Case Study:
Sandiego.gov

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Contents

Purpose

The purpose of the case study is to provide an analysis of the sandiego.gov website, with a user experience perspective on visual hierarchy, navigation and search functions. Analyzing the Sandiego.gov website from a user experience perspective concerning visual hierarchy, navigation, and inadequate search functions can provide valuable insights into enhancing its usability and overall user satisfaction.

History

The website was established as part of San Diego's endeavor to offer an on-line platform for businesses, residents, and visitors to conveniently access information, services, and resources relating to the city of San Diego. This platform serves as a comprehensive hub, offering a wide array of crucial information, essential services, and valuable resources pertaining to the sunny city of San Diego.

User

In order to perform the user testing that I needed to gain insight I had to enlist someone. My user is a 37 year-old married woman and mom of a seven year old son. She runs her own house plant business out of her home in San Diego. She is somewhat computer savvy and makes posts to her business instagram account. The user testing occurred in a coffee shop on her laptop and phone.

Problem 1: Inadequate search results

By inadequate search results what I am referring to are results generated by a search that don't effectively fulfill the user's information needs. The results could be irrelevant or incomplete or not what the user was looking for. This is a problem because it leads the user to become frustrated and disengaged with the website, possibly leaving the site altogether. It leads to a loss of credibility of the product and a negative user experience.

Testing techniques for problem 1:

Through contextual inquiry and observation I asked my user to perform the following task. This task was performed at a coffee shop on her laptop.

TASK: Go to the home page and search for "camps."

She entered the word camps into the search field and came up with the following results:

Current search results page 1 (image 1)

The first five search results did not present the user with what she was looking for–a list of camps for her son. In the second search result there is mention of camp sign ups under the header of "Public Library Social Media Articles."

The user clicked on the header "Public Library Social Media Articles" hoping it would have an obvious link to a list of camps. Instead the following page popped up:

San Diego Public Library

SDPL Homepage

Library Hours & Services

SDPL Event Calendar

SDPL Virtual Hub on Facebook

Register for the Summer Reading Program!

Summer Camp Signup & Programs from Do Your Homework @ the Library

Seed Libraries at SDPL

Upcoming Library NExT Events

Our eLibrary is open!

SDPL Art Gallery

Tune in to Listeners' Advisory: The San Diego Public Library Podcast

Check us out on YouTube

One level deep from search results page 1 (image 2)

I observed the user shake her head and comment:

> ## *"Where are the camps?! This site is impossible."*

I empathized with the user, sharing that I had encountered the same issues and frustrations with my own search for camps. I encouraged her to continue her search. The user warily scrolled down and clicked on "Summer Camp Sign up & Programs from Do Your Homework @ the Library." She happily exclaimed:

> ## *"It's in the title! This must be it."*

Two levels deep from search results page 1 (image 3)

This page showed zero information on camp sign ups. The user went three levels deep and still didn't find anything on camps, even when the keywords "Summer Camp Sign up" were in the title.

Why is this a problem?

This is a huge problem because the user's needs are not being met. She was sent on a wild goose chase, going three levels deep into the website only to find nothing. When the search function fails to yield relevant results it poses several UX problems included the following:

• Frustration and disappointment
• Wasted time and energy
• Loss of credibility and trust
• Abandonment of the site
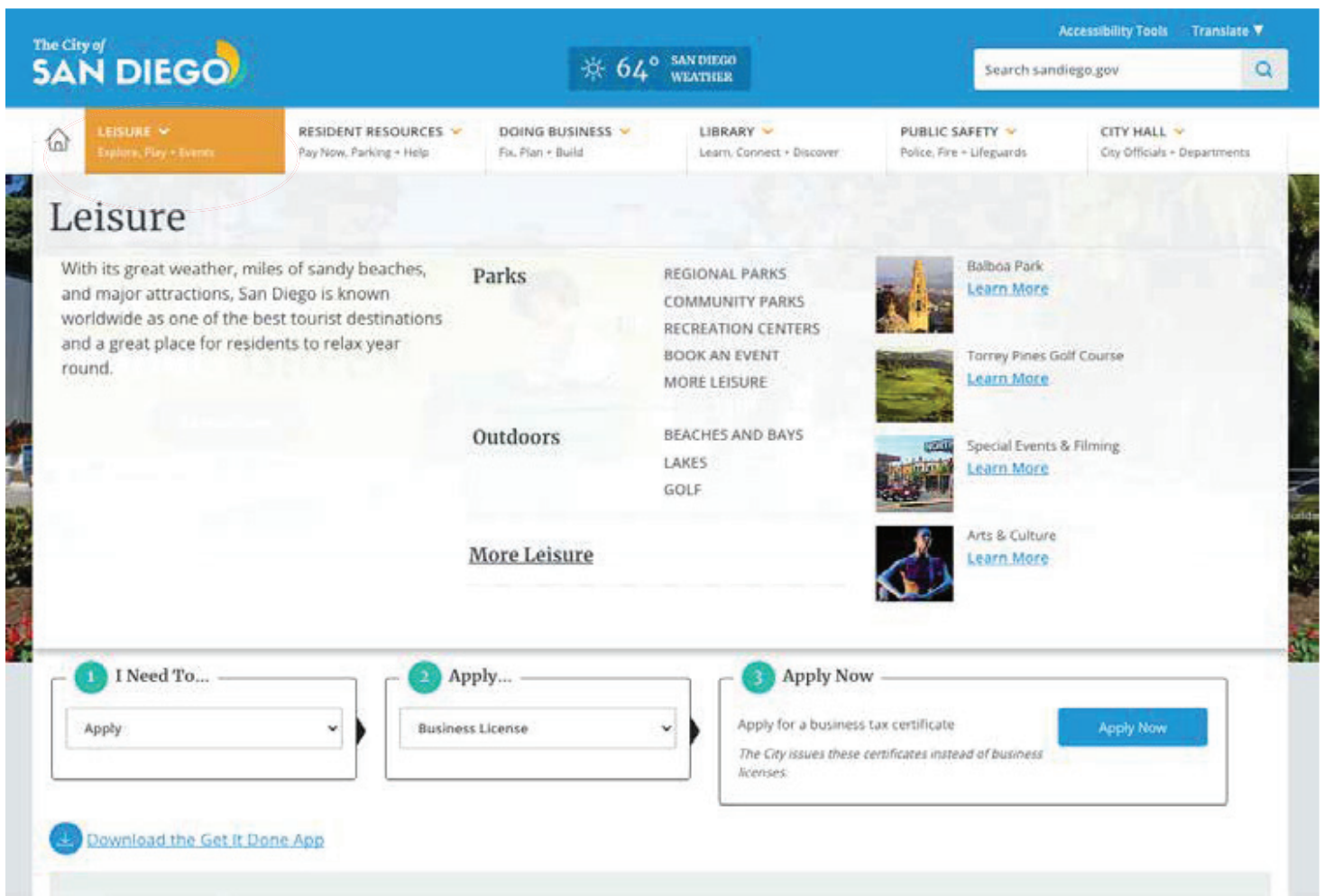
Current design (image 4)

What's the solution?

Overall the search algorithms will need to be fine-tuned to provide more accurate results based on other users' searches. Optimize the search queries by using auto complete and suggestions as well as spelling correction. In this particular case, I would give them what they want! Don't bury camps in the site. Keep the user happy, with a simple re-design, under the "LEISURE" heading change the sub categories to: Camps, Explore + Events. Then adjust the subcategories.
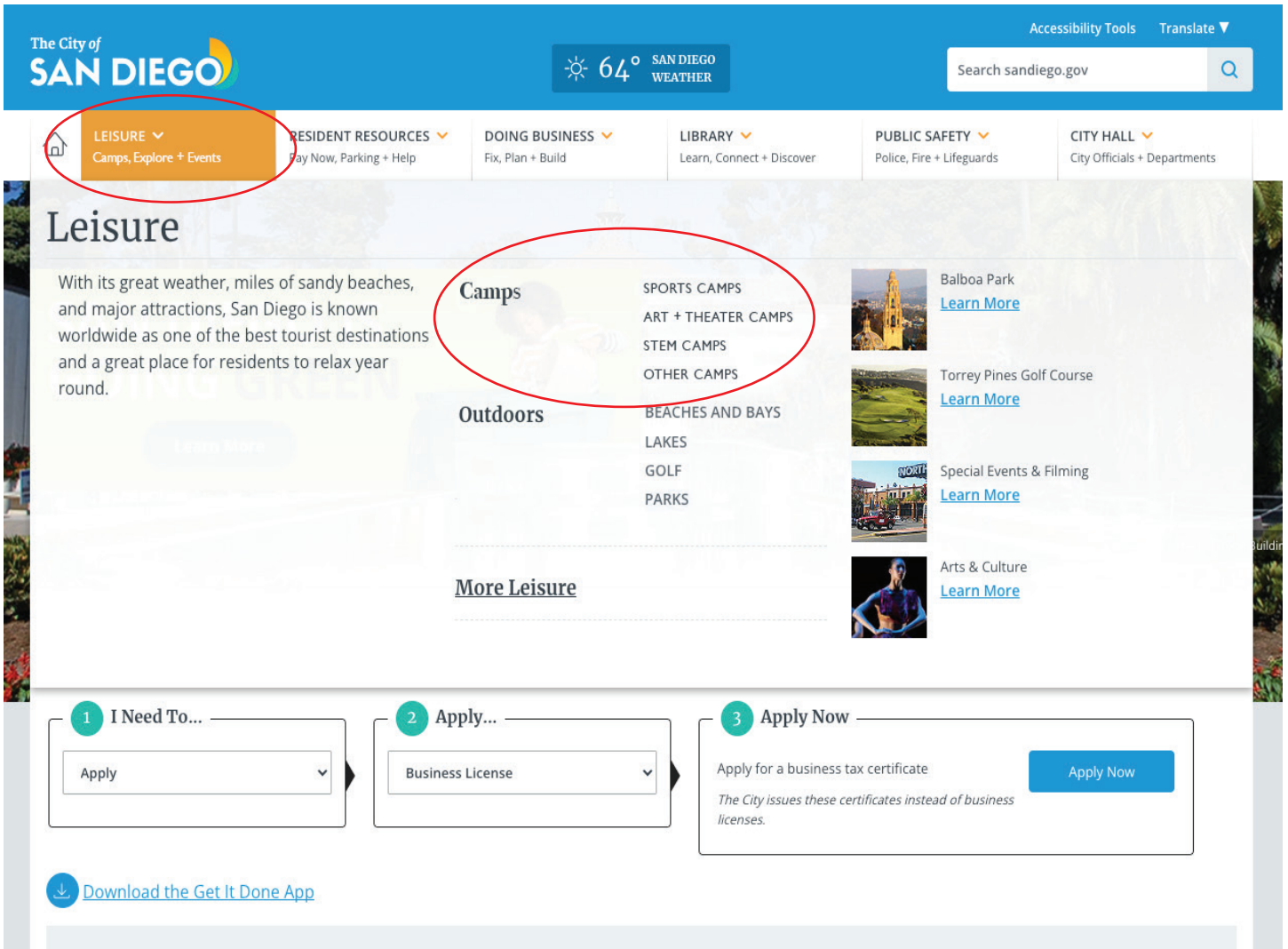
Proposed re-design (image 5)

Why is this a solution?

Streamlining the categories and putting "parks" under the "Outdoors" categories makes the "Camps" section prominent on the page. The user will be able to see this when she searches manually. By listing camps first under leisure the user won't have to dig through pages of information.

Problem 2: Limited search result refinement on mobile

The search results page currently offers only three sorting filters. One for Web Pages, one for Documents and one for all.

Testing techniques for problem 2:

Through contextual inquiry and observation I asked my user to perform the following task. This task was performed at a coffee shop on her cell phone.

TASK: On your cell phone go to the home page and search for "tutoring."
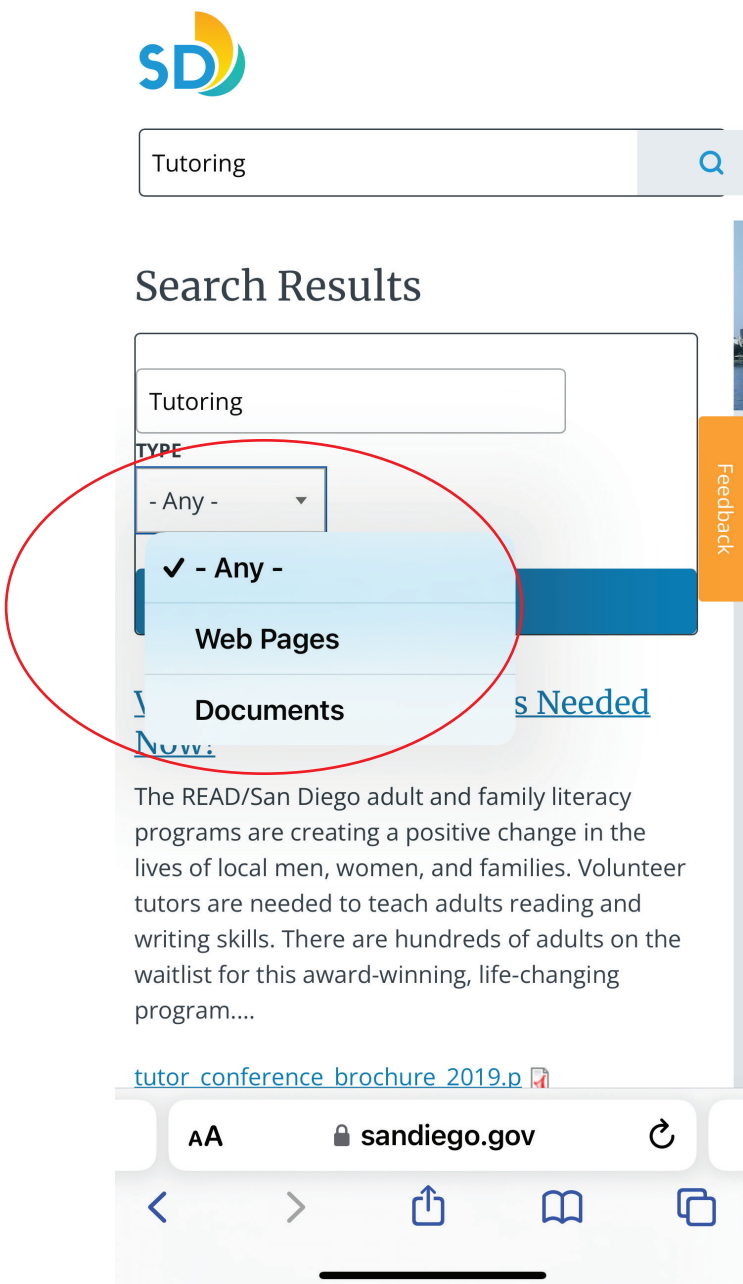
Current design results page 1 (image 6)   Current design results page 2 (image 7)

I observed the user looking confused:

> *"Why can't I sort this result list? That's weird.*
> *How am I supposed to know if these are current?"*

The user wanted to search the results by relevance and date, two commonly used forms of filtering that she is accustomed to. There is no mention of any date for the first search result and the second and third show results dating back to 2019 and 2018.

Why is this a problem?

By not giving the user the ability to sort results by commonly used filters such as "date" or "most recent," the user is faced with several challenges including:

• Outdated search results
• Information overload
• User confusion and frustration
• Inefficient navigation
• Diminished user confidence and trust

What's the solution?

Make it easier for the user by adding at least two options to sort: relevance and most recent. Other filter suggestions are to list results alphabetically, by date range or proximity. In this case I decided to use Date and Relevance for the sorting options. This empowers the user to structure information according to her preferences. Nielsen Norman Group highlights the significance of having easily available sorting options that are clear, guaranteeing a smooth and user-friendly experience.

Why is this a solution?

By identifying and prioritizing key sorting filters the user is able to complete her task much more easily. She needed to see the search results by date to make sure she had access to the most recent links.
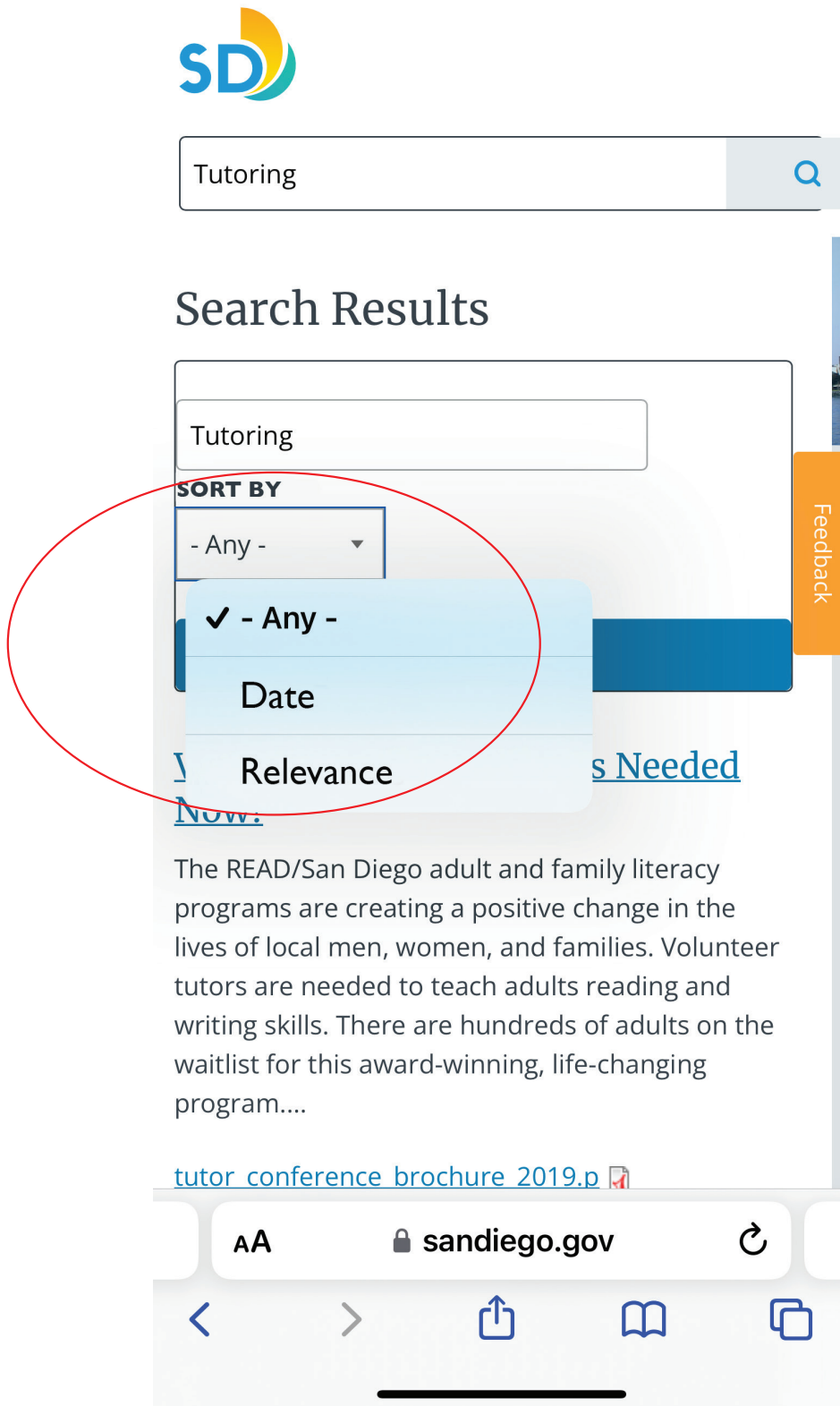
Proposed re-design (image 8)

Problem 3:
Lack of uniform design for call to action signifiers

Throughout the site there is a lack of uniformity in the items that are meant to be clicked. Some are blue buttons which stand out nicely and work. Some are ghost buttons which are an outline on a box and are much more subtle, while other areas that are clickable only show that they are meant to be pressed on when the curser hovers over the area. There are no other "on hover" changes in this last group, no signifiers whatsoever.

Why is this a problem?

It's confusing. Users want to be told what to do next. It needs to be clear and consistent. This can also lead to decreased accessibility because a user with disabilities relies on predictable patterns. The user can become confused or hesitant to engage with the site and lose trust in it.

Nielsen Norman Group's research stresses the necessity of maintaining consistency in design and user experience. They emphasize the significance of maintaining uniformity across various elements within a digital interface to ensure a more intuitive and user-friendly interaction. This uniformity extends to visual design, interaction patterns, terminology, and navigational structures, resulting in a cohesive and predictable user experience. The group advocates for a harmonized and predictable interface, aiming to reduce cognitive load and enhance user confidence and understanding.

According to Nielsen Norman Group, the human brain craves consistency. Features that look alike should act the same way. When the user has an expectation of how a feature will work and those expectations are not met it causes confusion.
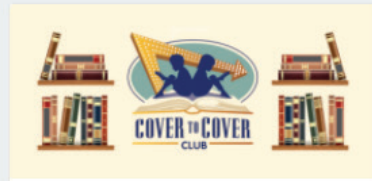
Features

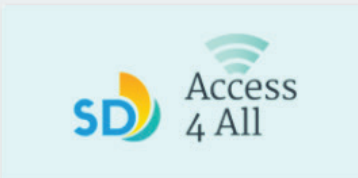|		
Books Unbanned	Library Master Plan	In-N-Out Cover to Cover Club
Explore San Diego & California	Local Author Showcase	Student EXCEL Card
LGBTQIA+ Library Services	Tech Help, Hotspots, and Chromebooks	Supporting Menstrual Equity

New Titles

Adult Fiction	Kids	DVD
Adult Non-Fiction	Teen	Audiobooks

Current design (image 9)

The Features buttons need some indication that they are to be pressed to find more information. They lack clarity of any action. The New Titles buttons however work well. They are blue, stand out and change color when hovered over.
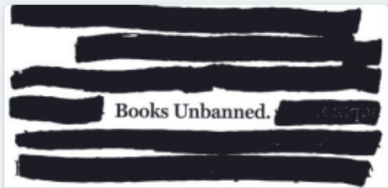
What's the solution?

Keep call to action buttons more uniform in color, font and hover states. If items look similar to each other they will tell the user that they will act similarly.

Why is this a solution?

In addition to consistency, "recognition not recall" is one of the top 10 usability heuristics established by UX pioneer Jakob Nielson. Recognition is easier because it involves more clues. It also requires less cognitive load, aids in error prevention and is more efficient.

Features

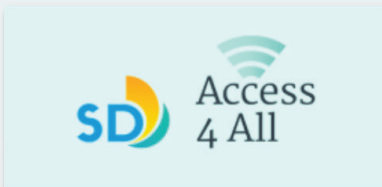|		
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Proposed re-design (image 10)

Lessons learned

Usability testing is pivotal in learning the issues and the goals of the user. My own opinions and biases are just that. I found myself leading a question based on something that bothered me about the site. It didn't bother the user at all. Keeping the opinions and focus on the user at all times is the only way to create a truly user-centered design.