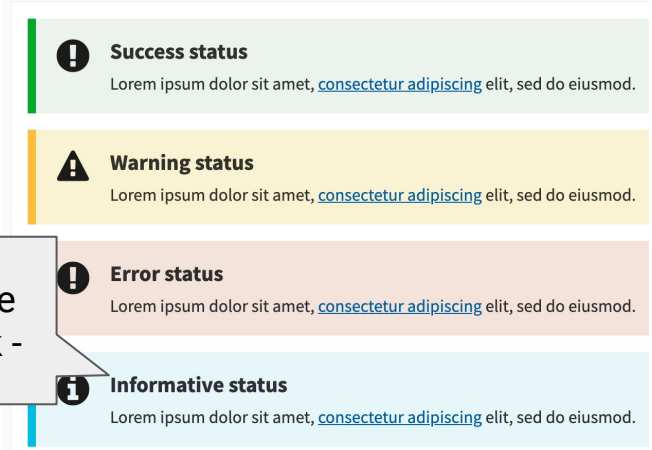
- Ensure example and code is easily findable
- Include semantic versioning and change log
- Provide design for code variants
- Provide design for component variants
- Provide beta variants where available, with necessary CSS and JS overrides
- Ensure it’s clear how to:
  - Report issues or gaps (and see overview of backlog)
  - Volunteer to experiment on a new pattern
  - Submit a beta with code
  - Move from beta to PR process for stable

Documenting variants



Choose a React vs Vue variant - NZ model

Design variants of a component all in same example & code block - US model



Provide beta code with override CSS/JS

Documenting templates

Provide link to the generic page layout

Beta institutional landing page

Template with guidance

▶ Code

Toggle between embedded guidance and clean template

Government of Canada

MENU

Home > About Canada.ca > Canad design system > Template and pattern library for Can

Remove guidance | Back to main template page

[Institution name]

Short description of the institution's mand

Super task link [optional]

Guidance in expand collapses for page layouts

▼ **Guidance:** breadcrumb, title, image and super task link

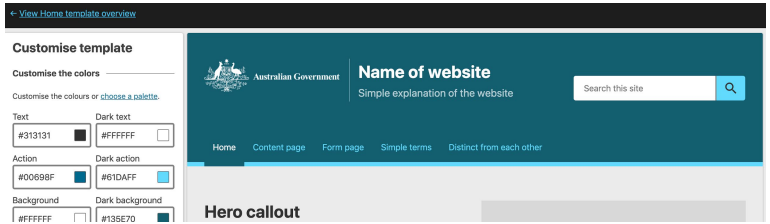
Breadcrumb

Mandatory

The breacrumb is: Home > Departments and agencies.

Title

Update will move the guidance toggle into a sticky banner with back to guidance link - AUS model



Documenting variants/configurations without examples

Image

Optional

The 1200x726 space behind the H1 can be used for a banner or image. The image does not have to take up the whole space and can be customised as needed.

The image and H1 should be visually distinct from the Canada.ca homepage to prevent confusion between institutional landing pages and Canada.ca.

Variation: Apply the `ip-cover-hide-mobile` class in addition to `ip-cover-img` to hide the image in mobile view.

In page layouts, variants on a component can be mentioned within guidance blocks

Option	Description	How to configure
Disabled state	Disabled inputs will not be clickable. Visual indications include greying out the control and adding a 'stop' cursor icon on hover.	To toggle a disabled state: • Add the class `is-disabled` to the list item of the checkbox or radio item • Add `disabled` attribute to the input field
Inline state	Inline radio buttons or checkboxes will display side by side on larger screens and wrap to new lines, rather than vertically.	Add the `form-label-inline` class to each checkbox or radio button label.
Success checkboxes (green)	Success checkboxes use a green background within the checkbox when it is selected to support user confidence that they are ready or successful. Recommended application is for checklists.	Add the `checkbox-green` class to each checkbox list item.

In components, variants can be documented in tables if less frequently used, or in a set of similar variations (but option+description must be plain language)

Documenting versions and changes

▼ Previous version

v4.0.28.1 to v4.0.27 `testCase-v4.0.27` **(2.0)**	• Clearfix removed • Doormat component explicit • More services and informatic
v4.0.26 to v4.0.22 `testCase-v4.0.22` **(1.2)**	• Separated column layout fr

Current WET shows version impact of component update on overall WET4 build

API (Version 3.0)

CSS Class	Template	Visual rendering	Schema
Version 1.3	Version 3.0	Version 1.1	Version 1.1

CSS Class (v1.3)

`gc-srvinfo`	Component: Service and information
`gc-drmt`	Component: (Deprecated) Doormat link. Defined inside a Service and information compor

▼ Version notes

Version 1.3	• Added: `gc-srvinfo`
Version 1.2 (between v4.0.28.1 and v4.0.27)	• Depricated: `gc-drmt`

Current WET gives breakdown of component into 4 categories each with versioning

Here's the proposal:

- Single version per component that would increment with changes to the pieces (API version - would not mention WET version on component page)
  - These would then have version notes + a label saying what the update affects.
- Specs on the visual rendering will only be made visible or changed in alpha design patterns so do not need to be in the design system proper
  - These changes then get reflected in the other categories
- A progressive disclosure pattern would be used to get to technical markup of the schema' or template near the bottom of the page.

Prioritising development of the WET5 core and documentation

Prioritising components and patterns

Principles

- Must include core designs to support adoption of Canada.ca
- Must include patterns from recent projects showing top features supporting top task success
  - contact us patterns, decision points, interactive questions/forms, sign in and authentication
- Must include a pilot collaboration to fork another design system's pattern

Next steps

- DTO will present a components list based on the WET, recent and spec
- Determine what we fork from gov.uk or other design system
- Documentation and WET5 dev

Component priorities - first cut

- Generic page template semantic markup
  - Grids and layout, JSON-LD support for schema.org, revised outline markup
- Components for decision points and interactive questions
  - Expand/collapse, radio/checkboxes, toggle, responsive tables, tabbed interface, auto-complete/polyfill, buttons, overlays, checkbox display logic, postal code finder
- Components for nav options
  - Sticky left hand ‘on this page’ nav, circles nav for SIT, Canada.ca menu, long document pattern
- Support for consistent authentication experience
  - Sign in pattern, customisable form validation messages, contextualising content based on region and URL parameters
- Support for responsive tables
- Nicer data visualisation - charts and graphs

Design system nav and getting started/collaboration guidance

Design system comparison (see annex A)

	Name	Landing	Stand alone	Top nav?	Code
UK	Descriptive	Doormats	Yes	Yes	Included w/ex
Australia	Descriptive	Doormats	Yes	Yes	Included w/ex - templates are separate page examples and code only in github - component examples are in a second column right of the title, always top of page
US	Descriptive	Doormats	Yes	Yes	Included w/ex
New Zealand	Descriptive	Doormats	Yes	Yes	Included w/ex
Material Design	Branded	Doormats	Yes	Yes	Only style and examples
Clone	Branded	No doormat	Yes	No	Included first
Aurora	Branded	Role based	Yes	Yes	Included w/ex
Shopify	Branded	Doormats	Yes	Yes	Included w/ex

Branding and navigation principles

- Unified design and component documentation
  - How do we reconcile frequent publishing with technical/updating guidance? Updating as smaller use case at bottom of page?
- Distinct design system branding
  - Use a broad, official, descriptive name (e.g. GC Design System)
  - Build as a “stand-alone” site with top nav (tabs) and left nav conventions
- Support for non-Canada.ca implementations (intranet, authenticated spaces and sign in, non-GC users)

What we need to support use and collab

- Documented get started process to use the system
  - CDTS and code variant distributions
- Experiment requirements and support:
  - Easy get started experimenting, how to do it well
  - Modularised component implementation and changes
  - Clear exit requirements to get to beta and integrate into WET5
- Tracking component development
  - Issues tracking in github repo
  - Backlog: currently working with a documentation oriented project board, might need to add more component dev phases: GCDS backlog
  - Documenting easy to follow contribution guidelines
  - Documenting easy how to meet standards guidelines

90-day plan

90-day plan - Documentation

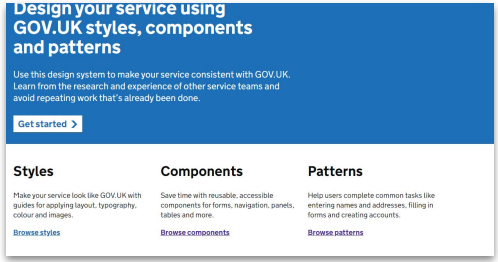
Activity	Deadline
Present 90 plan	Oct 31
Present documentation page layout and example	Nov 14
MVP patterns in new library (and translated)	Dec 15
Design system in production (at least limited distribution) with contribution guidance	Jan 15
Host in Drupal/Github integrated environment	Mar 2020
Update to Design System branding and nav	Mar 2020
Elaborated Getting started and Experimentation guidance and support	Mar 2020

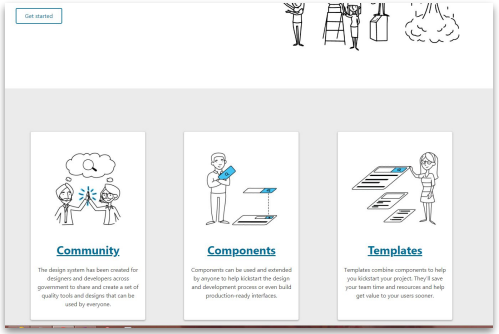
Annex A: Comparative analysis of other design systems

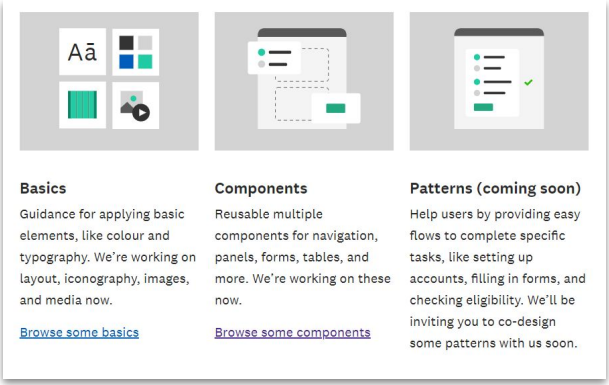
Other design systems

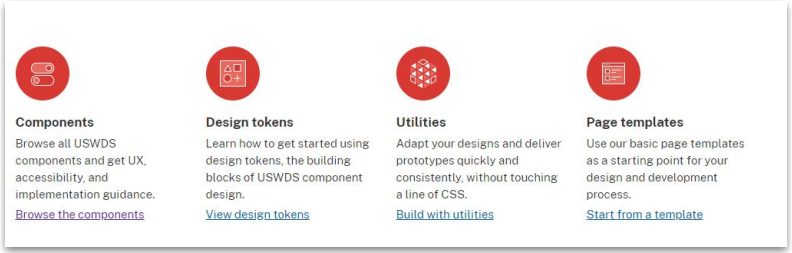
- GOV.UK Design System
- Australian Government Design System
- United States Web Design System
- New Zealand Government Design System
- Google Material Design
- Clone
- Aurora
- Polaris (Shopify)

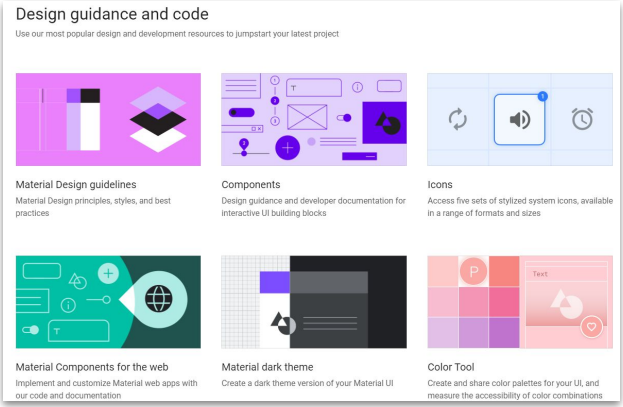
Landing pages with doormats

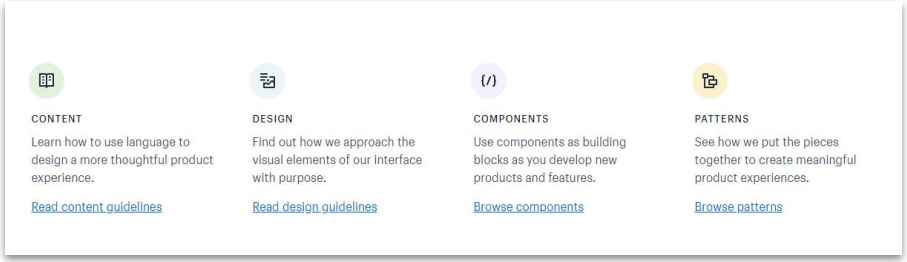






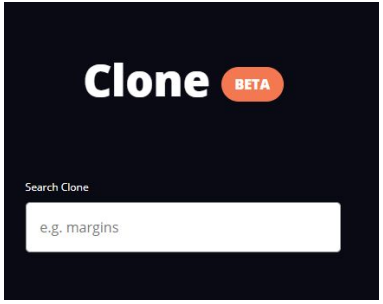


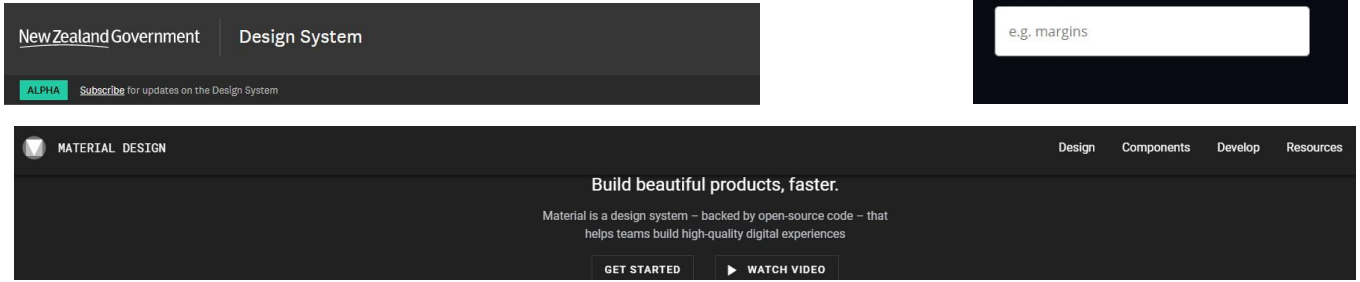




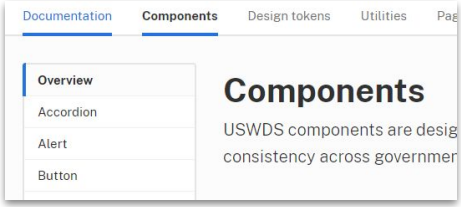
Stand-alone sites, with additional branding

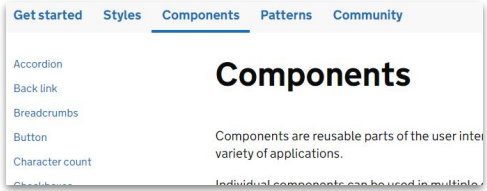
All government design systems are stand-alone sites, not connected to the overall site navigation, with their own search.

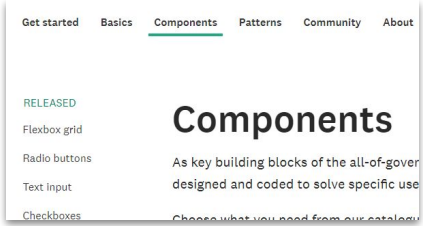


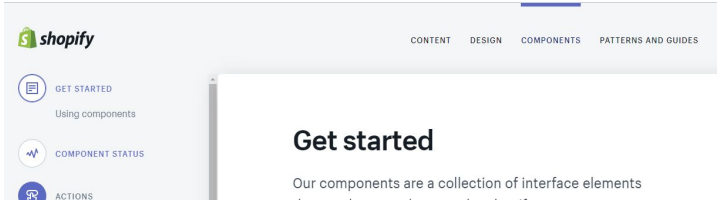


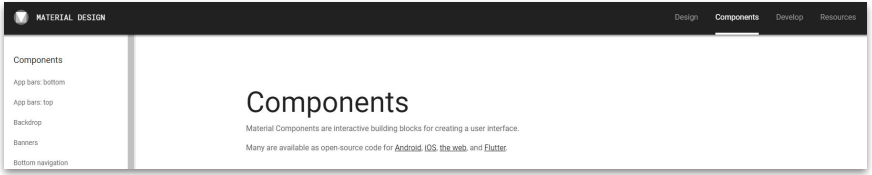
Using top and left menus











NZ specific component - how to present code