

Case Study

FCC Government Website Redesign

By Khristopher Velasquez



• Project Overview

The Problem: For this Government Website Redesign we've analyzed how this site is not very optimized for people with disabilities or the average user outside of legal matter related to the FCC.

The Solution: Here, we are bringing functions and simplicity to the site to give individuals with disability and normal persons a more reasonable site to access, utilize and navigate without hassle.

My Role: Lead UI Designer

Tools: Figma, Invision, Google Docs/Sheets, Octopus.do,

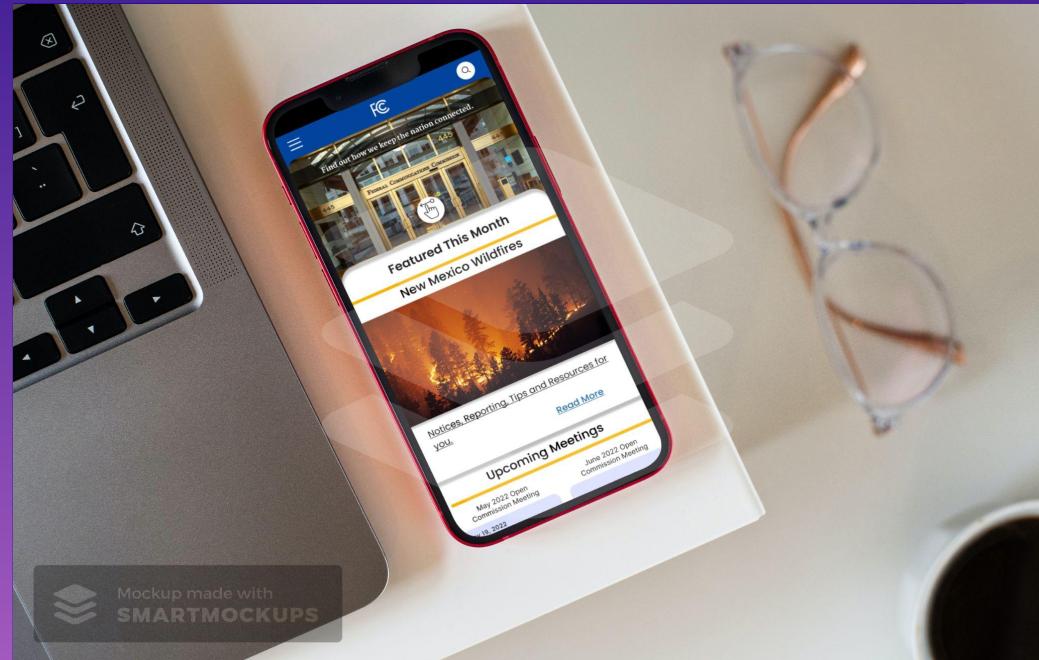


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01

User Interface Analysis

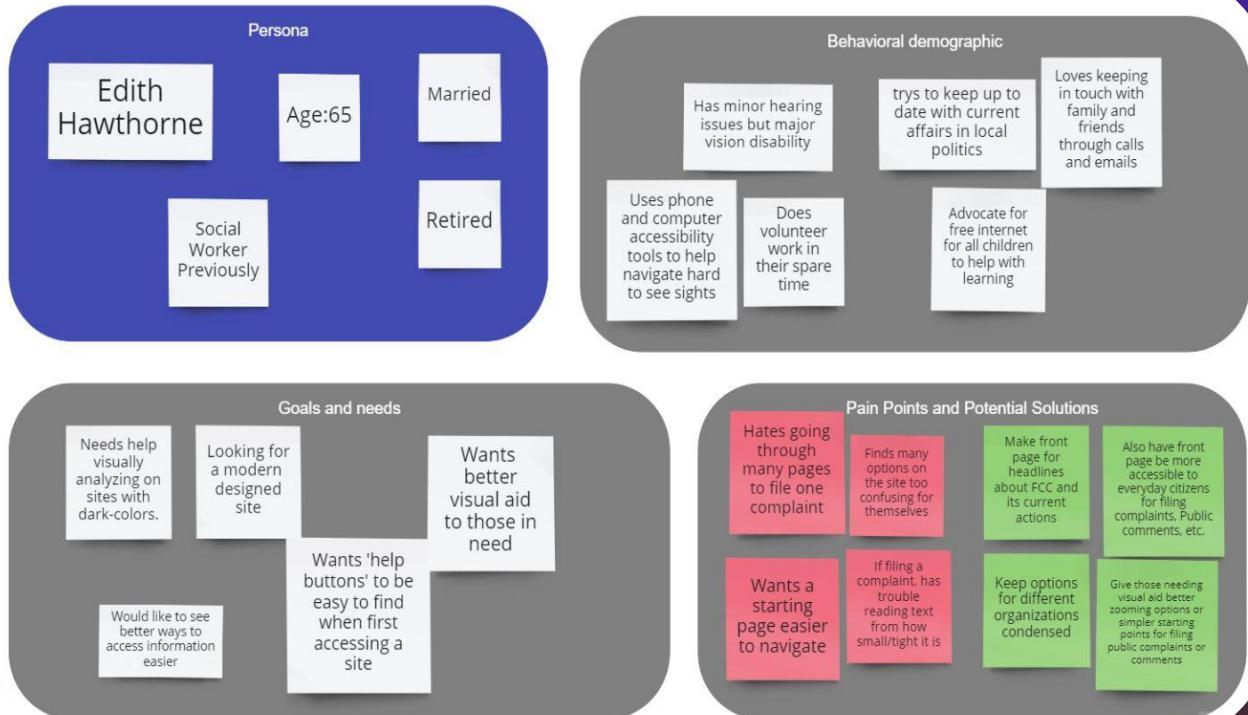


• Our User Subject

- Our user Edith Hawthorne is visiting the FCC.gov website to file an accessibility complaint against her television brand for not instituting better intuitive visual aid with her television set. The result is having trouble seeing any of the captions presented when the option is selected and trouble reading when contrasted against shows that are too bright or contrasts too harshly with the color of the CC font.



Proto Persona



Heuristic Evaluation

Next, our team conducted a Heuristic Evaluation of the FCC's main page and went through best and worst features pertaining to accessibility, usability and structure.

Website URL: https://www.fcc.gov/		
Heuristic	Rating	Comments
Appearance/aesthetics: first impressions are important—they can make the difference between users staying or leaving your site		
Example	3	2 1
Primary goal or purpose is clear	X	
Clean, simple design	X	
Pleasing color scheme		X
Appropriate use of white space	X	
Consistent design	X	
Text and colors are consistent		X
Icons are universally understood		X
Images are meaningful and serve a purpose	X	not many/any photos
Content: users are at your site for the content—make it easy for them to find and use your site		
Major headings are easy to understand	X	
Easy to scan	X	
Minimal text/information presented		X
Clear terminology; no jargon	X	
Links are clear and follow conventions	X	
Help is available on every page	X	little blue icon in bottom right but needs more visibility
Important content is above the fold	X	
Search box is easy to identify and easy to use	X	
Navigation: make getting around your site easy and eliminate the user's guesswork		
Consistent navigation	X	
Easy to identify your location on the site (breadcrumbs, headers, colors)	X	
Consistent way to return home	X	the logo
Limited number of buttons and links	X	its everywhere but not disturbing
Organization of information makes sense	X	way to much info and no user focus
Efficiency/functionality: following basic rules will keep user frustration to a minimum		
Website loads quickly	X	
Custom 404 errors	N/A	
Error messages are meaningful	X	
Login is in upper-right corner of page		X not in home page an deep in other pages
Proper etiquette for links off site		
Contact information is easy to find	X	
Login is easy to find		X
Hours are easy to find	X	
No broken links	X	
When searching, keywords can give you many options to different categories of information in the FCC database		

Redline Annotations

02

03

04

More Headlines

Events

April 21, 2022

ADD Consumer Advisory MAV May 2022 Open

01 Move Accessibility to top right of screen for visibility to the right of sign in

02 Margin to both sides of site are too large. Should be utilized better to condense material on site.

03 Information inside drop down menus need to be condensed. Too much information.

04 Make middle section more accessible to new visitors by putting most used features close to the top and express them better.

01



User Path

	User Path	Steps
1	FCC main page & Filing Complaint	Our user will enter on to fcc.gov and click the button option 'File a Consumer Complaint'.
2	'Access for people with disabilities' Module	Next our user will continue to the next page and click the module for people with disabilities.
3	Television controls ,menus, and program guides	On the next page our user will select the option to file a complaint against television controls, menus, and program guides
4	Enter personal info/detail of complaint and submit to FCC	Finally our user will enter their info and detailed complaint and click 'Submit'

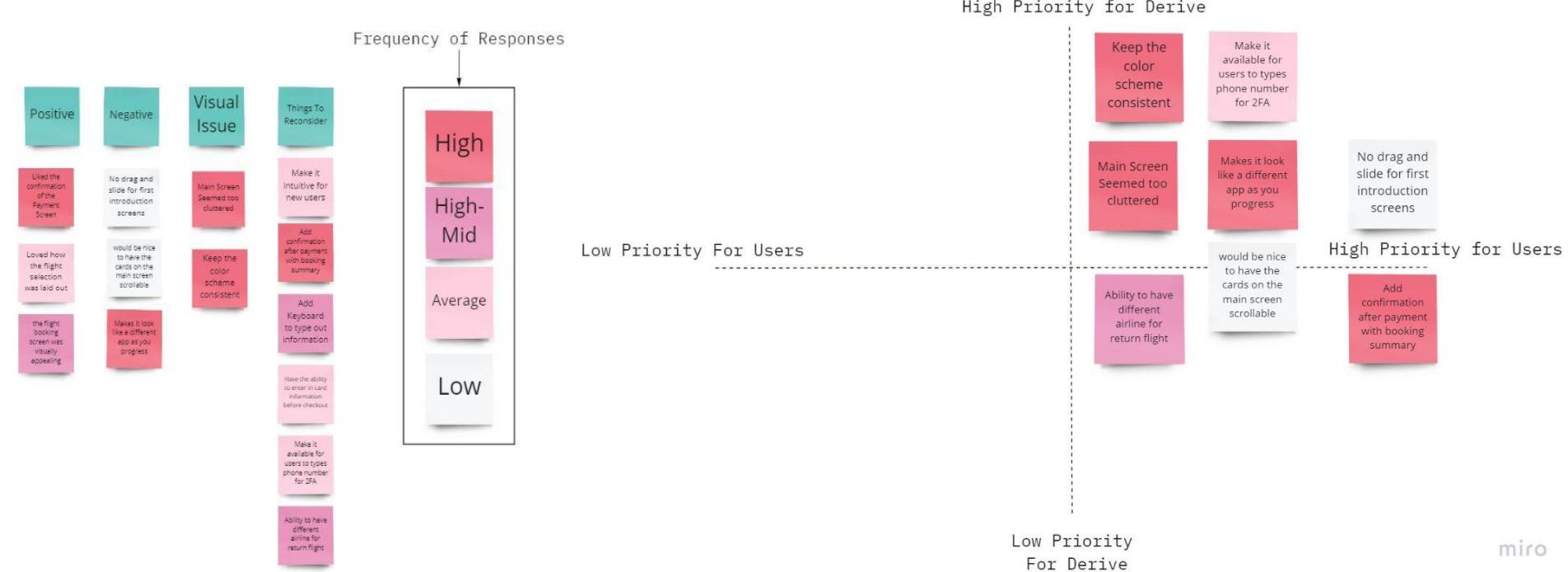
Usability testing



As we continue on with more information into our user and the path they'd take, our HW group set up usability tests to focus on how easily or difficult it was to navigate the website, find items and study how accessible it was to an average first time user.

Usability Tests folder

• + Prioritization Matrix



MoodBoard and Visual Representation

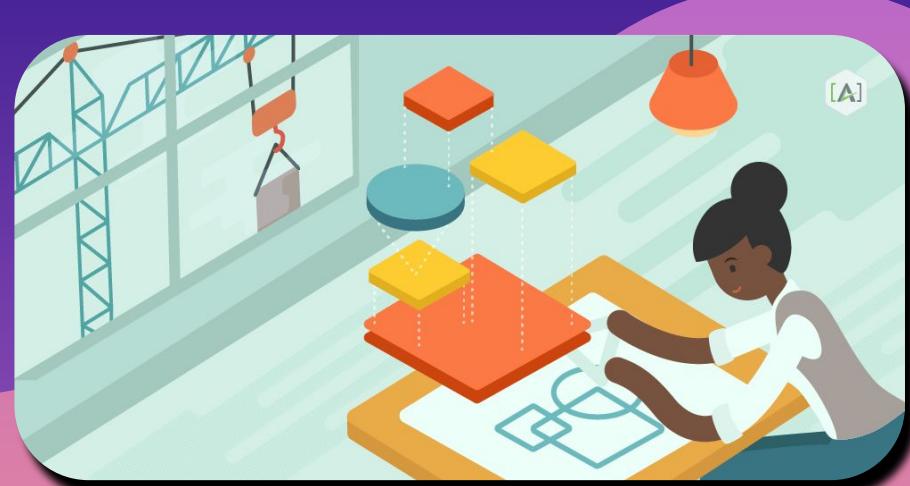
Finally from there, an Invision Mood Board was created to showcase representations of how we would like to redesign and style a new version of the FCC. One that was intuitive, sleek, inviting and helpful to new and future users.

[Link to Mood Board](#)



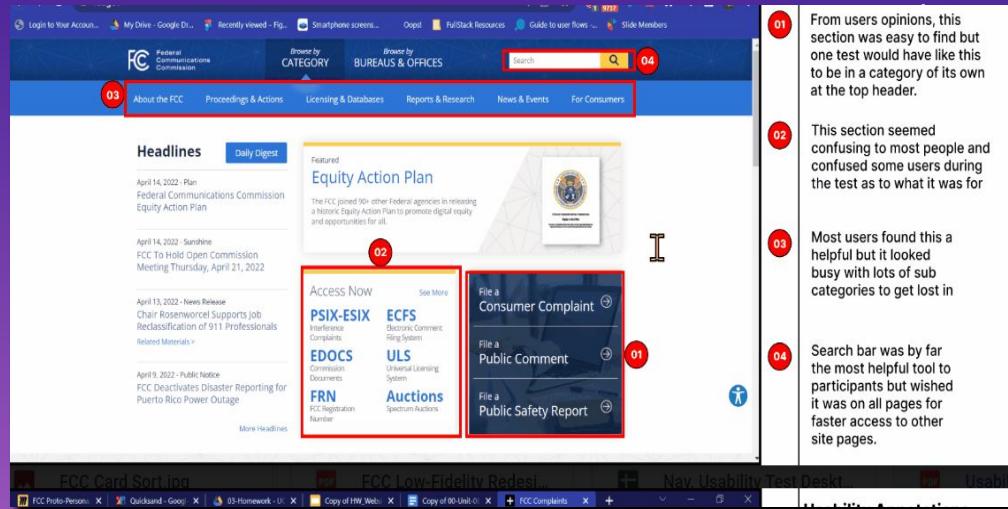
02

Information Architecture



FCC.gov Navigation Analysis

- With our beginning information settled we began to look into the navigation system of the FCC main web page. This involved analyzing navigation structure, Hierarchy of information and applying L.A.T.C.H principles to the site and its layout.



Usability of Navigation

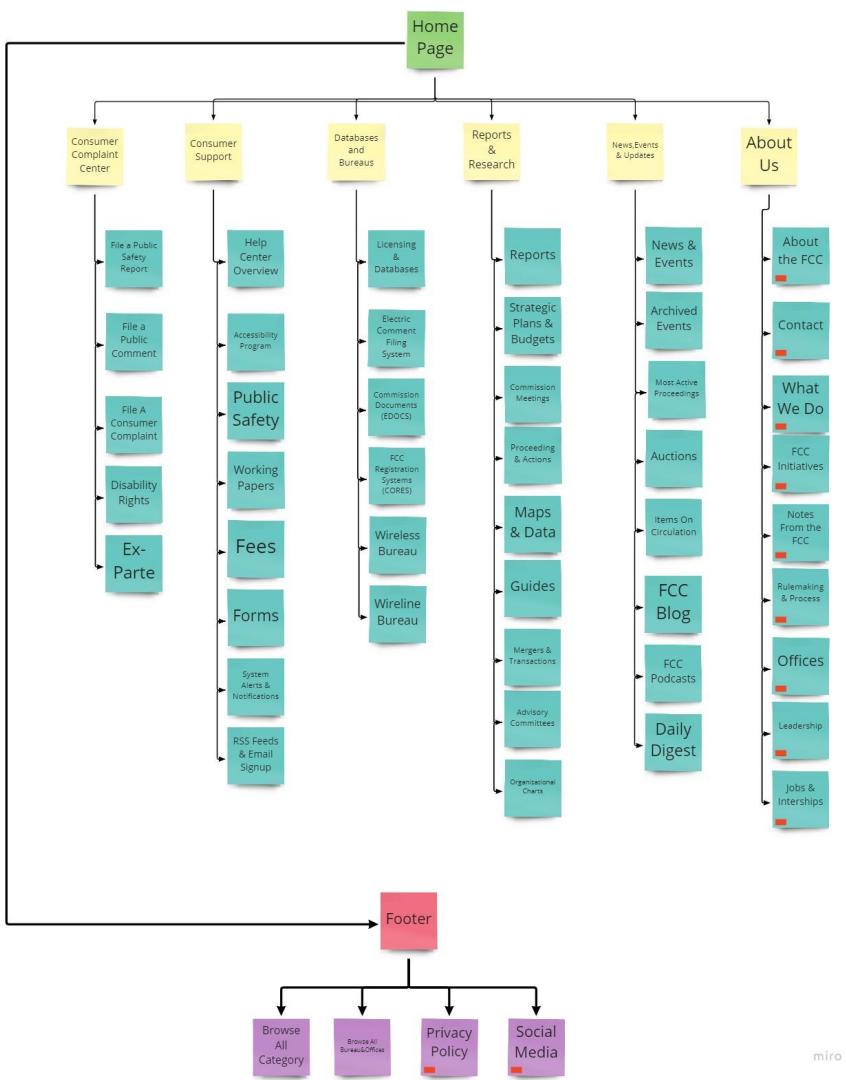
Desktop Test 1 & 2

- + On Desktop, our users face significantly more challenges and problems when it came to locating information. Mainly, without using the search bar, new users would be lost going through a the vast amounts of information.

Mobile Test 1 & 2

On mobile, users felt more comfortable with accessing information with its easy to navigate side shelving and access to quick options easily accessible from the main page

Card Sorting

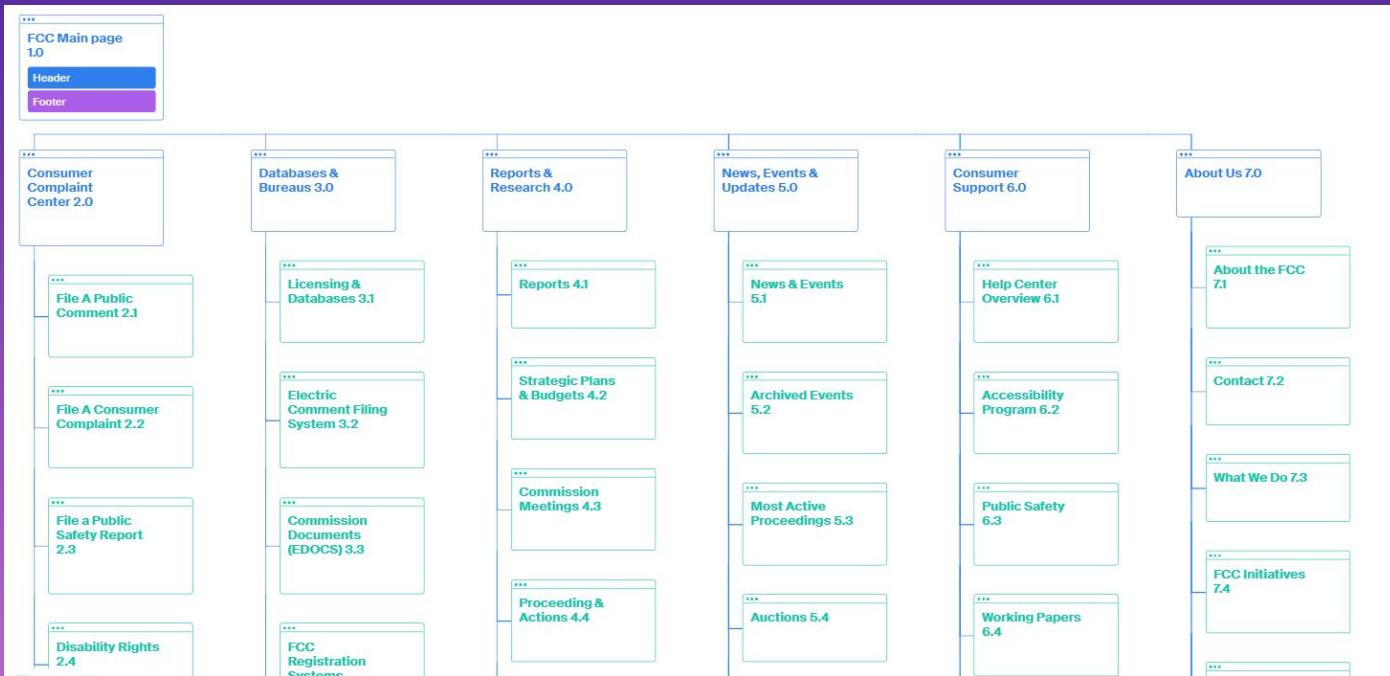


From our tests we began collecting all Primary and Secondary pages together to implement a better sitemap navigation for our redesign.

From there cards were collected and organized into groups then structured into our new navigation categories. An example site map was then created to show how the structure of this information will be laid out.

Finalized SiteMap

- + Finally we took the card sorted Sitemap and made small changes to it to reflect a better working navigation of our site situated with hierarchical needs and L.A.T.C.H principles in mind.



Lo-Fi U.I. Navigation Redesign

The screenshot shows a wireframe of a website interface. At the top, there's a header with the Federal Communications Commission logo, a search bar, and a link to "Trouble Accessing? Click Here". Below the header is a navigation bar with dropdown menus for "Consumer Complaint Center", "Databases & Bureaus", "Reports & Research", "News, Events & Updates", "Consumer Support", and "About Us". A large central area is labeled "Top Featured Content Here" with placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam nec volutpat in egestas nulla facilisis elit." To the right of this text is a large gray box with a large 'X' drawn through it. Below the main content area are three cards: "Upcoming Events" (listing three events with dates and descriptions), "Headlines" (listing three news items with descriptions and X icons), and "Notes from the FCC" (listing three notes from the FCC with descriptions). At the bottom of the page are links for "Event Calendar", "Future Events", "Browse All Databases", "Privacy Policy", "Contact Us", and "Social Media" (with icons for LinkedIn, Facebook, Twitter, and YouTube).

From sitemap to Low-fidelity navigation, we flesh out the beginnings to our next steps in our redesign process utilizing what we came up with in our cardsort site map as well as usability testing. We updated drop down menus for top navigation and simplified as best we could the most necessary information to be displayed on the front page.

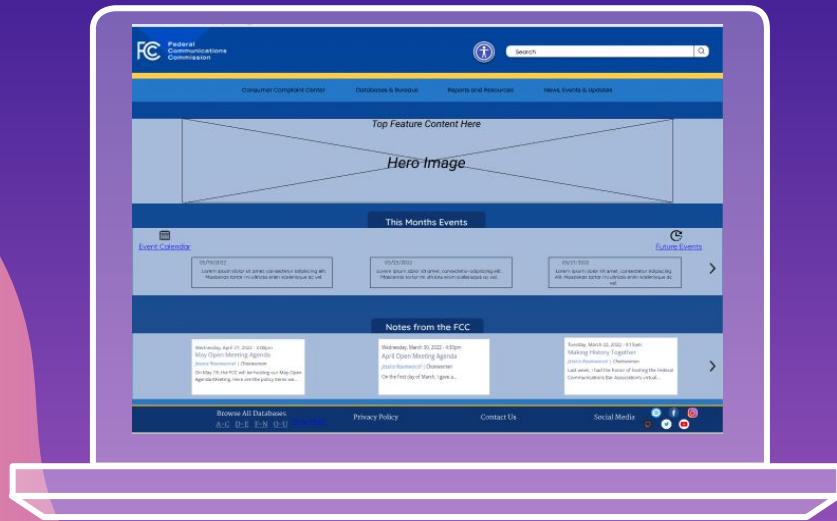
03

Responsive Design



Iterated UI for Desktop & Mobile

Desktop



Mobile



For this step, we worked on iterating our desktop while also working on a responsive mobile version. We took key characteristics from our desktop that we would like to see implemented into a mobile site and made sure to make it fluid and lighter than what was previously displayed

WireFraming U.I. Prototypes

With a redesign done to our responsive iterations we created Wireframing Prototypes for Desktop and Mobile versions of the new website.

[Desktop Version:](#)
[Mobile Version:](#)





Clickable Prototypes

Afterwards a clickable prototype was built to give functionality to the design. Bringing depth and discussed features to be toggled and to give more understanding to how we would like to build up from our mobile view to desktop.

5 Second Usability Tests

01

Desktop Test #1

Test #1 Found certain drop down sections were acting weird. Needed to be fixed. Likes the option for certain sections to work like a carousel for showing info. They Also Loved the accessibility option at the top.

02

Desktop Test #2

Test # 2 Saw that the social media options on the footer unaligned and would like them to be more aligned and not slanted. Height spacing for the footer categories needed to be adjusted.

03

Mobile Test #1

[Link to Test and iteration](#)

Mobile Test #1 Scrolled through and analyzed the navigation. Would like a container for the carousel option and around the header so there isn't too much whitespace.

04

Mobile Test #2

Mobile test #2 Saw top and bottom nav to look really nice. Visually, the only complaint would be to add more color to the wireframe.

FCC RWD

Style Guide

Color Schemes, Graphic patterns and Typography used for the web and mobile sites were all collected here to be used for future development and hand-off to website developers.

UI STYLE TILE: FCC.gov RWD

UI STYLE DIRECTION		BRAND LOGO	COLOR PALETTE																	
<p>took the style direction towards an 'information blue' kind of style. keeping dark tones for the header and footer while making the body lighter and more open for information to sit.</p>		<p>- LOGO ON WHITE - LOGO ON DARK</p>	<p>- BRAND COLORS</p> <table border="1"> <tr> <td>#HEX 1649BC</td> <td>R/G/B</td> <td>#HEX 30BAD9</td> <td>R/G/B</td> <td>#HEX 274259</td> <td>R/G/B</td> <td>#HEX F2B544</td> <td>R/G/B</td> <td>#HEX FFFFFF</td> <td>R/G/B</td> </tr> </table>								#HEX 1649BC	R/G/B	#HEX 30BAD9	R/G/B	#HEX 274259	R/G/B	#HEX F2B544	R/G/B	#HEX FFFFFF	R/G/B
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<p>UI Style Adjectives</p> <table border="1"> <tr> <td>Reliable</td> <td>Authority</td> </tr> <tr> <td>Responsible</td> <td>Informative</td> </tr> </table>		Reliable	Authority	Responsible	Informative	<p>- PRIMARY INTERACTION COLOR</p>	<p>- SECONDARY INTERACTION COLOR</p>				<p>- COLOR GRADIENT</p>									
Reliable	Authority																			
Responsible	Informative																			
<p>TYPOGRAPHY</p> <p>poppins - used for headlines and subheads</p> <p>martel - used for body</p> <p>quicksand - used for app buttons</p>		<p>ICONOGRAPHY</p>	<p>GRAPHIC PATTERNS</p>																	
<p>H1 - Headline</p> <p>Poppins - Bold 36px</p> <p>H2 - Subhead</p> <p>Poppins Bold 24px</p>		<p>BUTTON STATES</p>	<p>IMAGE SAMPLES</p>																	
<p>H1 - Headline</p> <p>Poppins Regular 36px</p> <p>H2 - Subhead</p> <p>Poppins Regular 24px</p> <p><i>"This Is A How You Would Stylize A Meaningful Quote"</i></p> <p>- Author</p> <p>Poppins Italic 18px</p>		<p>BUTTON STYLES</p>	<p>Drop Down Clicked</p> <p>Consumer Complaint Center</p> <p>Drop Down Button</p> <p>File a Public Complaint</p> <p>File a Consumer Complaint</p> <p>Nav. Arrow</p> <p>Hamburger Menu Button</p>																	
<p>TYPOGRAPHY BODY COPY</p> <p>lorem ipsum dolor sit amet, consectetur adipiscing elit. porttitor elementum cras neque, sapien. leo enim bibendum ultrices in sed eu arcu magna quis. lorem ipsum dolor sit amet, consectetur adipiscing elit. porttitor elementum cras neque, sapien. leo enim bibendum ultrices in sed eu arcu magna quis. lorem ipsum dolor sit amet, consectetur adipiscing elit. porttitor elementum cras neque, sapien. leo enim bibendum ultrices in sed eu arcu magna quis.</p> <p>this is a regular link</p>																				

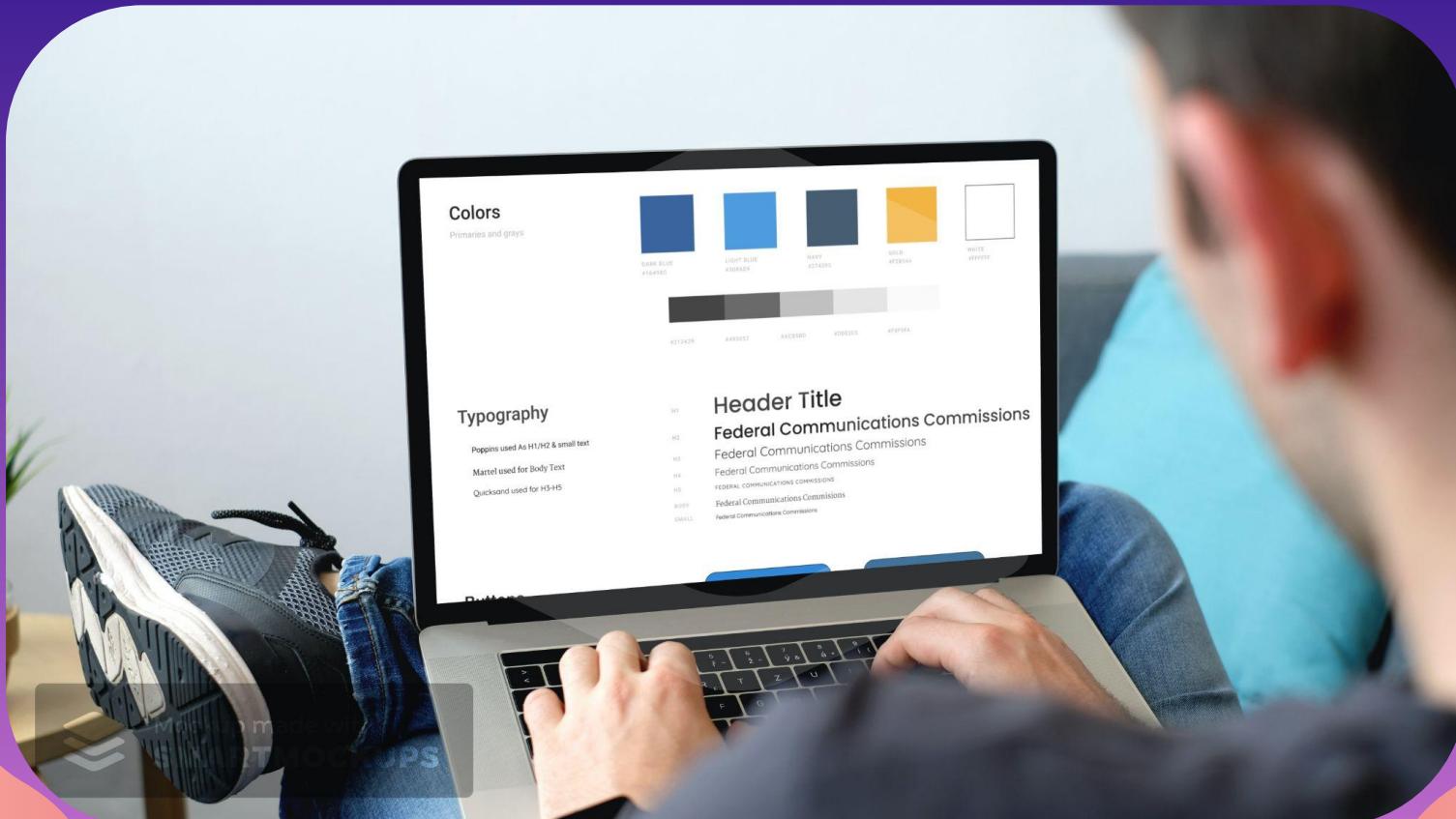
03

Responsive Design



Final Style Guide

For implementing the final changes in the design, we ramped up the design process for our final Style Guide for the website. Including Components, Button types, Typography, Color Scheme and Logo Design.



Mobile/Desktop Iteration

From here we iterated the homepage designs for mobile and desktop wireframes. Putting navigation features in and implementing extra content included in our Style Guide.



Final Homepage RWD Wireframes



Usability Testing

With our Final iterations complete and navigation supported onto our mobile desktop wireframe we started creating our usability testing plan.

- + The goal was to have 7 users test the mobile website and give any feedback on whether the U.I was still clunky or if the navigation features could be tweaked.
- Link to Usability Tests

USABILITY TEST PLAN DASHBOARD		
AUTHOR Khristopher Velasquez	CONTACT DETAILS N/A	FINAL DATE FOR COMMENTS 05/21/2022
PRODUCT UNDER TEST What's being tested? What are the business and experience goals of the product? Today we are testing the usability of the redesigned FCC website. Our goals are to test and analyze the new website navigation and webpage flow.	TEST OBJECTIVES What are the goals of the usability test? What specific questions will be answered? What hypotheses will be tested? We're looking to see if the site can be accessed properly on mobile. We also want to see if our navigation to secondary pages is fleshed out properly. Having a footer that provides helpful information would also be part of the goals we look for in these usability tests	RESPONSIBILITIES Who is involved in the test and what are their responsibilities? This is solo testing. I will be conducting and taking notes for each one.
BUSINESS CASE Why are we doing this test? What are the benefits? What are the risks of not testing? We're conducting these tests to find the best methods of redesigning the government website to a more accessible state for users of all disabilities. Without any tests, our design decisions could be misread and actually cause more harm than good.	PARTICIPANTS How many participants will be recruited? What are their key characteristics? We have 7 testers recruited to help test the usability of the new mobile website.	TEST TASKS -Show how they would get to secondary pages -Scroll through mobile site and analyze landing page -Find certain information in the Footer -See how certain functions work -Give feedback on any visual or functional designs
PROCEDURE What are the main steps in the test procedure?	EQUIPMENT What equipment is required? How will you record the data? All Testing is conducted via Zoom and in person using a local laptop	LOCATION & DATES Where and when will the test take place? When and how will the results be shared? tests will begin on 05/21/2022. Results will be written down via google spreadsheets
		

Final Changes and Case Study

User Tests

User Tests provided great feedback and insight. Only minor changes were needed for the website iteration.



Finalize

We then made sure our navigation was still working properly, added changes to images and noted what we couldn't change for times sake.



Case Study

Finally we started to complete our case study for the entire project, incorporating notes and images into it for stakeholders and team member to analyze



Summary



In conclusion to this massive project, there were plenty of components and ideas we wished to see implemented properly to bring the site some extra accessibility. Help buttons for those with disabilities in convenient, easy to click places. Chat helper buttons to be of supplemental aid to those needing brief information about a subject or help with a certain communication issue.

With that said, i've learn enough so much about how to gather and implement new designs onto websites needing assistance. Its what's most important whenever a user is dealing with an issue, visual or tactile. Websites should remain accessible for all.

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+ +

Thank you for viewing!

