How can we improve GMU library's website?

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George Mason University's Goal

"Mason's stature as the most innovative and diverse public university in the Commonwealth of Virginia positions it to provide evolving online learning opportunities."

George Mason University's Vision, Mission & Goal

The library is crucial in providing the university community with information resources.

For the past ten to fifteen years, all libraries have increasingly focused on providing electronic services, and most recently, online services have received a dramatic rise in priority. The website of GMU, which enables authorized users to access the majority of the Library's resources, serves as the main component of this strategy.

The strategy is to develop cutting-edge services and resources for teaching, learning, research, and scholarship at George Mason University (GMU) in order to serve as a model for the contemporary academic research library in all of its forms and modes.

GMUs intellectual hub is the University Library. By facilitating access to scholarship and information, offering professional advice during the research process, and actively instructing the efficient and critical use of knowledge, GMU stimulate innovation, creativity, and imagination. Also, GMU play a crucial part in the production, transfer, and preservation of knowledge.

A lot of people at GMU agreed that the website needed to be improved, both in terms of **usability** and **appearance** as well as **utility** for the target demographic.

Design must be based on a thorough understanding of the needs. A user interface for a library website must be carefully designed, functional, simple to comprehend, and—possibly most importantly—useful to users.

Why do we need personas?

- Personas give stakeholders an opportunity to discuss critical features of a redesign.
- Personas help the team to understand the user group.

- Personas help designers develop wireframes and site architecture.
- Personas provide a "face" to the user story, creating more empathy and understanding about the person using the product.

The "Everyday" GMU Student

Teens & Young Adults at GMU

Digital Natives: A group of individuals who have grown up with access to digital technology.

+ Incentives to acquire skill, pursue higher education, and jumpstart their careers
+ Good at <u>parallel browsing</u> and <u>page parking</u>
+ Not as good at multitasking as we may think (Suffer from reduced efficiency when they engage in this context-switching behavior)
    - Seeing everything all at once can decrease the cognitive efficiency of tasks
    - How can this inform design?

Hyperconnected: Access to shareable data and compatible platforms to transfer such data

Include further persona subsets with in-group variability (ex. Disabled, multilingual, etc.)

Sandra Mendez
(she/her)

AGE 24

EDUCATION Junior at George Mason

STATUS Single

OCCUPATION Administrative Assistant

LOCATION Fairfax, VA

TECH LITERATE Intermediate

> " All of my work is done online - I just wish there were options to customize my experience. As a student, I have ways I'd like to store my sources and find new ones.

Personality

Introvert   Organized

Bio

Sandra currently lives in the Northern Virginia area and attends George Mason as a distant learner. Managing school part-time and work full-time, her free time is usually spent with friends and family.

Goals/Core Needs

- Wants to have a personalized learning experience online; aspects specific to her and her preferences
- View and easily access all resources relevant to research and library services
- Easy and intuitive navigation for intended areas of search

Apps

Headspace   Instagram   YouTube

Frustrations

- Cases of slow internet cause potential disruptions
- Cluttered interface makes it difficult to differentiate what's important and where to go
- Inconsistent design and inadequate feedback make it difficult to anticipate the site's design
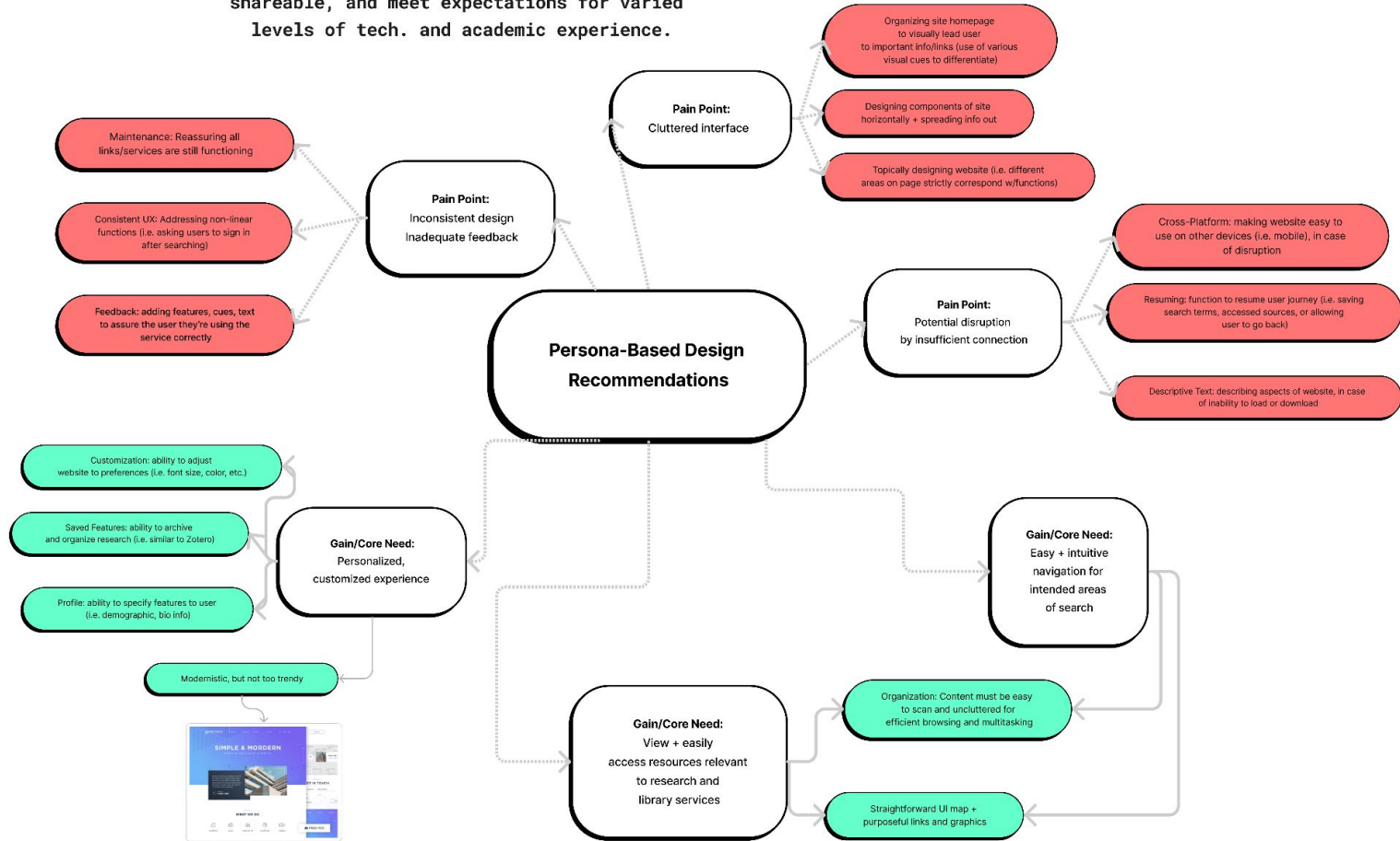
Platform

Website   Mobile App

Interests

- Concerts
- Art
- Traveling
- Fitness
- Cooking
- Gaming

Design must be eye catching, easy to learn,
shareable, and meet expectations for varied
levels of tech. and academic experience.

Pain Point:
Cluttered interface

Organizing site homepage
to visually lead user
to important info/links (use of various
visual cues to differentiate)

Designing components of site
horizontally + spreading info out

Topically designing website (i.e. different
areas on page strictly correspond w/functions)

Maintenance: Reassuring all
links/services are still functioning

Pain Point:
Inconsistent design
Inadequate feedback

Consistent UX: Addressing non-linear
functions (i.e. asking users to sign in
after searching)

Feedback: adding features, cues, text
to assure the user they're using the
service correctly

**Persona-Based Design
Recommendations**

Pain Point:
Potential disruption
by insufficient connection

Cross-Platform: making website easy to
use on other devices (i.e. mobile), in case
of disruption

Resuming: function to resume user journey (i.e. saving
search terms, accessed sources, or allowing
user to go back)

Descriptive Text: describing aspects of website, in case
of inability to load or download

Customization: ability to adjust
website to preferences (i.e. font size, color, etc.)

Saved Features: ability to archive
and organize research (i.e. similar to Zotero)

Profile: ability to specify features to user
(i.e. demographic, bio info)

Gain/Core Need:
Personalized,
customized experience

Gain/Core Need:
Easy + intuitive
navigation for
intended areas
of search

Modernistic, but not too trendy

Gain/Core Need:
View + easily
access resources relevant
to research and
library services

Organization: Content must be easy
to scan and uncluttered for
efficient browsing and multitasking

Straightforward UI map +
purposeful links and graphics

Now, our main objective, the "**1%**" of users.

*1% - students with a need for accessibility: including students with disabilities and other conditions, language barriers and international users, mobile users, and those with technological inexperience.

Neurological Conditions, Impairments, and Disabilities

Designing for neurological conditions

Due to issues recognizing spoken sounds and understanding how they relate to letters and words, dyslexia is a learning impairment that makes it difficult to read (decoding). Dyslexia, sometimes known as a reading handicap, is brought on by individual variations in language processing areas of the brain.

Name: Katie

Age: 21
Occupation: College student
Location: Fairfax, VA
Major: Psychology
Income range: NA
Condition: Dyslexia and Anxiety

PERSONAL GOALS:

- Wants to be a criminalogy major
- Wants to go to grad school
- Wants to start her own agency.
- Wants to move to NYC

INTERESTS

- Watching documentries
- Going to the gym
- crocheting
- painting
- baking

PERSONALITY

- Introvert
- Reserved
- Planner
- Open-mindeded
- Hardworking
- Doesn't tolerate change

QUOTE

"I want to be able to navigate and find the article I need without causing stress"

GOALS

- Find materials for classes

- Find articles for grad school

- Ask the chat box questions

SCENARIO

- Katie is trying to spare time for all of her responsibilities including her current undergraduate classes, grad school research, her family, and her part-time job.

- Katie complains that because it takes her hours to navigate through the library website, she can't find time to spare for her other responsibilities. She also feels frustrated as she feels singled out because of her dyslexia .

FRUSTRATION

- Katie was anxious as there was no consistent navigation throughout the website. She was directed to the official GMU website instead of the library website therefore lost the information she gathered.

- When Katie was trying to find a research article, she was overwhelmed by the excessive information. She had difficulty finding where to go to find specific information.

What we can do for Katie

- Have consistent navigation throughout the website
- Have an information hierarchy
- Use dark grey text against the white background
- Use a simple background since text on picture makes it confusing -Use clean design
- Don't have links that take you to the same page
- Have a distinct difference between the link that takes you to the gmu library website and the official gmu website
- Symbol for the links whether it will open in a new page or within the same page
- Descriptive symbols for the links below

Designing for visually impaired

Prevent Blindness America estimates that 53.2 million Americans aged 45 and over have some degree of visual impairment, ranging in severity from mild to severe, and that 18% of those affected are "legally blind." Color blindness, poor vision, and blindness are among the most common disabilities and concerns that fall under the umbrella of visual impairments.

Name: Mark

Age: 41
Occupation: Civil engineer
Location: Texas
Major: Masters in Sustainable and Resilient Infrastructure
Income range: 100K
Condition: Color blindness and blurry vision

PERSONAL GOALS:

- Wants to get his Masters degree in Sustainable and Resilient Infrastructure Systems Program.
- Wants his visual impairment to not be a barrier for him to learn.
- Wants to buy a house

INTERESTS

- Spending time with family
- Cycling
- Reading
- Playing the guitar
- hiking

PERSONALITY

- Introvert
- Insecure
- Low attention to detail
- Irritable
- Hardworking

QUOTE

"I want to access the information I need without the struggle since I have a full time job and family responsibilities."

GOALS

- Find materials for classes.
- Find timely articles.
- Distinguish important information on website.

SCENARIO

- Mark was assigned a very important paper that would affect his overall grade in class. Because of his visual impairment, it took days for Mark to naviagte the library website and find the information he needs.
- Mark's family compains that he is not sparing enough time for his family and spends hours on the computer trying to find articles and get frustrated because of the time consumption of the design.

FRUSTRATION

- Mark was frustrated while he was trying to reserve a spot for reviewing his thesis because it was hard to see the links on the grey background.
- Due to how cluttered the website was, Mark had a difficult time navigating it and reaching the page he wanted.
- The picture in the backround makds it hard for Mark to see the buttons due to his blurry vision

What we can do for Mark

- Have explicit buttons instead of links
- Provide sufficient contrast using color and texture
- Use a simple background
- Use a cleaner design
- Allow manual font size adjustments
- Use dark gray texts against the white background

Language Barriers and International Users

Hana

Age : 18   **Language(s)** : Japanese

Education : University Freshman

Occupation : Student

Location : Japan

Technical Ability : Experienced

Quote

"A book is a gift you can open over and over again"

Personality

Goal-Oriented | Curious | Extroverted

Scenario

Hana is a university student from Japan.
Hana wants to check out the GMU library online for her research project but does not read English or Latin-based scripts.

Goals

- To be able to navigate GMU library website without understanding or reading English
- To be able to translate the website from Japanese to English efficiently
- To be able to find a book from the GMU library database for research project

Frustrations

- The language barrier makes it complicated to navigate
- The lack of universally understood symbols make navigation more confusing
- There are no video walk-through or tutorials for the website
- There are no built-in translating features
- The live-chat symbol is not immediately understood

What we can do for Hana

- Incorporate a built-in translation tool
- Implement more universally understood symbols/icons
- Offer video walkthroughs and tutorials explaining how to navigate the site
- Allow all text to be copied (for easier translating)
- Make the live-chat symbol easily understandable
- Prioritize helping tools at the beginning of the page
- Make the toolbar larger and add symbols/icons

Mobile User Experience

> *"By having a more accessible site for mobile, my ability to work on my school project will be much more efficient."*

Goals

- To access a database and conduct research for their English 101 course
- To ask a librarian for help on through the library website on their mobile device.

Frustrations

- The lack of organization gets in the way of me effectively doing my task.
- It's difficult for me to know where to start, the information is squished and unattractive.

Jean Deaux

Age: 19
Education: Some college
Hometown: Durham, NC
Status: Single
Occupation: Full time Student

As a recent GMU transfer, Jean Deaux is worried about keeping up in their mandated English 101 course. For their first project, they are required to use the library website to find primary sources for their essay. While the professor explained in class how to navigate the website via computer, there was no explanation for the mobile format. Being that Jean does not own a personal laptop, they notice a stark difference between the mobile and desktop sites. They want to do research to form a research question, but do not know how to get to the databases website that they saw in class. They become frustrated trying to swipe down on the homepage and the screen shifting, they also notice that when they changed the screen orientation, more links pop up. Jean is thinking about giving up, but as a final effort, they try to contact a librarian for help via a link on the website, but there is no answer, so they give up and use google.

Mobile Device Recommendations

For a user like Jean Deaux the library website can be a bit of a learning curve, this is made more frustrating through the way that mobile device features such as screen orientation, swiping, etc. are not properly displayed when interacting with the homepage. For these reasons, a major design change suggestion would be to **improve the scrolling experience of the homepage.** It is a minor yet effective change because it not only polishes the website layout, but the user does not have to deal with frustration from having to constantly shift the webpage back on its axis. Additionally, by finding **better placement for the links at the very top,** as mentioned in the case of Jean Deaux, they switched orientations on their phone and found more links. By finding a more central placement on the page for these links, the user does not have to worry about feeling as though they are missing out on potentially useful information in the sea of links that lie on the homepage. Finally, the contact librarian links (3 of which lie on the same homepage), an **automated-response system** would be best for not only the student, but also the librarians who may have multiple inquiries simultaneously, a human can only do so much, but with a website like this, response time s key to building a consistent relationship with users.

"Tech-Savviness," Digital Experience, and Age

Persona 5: Ben Winock (he/him)

Basic Information

Age: 57

Education: Associate Degree from a community college in 1988

Status: Married

Occupation: Associate Regional Manager at a hotel chain

Hometown: Wichita, Kansas

Personal Quote

"Technology in the modern day is something I struggle with, but I see how it can better my work and studies"

Personal Life

Spending time with his son and wife

Goals

- Wants to easily be able to access online library sources, such as books and articles
- Simple to understand and read directions, on where information is stored

Frustrations

- Complicated paths of retrieving sources
- Unintuitive links that send the user to other sites
- Small texts that are oddly colored

Scenario

Ben is in a writing intensive course that is required for his degree, in said class he needs to write a research paper on various articles found from the George Mason databases. Ben is willing to learn how the databases operate and is ready to start on his paper, but some factors make his ability to find articles and journals a difficulty.

Recommendations for Ben

- Declutter center of GMU library website, having information more spread out to be easily understood and read
- Dark text on lighter background for the four middle options: Subject Guides, Databases, Journals, and Reserves
- Provide more explanation for the hyperlinks imbedded in the webpage including but not limited to the black header at the top with a list of drop down menus
- Discreet and clear messages that inform the user where a hyperlink will take them, and if it is a separate website
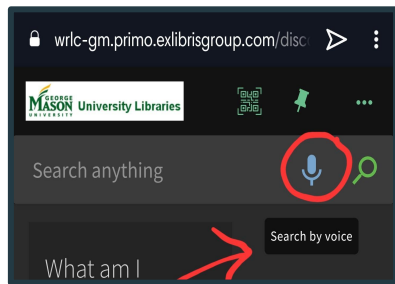
Common issues across platforms: Icons, Microphone Search, Text wrap, Image backgrounds, thick, empty margins (pc), orientation, etc.
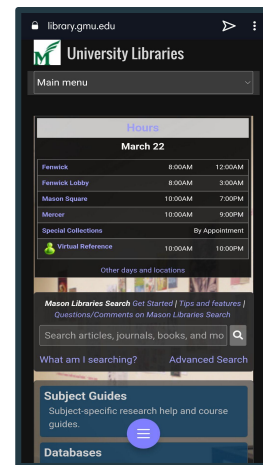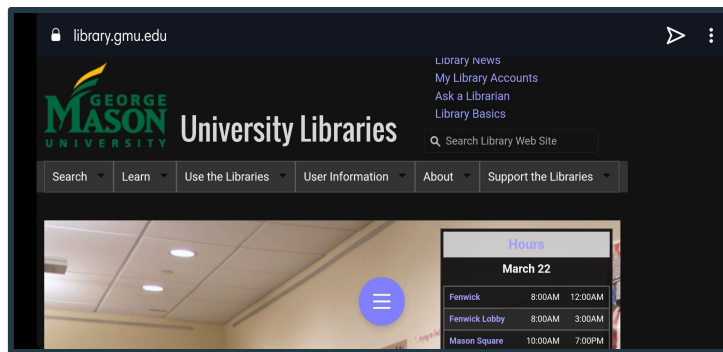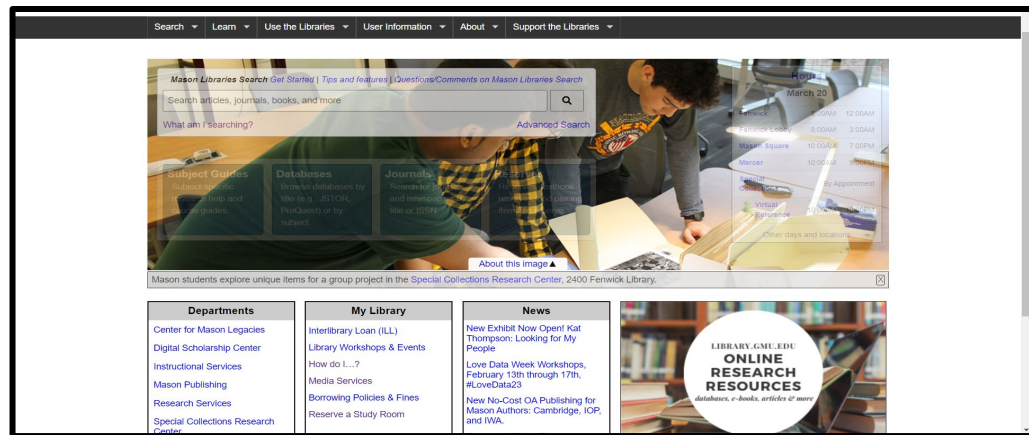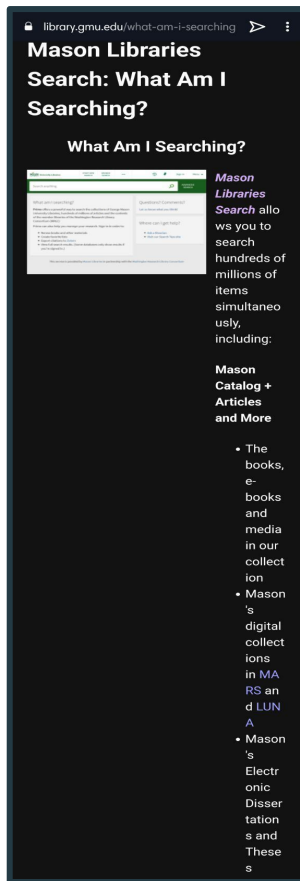
Screenshots from the GMU library website as of 3/21/2023

Consistent and Clear Navigation

Navigation should be intuitive and clear to users; if not, there should be mechanisms to guide them. Similarly, all navigation should be consistent and align smoothly with the user journey.

Discreet and clear messages that inform the user where a hyperlink will take them, and if it is a separate website

Provide more explanation for the hyperlinks imbedded in the webpage including but not limited to the black header at the top with a list of drop down menus

Have explicit buttons instead of links

Have consistent navigation throughout the website

Don't have links that take you to the same page

Have a distinct difference between the link that takes you to the gmu library website and the official gmu website

Consistent UX: Addressing non-linear functions (i.e. asking users to sign in after searching)

Feedback: adding features, cues, text to assure the user they're using the service correctly

Resuming: function to resume user journey (i.e. saving search terms, accessed sources, or allowing user to go back)

Maintenance: Reassuring all links/services are still functioning

Layout + Architecture

Layout should be simple, clean, and distinguishable. Information is contained narrowly and similarly, making it hard to find areas. Experiences also vary depending on platform.

Declutter center of GMU library website, having information more spread out to be easily understood and read

Improve the scrolling experience of the homepage

Better placement for the links at the very top

Simpler interface ("confusing even for English speakers")

Use a simple background

Use a cleaner design

Have an information hierarchy

Designing components of site horizontally + spreading info out

Use a simple background since text on picture makes it confusing -Use clean design

Organizing site homepage to visually lead user to important info/links (use of various visual cues to differentiate)

Topically designing website (i.e. different areas on page strictly correspond w/ functions)

Organization: Content must be easy to scan and uncluttered for efficient browsing and multitasking

Text/Font + Images

Text, font, and imagery should consider minority groups, such as non-native speakers and those with disabilities. Users should also consider alterations to emphasize particularly useful areas.

Dark text on lighter background for the four middle options: Subject Guides, Databases, Journals, and Reserves

Icons and symbols need to be more universal

Use dark gray texts against the white background

Provide sufficient contrast using color and texture

Use dark grey text against the white background

Descriptive Text: describing aspects of website, in case of inability to load or download

Straightforward UI map + purposeful links and graphics
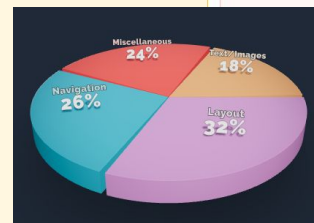
Additional Resources/ Help

We provide recommendations for additional resources, redesigns of current ones, and usability modifications. All stress the potential for users to curate their experience.

Guided navigation option

Embedded translator feature

Offer translation of multiple different languages

Automated-response system, available answers

Allow manual font size adjustments

Customization: ability to adjust website to preferences (i.e. font size, color, etc.)

Saved Features: ability to archive and organize research (i.e. similar to Zotero)

Profile: ability to specify features to user (i.e. demographic, bio info)

Resuming: function to resume user journey (i.e. saving search terms, accessed sources, or allowing user to go back)

Tutorial to navigate library website included in a clear 'help' section

Why is it important to make these changes?

The significance in creating a more welcoming and accessible library website lies in the rapport that is built between the research process and a GMU student throughout their schooling at Mason. These **repeat users are more likely to recommend the library website** to their peers. Also, by having repeat users, it establishes a higher standard of GMU research through the utilization of credible sources found in the GMU library via books, databases, scholarly articles, etc.

Students that are able to properly utilize resources are **able to produce work more efficiently and effectively** given that an easier method of navigating the library website provides for an **easier experience in the research process, boosting productivity and output.**. In polishing the library website, it can be acknowledged and utilized as the useful and reliable resource that it is and will continue to be.

With that being said…
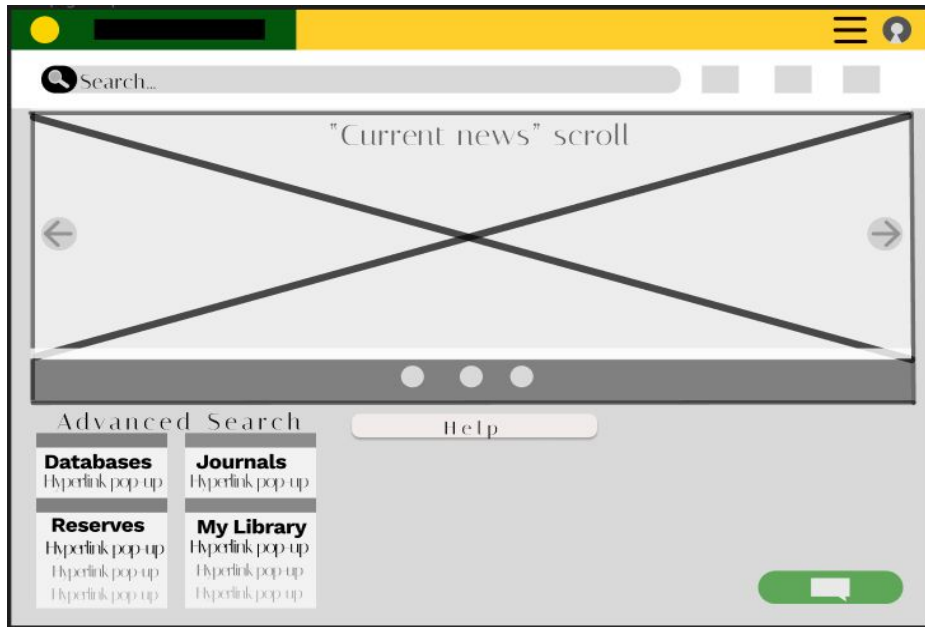
Some mock-ups of what a more modernized GMU library website could look like given our recommendations.
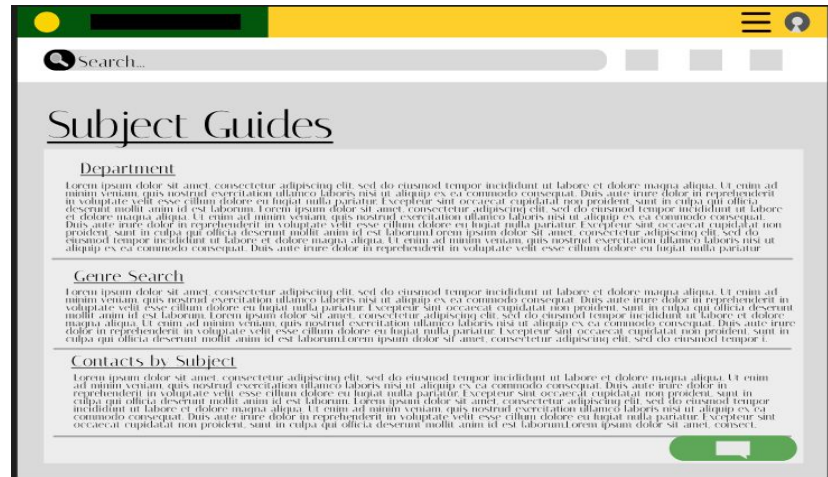
Thank you! :)
Questions, comments, concerns?

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