



# CARD SORTING RESULTS

Design System Information Architecture

Digital Collaboration Division

June 2018

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## Executive Summary

This card-sorting activity was designed to provide insight for structuring the content of the GCdigital design system website. Over two sessions with 12 total participants, the open card sort allowed participants to create category and sub-category names that made the most sense to them as users of the design system.

Through a different path, both groups came to relatively similar groupings, with the highest-level categories having the most similarities and the biggest differences being among sub-categories.

The majority of differences occurred within the *Components* category, where Group One only placed some cards into sub-categories, while Group Two placed all individual cards into sub-categories.

Both groups also noted that *Motion* and *Accessibility* cards should be integrated within specific components, and that the *Help Articles* card should be re-named to *Article Formatting*.

Overall the design system site should be divided into five main categories, *Overview*, *Identity*, *Components*, *Data* and *Writing Guidelines*, with sub-categories in *Overview* and *Components*.

# Research Overview

## Test Objective

The purpose of this study was to help establish the information architecture for the design system website, by determining general categorizations of elements, and generating names for said categories.

## Participants

Two sessions were conducted to minimize the number of participants per group. Each session group consisted of members from the Digital Collaboration Division, with a mix of participants from the design system team and other teams in the division (i.e. UX, Outreach, Developers etc.).

Session one included five participants (2 from the design system team), and session two included seven participants (3 from the design system team). In total, twelve participants were involved in this study.

## Methodology

This study used an open card-sort method. It was conducted in two separate sessions, which lasted approximately 45 minutes each. Before each session began, the facilitator gave participants an overview of what a card sorting task entailed, as well as a brief explanation of the design system.

Participants were provided with 67 cards that displayed the pieces of content to be included in the design system. They were instructed to group the cards into categories they felt to be appropriate. Participants also had the option to add or remove cards as necessary.

The second objective of the task was to create category names for each grouping. This could be done during the sorting, or after all categories had been determined. Participants were encouraged to discuss with the other group members, and share their thoughts out loud. The facilitator did not participate in the discussion or give suggestions, however participants were allowed to ask questions for additional context on the cards.

Throughout the card sorting task, the facilitator observed participants to determine which cards needed further clarification, re-naming or reconsideration before finalizing the design. The facilitator

also took note of which categories were formed for different elements, in order to determine sections for the final website.

## Data Collected

After both sessions, photos of the card-sorting board were taken and reviewed. See Figure 1 to refer to all categories that were created by each group.

The categories each group created were compared to determine the similarities in the naming, and content placed within each category. With both sessions, the higher levels of groupings were similar (i.e. *Sub-Data/Data Components* or *About/About Us*), but sub-categories were organized and labelled differently. Of the above categories, both sessions created groupings with the category title *Navigation*, *Forms* and *Layout* which were sub-categories of the *Component* category.

## Summary of Findings

Categories contained a number of cards ranging from 2 – 12. The categories *Navigation*, *Data* and *Writing Guidelines* contained many similar cards, while others had quite different card combinations (most notably, *Forms*). Group One tended to create smaller and more specific categories and sub-categories, while Group Two only had one layer of sub-categories and tended to create larger groupings.

For the most part, both sessions had similar cards within the overarching *Components* category, although their sub-categories differed. Both groups agreed that *Navigation*, *Forms*, *Layouts* and *Data* were sub-categories of *Components*. Differing sub-categories such as *System State*, *Site Functions*, and *Buttons* appeared within the larger *Components* category. Group One placed many cards in the *Components* category without further breaking this grouping down, while Group Two placed every *Component* card into a sub-category.

Both groups had *Accessibility* as an overarching theme, as well as a category for visual elements, a category for about/other content, and a category for writing guidelines.

Group Two included accessibility as a separate card in each sub-category of components, while Group One created a specific category for *Accessibility*, with key guidelines and components related to accessibility.

It is notable that both groups had difficulty understanding the following cards: *Motion*, *Help Articles*, *Mega-Menus*, *Themes* and *Examples of Implementation*. With more context, participants were able to

sort these cards, but new names may be required to ensure the label is meaningful to the people using the system. . Group One discarded the *Motion* card and noted that it should be integrated with every individual piece in the *Component* category.

While both groups created *About* sections, there was large variation in content included within that category. Group One divided this content into one large *About* category and a separate *Implementation* category, while Group Two broke this section down further into an *Overview* category with the sub-categories *About Us*, *Resources* and *Community*

## Recommendations

Based on this card sorting activity it is recommended to create the following information structure for the design system website:

- Overview
  - About
  - Resources
  - Implementation
  - Community
- Identity
- Components
  - Visuals
  - Navigation
  - Forms
  - Layouts
- Data
- Writing Guidelines

*Help Articles* should be re-named to be *Article Formatting*. *Accessibility* and *Motion* will be removed and integrated into the existing documentation. Navigation will also be facilitated using a top navigation bar that includes each primary category, as well as a search bar to find specific content.

Participants struggled to decide what content should fall under an *Overview* section. Comments were made that there were many cards referring to the same, or similar, content. Content intended for the *Overview* section should be refined in order to make the labels as clear as possible for users.

# Appendix

## Figure 1

Categories created by each group:

### Group One:

- About
- Voice and Tone
- Components
  - Navigation
  - Layouts
  - Forms
  - Site Functions
- Data
- Accessibility
- Implementation
- Identity

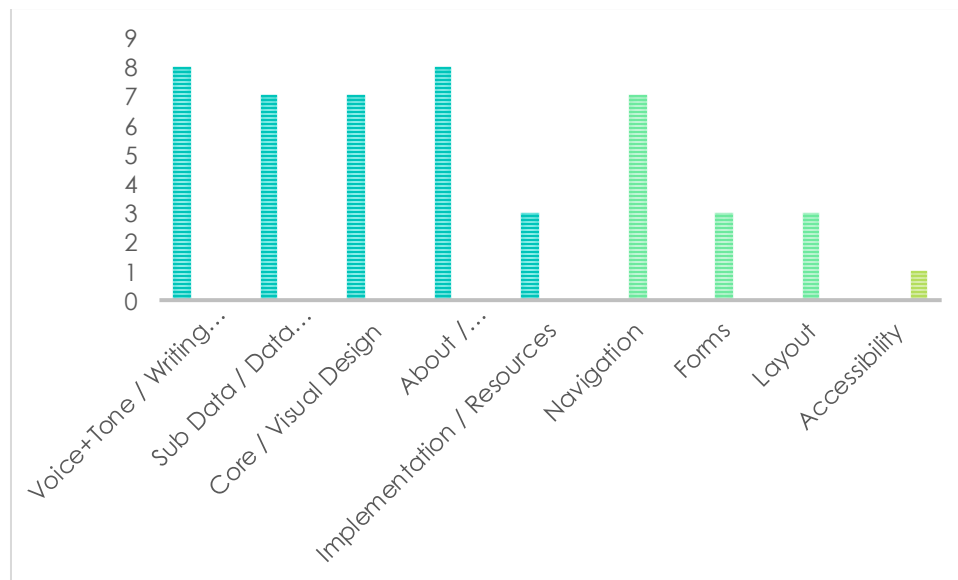
### Group Two:

- Accessibility
- Components/ Guidelines
  - System State
  - Navigation
  - Forms
  - Layout
  - Buttons
- Writing Guidelines
- Data Components
- Resources
- Visual Design
- Overview
  - About Us
- More/Community

Figure 2

The amount of cards that each group put into the same category. The data shown in the following table is the data used for the column graph below.

	Shared Features	
Voice and Tone / Writing Guidelines	8	
Sub Data / Data Components	7	
Core / Visual Design	7	
About / More/Community/AboutUs	8	
Implementation / Resources	3	33
Navigation	7	
Forms	3	
Layout	3	13
Accessibility	1	1



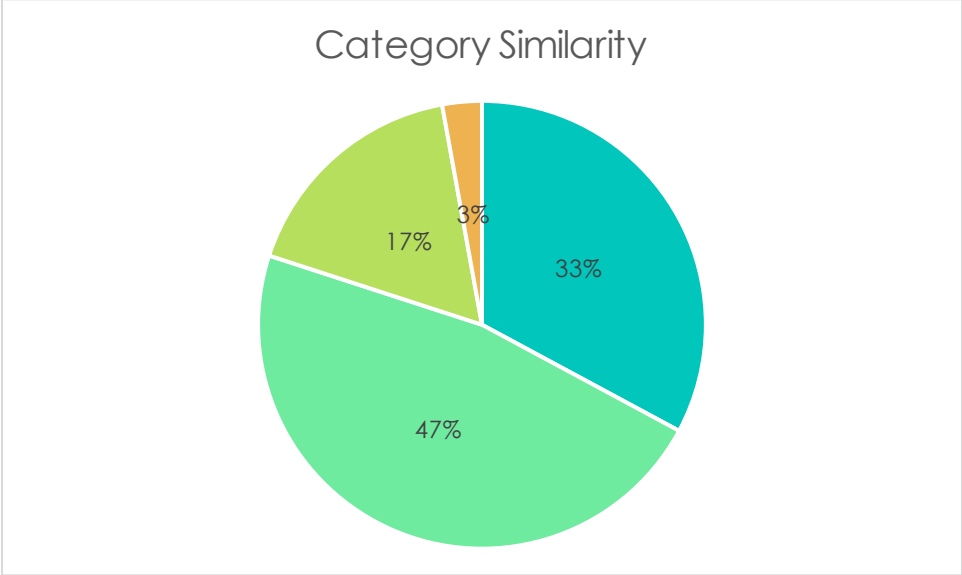
Legend

Teal	Similar category
Light Green	Same category
Yellow-Green	Special case







Figure 3

A visual representation of how many categories created by each group were similar or different.



Legend

	Categories did not match
	Similar category
	Same category
	Special case