



Digital Humanities

IN THE LIBRARY

SECOND EDITION

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A cluster of approximately ten squares of varying shades of gray is positioned in the upper right quadrant of the page. The squares are arranged in a loose, non-linear pattern, with some overlapping and others spaced apart. The colors range from light gray to dark charcoal.

Digital Humanities

IN THE LIBRARY

PART 1. THEORY

CHAPTER FIVE

Inclusive Design: A Method and Craft of Transforming Digital Humanities with User Experience

A. Miller

PROJECT DESIGN in user experience and project design in digital humanities (DH) share many of the same motivating questions. When setting up surveys as part of your research, do you consider the language or purpose of the question? Are there leading questions? Have you considered the background or demographics of your audience? When setting up tasks for user-testing a research project, do you strategize how to recruit users with a diverse approach or just try to get as many as possible? These are just a few of the questions user experience (UX) professionals would consider when creating a digital project. These questions should also be asked by the creators of DH projects.

Libraries, and the academy in general, have specialists in various disciplines, including accessibility, information technology, DH, UX, Open Educational Resources (OER), and subject specialists (such as for the social sciences or humanities). User experience research and design methods can help these specialists bridge gaps or push the boundaries of their work in DH.

This chapter will provide an introduction to the field of UX, an overview of the user-centered design (UCD) phases and applications in UX, an overview of UX research and design phases, the importance of applying UX to DH, and will culminate in an inclusive design checklist that can help root the UX process in digital projects, regardless of the role of the subject specialist or reader of this book. This chapter is neither comprehensive nor definitive but is intended to be helpful to those who are new to UX and inclusive design in digital projects.

Introduction

UX research protocols can be applied to DH workflows to enhance the experience of DH practitioners and DH project end-users. Using the stages of human-centered design—empathy, define, ideate, prototype, test, implement¹—DH projects have the chance to become more inclusive in their design and use. For example, UX research design practices can help get to root problems with carefully planned surveys, card sort activities, moderated interviews, or observational sessions where unbiased, open-minded, and respectful practices are the norm (some of these practices are discussed later in the chapter).

UX can also enhance the user interface (UI) with sound design strategies around how user-friendly a product is, such as typography, layout, navigation, accessibility, and usability. A research-based prototype can be user-tested before launch, with screeners and tasks in place to see how intuitive the product is for users. For example, a spatial analysis research project may yield a GIS map or a curated database of archival findings. The resulting website or project UI may have any number of challenges to various users, including typeface, color palette, wording, wayfinding, or responsive features of content. Users may be accessing the project on various devices, have varying cognitive or physical abilities and even different purposes for accessing or using the product (DH project).

UX is becoming more normative in DH programs and services offered at many institutions and libraries. Groups and individuals are seeking ways to enhance or become involved in DH, and UX is a great way to help people get started with strategies, such as design thinking, that can yield better insights into user behavior, wants, and needs. By applying this human-centered thinking, DH researchers can better create and connect with their users. More importantly, DH practitioners (and libraries in general) that use UX practices can reach wider audiences and help their current audiences even more with inclusive, human-centered practices that use empathy, definition, ideation, prototyping, and testing.

The Problem

Digital humanities projects are commonplace across academia and DH scholars increasingly seek ways to advance their activities. However, many DH projects lack a critical vantage point: user-focused design and usability.² While arguing that DH is a system with users, Charlie Edwards compels the

DH community and tool builders to acknowledge that the system has serious usability problems, affecting both new and expert users.³

Early DH projects focused on the system's raw functionality rather than on the user's experience, where a DH project's weak front-end (UI) would create difficulty for a user navigating the system.⁴ Edwards proposes that "DH and its possible futures are likely to be shaped, delimited, or advanced by how DHers choose to design and build their conceptions of the user, and the extent to which *all* users can participate in that process."⁵

Burdick, as cited by Caviglia et al. (2009) argued that DH disciplines hardly recognize design as a discipline, rather just an addition used by people without design backgrounds.⁶ Burdick additionally noted that most scholars design their own digital projects or outsource the development to research assistants or IT staff. As Caviglia et al. continue, "Moreover, the lack of designers and, especially design researchers, leads often to an appropriation of the theoretical aspects of the discipline by humanities scholars."⁷ When non-UX/non-UI designers create DH projects, problems may occur that affect usability and project sustainability. Typical problems across products and services include: ambiguous and inconsistent vocabularies; disregard of graphical conventions; opacity of the system status; missing documentation; missing strategies to avoid mistakes; and disregard of convention for workflows.⁸

These problems could be solved if users were a part of the design process. Although Klaus Thoden et al. (2017) would argue that many projects in DH do address usability and integrate user-centered design practices, "the resulting tools are often not easy to use or are not self-explanatory. Although usability guidelines and heuristics exist, many DH tools fail to even comply with the simplest rules."⁹ DH scholars are not necessarily UX/UI designers and most certainly are not the totality of possible end-users. All projects need to be designed with users and for users.

Definitions

User experience designers should never assume what a user knows or thinks. For consistency in this chapter, the definition of DH will be broadly defined, within the larger umbrella term of digital scholarship.

- "Digital scholarship is scholarship enhanced by the design of digital projects, incorporation of digital tools, collaboration among digital partners, and dissemination through digital platforms."¹⁰

- As a subset of digital scholarship, DH is a dynamic and interdisciplinary field that intersects humanistic inquiry with design and computing. The definition of DH largely varies, as seen by continually refreshing the page at <http://whatisdigitalhumanities.com>. Regardless of definition, or choice of technology, DH projects begin with a research question. Solving that research question can involve any number of people, technologies, and project goals. Approaching the project with a focus on the user experience can help increase successful outcomes.
- User experience (UX) “encompasses all aspects of the end-user’s interaction with the company, its services and its products.”¹¹ It is a broad concept that covers a user’s feelings, attitude, and behavior while using a system, service, product, or space. User experience research is the process of collecting information about the behaviors, needs, and motivations of users for a particular product, service, or space.¹² UX can be divided up into research and design, but it is often an iterative process to understand the impact on an audience. UX design is “the process of supporting user behavior through usability, usefulness, and desirability provided in the interaction with a product” or service.¹³ This step happens after the UX research, where the research is synthesized and applied to form a design.
- Usability is a quality attribute of a “user’s experience when interacting with products or systems, including websites, software, devices, or applications. Usability is about effectiveness, efficiency, and overall satisfaction.”¹⁴ Usability is a subset of UX.
- Inclusive design is a design process that enables and draws on the full range of human diversity, such as ability, language, culture, gender, and age. The goal is to have a product, service, or environment that is “designed to be usable by as many people as reasonably possible, without the need for specialized adaptations.”¹⁵ Inclusive design is a subset of UX.
- Accessibility is related to inclusive design as they both focus on “making products or services available to a wider range of people. However, accessibility is more limited in scope as it is focused on “specific accommodations to ensure that people with disabilities have access to products, services, or environments.”¹⁶
- User interface (UI) design (also called interaction design) studies how users interact with a webpage, application, or product with a focus on “anticipating what users might need to do and ensuring that the

interface has elements that are easy to access, understand, and use to facilitate those actions.”¹⁷ A UI is a view of an object, page, or program.

- User-centered design (UCD), human-centered design, and/or design thinking are all approaches and mindsets that enable a user-focused framework for designers to understand, explore, and materialize a meaningful design solution that involves users in the design process.¹⁸

Overview of User-Centered Design

UCD, also known as design thinking, is an ideology or mindset supported by various practitioners in different industries. Although the process and terminology used can vary, at its core, design thinking is a framework that is hands-on and user-centric. The *Design Thinking for Libraries Toolkit* offers a brief introduction of the non-linear phases:

- **Empathy:** A key principle in the design thinking and human-centered design process that represents the user’s perspective (research, listen, and observe users).
- **Define:** Combine research and observations to identify the problem, target users, and identify the constraints to work within. Ultimately looking at the users’ needs to define a design challenge.
- **Ideate:** To generate (creative) ideas to solve the user challenge as part of an exploratory activity that encourages imagination (quantity supersedes quality in the ideate phase). Brainstorm prompts and identify themes or patterns.
- **Prototype:** A rough, mocked-up, tangible manifestation of your idea. Prototypes can be paper, physical, digital, or a combination of low- or high-fidelity.
- **Test:** Iterate your ideas by testing the prototypes with users, asking for feedback. Iterate the feedback into the concept and reevaluate or adapt the prototype.
- **Implement:** Getting to scale by telling your story, developing a roadmap, and stewarding the project with a plan for long-term stewardship and continuity (for example, who will continue the project or maintain it?).¹⁹

For more on how this user-centered design process can be specifically applied to libraries, consider reviewing the *Design Thinking for Libraries Toolkit* (<https://designthinkingforlibraries.com>). For additional resources on design thinking, see the Additional Resources section at the end of the chapter.

Applications of UCD and UX

Several examples of how user experience has been incorporated into DH projects can serve as illustrations of these principles in practice. Mia Ridge and her team curated a DH project focused on deep maps and spatial narratives, and found UX to be paramount to its design:

The process of creating wireframes and prototype screens—and more importantly, the discussions and debates they initiated—helped us understand the complexity of the requirements for deep maps, the design tensions they would have to accommodate, and the importance of descriptive language in interdisciplinary platforms. Our prototyping process led us to devise a conceptual model that helped clarify relationships between spatial narratives and deep maps and encompass the different definitions of deep maps encountered at the Institute.²⁰

Similarly, Ashley Rojas describes how her project team centered the project's focus on the user. They wanted the DH project's database to be easy to navigate and to contain content the audience would find valuable and useful.²¹ An example of how Rojas' team put the user first was in their design and testing:

To ensure easier readability for individuals who use screen readers, we constructed the HTML to begin with the first item of the menu and when the 'tab' button is pressed the item selected to activate goes through each of the items, left to right, before going through the main body of text.²²

This process enables the use of the tab key to run through items selected (title, menu, footer, etc.) in a left to right format. This is a design practice that some DH scholars might miss if designing without UX in mind.

According to Melinda Baumann, the DH@UVA site owners conducted user testing on the DH certificate program to assess the understanding of certificate requirements, the application process, clarity on what counts as electives, and exploring the initial perceptions of the site organization, among others.²³ The methodology used and sheer reporting of the results on their website are great examples of UCD and UX being applied to DH.

Overview of UX Research and Design Phases

There are numerous online resources to learn about the UX research and design phases. Some of these sources include the Humans in User Experience at UCLA, User Experience Professionals Association, Usability.gov, IDEO, the Nielsen Norman Group, and UX at University of Arizona Libraries.²⁴

The purpose of UX research is to understand how a user thinks, feels, and acts when interacting with a product or service. There are many ways to conduct user research depending on the project. According to the 18F UX Guide, the goals or activities within UX research may involve exploring possibilities, interacting with the community, testing assumptions, and investigating tools and systems.²⁵ Examples of some of the more popular UX research methods and tools include:

- Focus groups (a moderated discussion, typically with 5–10 participants)
- Individual interviews
- Personas (researched, reliable, and realistic representations of the user audience)
- Surveys (structured questionnaire)
- Task/scenario analysis (observe users conduct tasks related to the project)
- Content inventory (list of all the content on a site to gain insight: text, images, documents)
- Organization schemes/structures (how the site categorizes content and relationships within site)
- Market analysis (compare competitive or related projects)

Additional examples of UX research methods are available at Usability.gov and 18F Methods.²⁶

The purpose of UX design is to synthesize research and apply it in a design form. UX design can be broken down into the design of the information architecture (content layout, navigation, terminology), interaction design (calls to action, prompts, intuitive user flow), UI design, visual design, and usability, among others. According to Susan Farrell, the goals or activities within UX design may involve designing for universal access, giving users control, preventing errors, providing helpful defaults, mapping features to user needs, considering diverse contexts, considering social implications, tracking usability bugs, keeping data safe, and making user documentation.²⁷ Examples of some of the more popular UX design methods and tools include:

- Wireframes (two-dimensional illustrations of page UI, focusing on prioritization of content, space allocation, and intended behaviors of UI elements)
- UI elements (checkboxes, radio buttons, dropdown lists, sliders, breadcrumbs, search fields, icons, notifications, progress bars, etc.)
- Card sorting (which helps evaluate the information architecture of the site)
- Prototypes (a draft version of product, low- or high-fidelity)
- Color basics (a color wheel illustrates relationships between color levels)
- Usability testing (to evaluate a product or service by testing with representative users)
- Accessibility evaluation
- Scenarios (stories and context for users of the site or product)
- User documentation (including how-tos, instructions, FAQs, etc)

For additional examples of UX design methods, see Rohrer (2014) for help determining which UX research method to use in a project; Usability.gov (2021) “Methods” for help choosing design methods for content strategy, UI design, usability evaluation, information architecture, interaction design, and visual design; and the UX Cookbook²⁸ for various UX design recipes to replicate. If time or resources are limited and only one activity can be performed, Susan Farrell recommends a qualitative (think-aloud) usability test.²⁹ For this, it is best to recruit 3–5 representative users and give them tasks to perform while you silently listen and watch them perform the tasks while they think out loud. This method will allow you to learn about misinterpreted design elements and get insights into user behaviors that can be advantageous to the redesign.

Designing for and testing against the user experience of DH projects will not only make better projects for more users, but it will help DH practitioners reconsider their own purpose and audience for their projects as they iteratively design with UX in mind.

Importance of UX in DH

While technology professionals in education and commercial applications have made significant progress in meeting the needs of users, scholars creating digital projects often fail to take users’ needs into account.³⁰ It is wrong to assume everyone approaches information or websites with the same goal or ability.

In an ideal world, a DH project or website would not only be compatible with desktop computers, laptops, smart phones, and tablet devices, but “the materials we create should also work well with such tools as refreshable braille displays, digital talking book devices, screen reader applications, and screen magnification software.”³¹ This is important because by working to meet the needs of people with disabilities and conducting usability testing with the disability community, the DH community “will also benefit significantly as it rethinks its assumptions about how digital devices could and should work with and for people.”³² This raises the importance of addressing the audience of DH projects. The intended audience may be humanities scholars or technically savvy users, but the potential audience is far larger. “Prioritizing a wider audience can help further adoption of tools in general, and thus further acceptance of their use and development as comprising legitimate scholarly work.”³³

Even when DH scholars focus on an intended audience, DH tools still tend to neglect the typical humanities user in their design and documentation. “Builders of digital humanities tools, especially those that deal with technically more sophisticated techniques, like text mining and visualization, could considerably increase their tools’ visibility and speed of adoption with more attention to their user interface and clear instructions with example use cases.”³⁴ Regardless of discipline, users want the benefits or purpose of a DH project described up front, ideally with the UI and documentation erring on the side of obvious rather than clever.³⁵

According to Klaus Thoden et al., the goal is to “find consensus on what good user experience and usability means in the Digital Humanities, what practices this might entail and what factors influence these practices.”³⁶ Clair Warwick urges scholars to think about “use” before the DH tool is built; this is done by studying potential users.³⁷ There is no substitution for this process, as creators, designers, and researchers are not users. Personas and use cases are tools that can be applied in the design process but must “be used with care in a multimethod user study, and should never be a substitute for other, more time-intensive methods.”³⁸ This is how we limit bias in the research design process, with mixed methods and testing.

Simplicity is also important to UX and DH. For example, consider the terminology used in a DH project or even the name of the DH tool. A resource with a confusing, unusual, or hard to pronounce title may not be found nor understood by potential users. User testing could help limit that risk. Similarly, to increase the UX of a DH project, even a little usability

testing is better than none, and a simple way to achieve this includes providing sample data and good documentation.³⁹

Finally, one of the most important UX applications you can do is usability testing. Even when done with just five users, you will discover about 85 percent of the design problems in the system.⁴⁰ This is important to DH not only because it will help find and solve design problems, but it can help design for the larger potential audience.

Inclusive Design

This section features three examples of academic institutions that highlight the need to create and build with inclusive design in mind. Inclusive design is an iterative process that keeps the diversity and uniqueness of a user forefront, especially users at the margins who are often left out of hypothetical average-based solutions.⁴¹ There are many resources for inclusive design models, but these three were specifically chosen for the academic perspective, as that is relatable to many academic-focused DH projects.

The Inclusive Design Research Centre at the Ontario College of Art and Design University (OCAD U) created an online guide to inclusive strategies. According to its *Inclusive Design Guide*,⁴² the insights, practices, tools, and activities of the guide can be applied to digital designs as well as to the design of services for physical products and built environments. Many of the tools described in the guide are applicable to the creation of DH projects, like the tools referenced in the overview of UX research and design phases earlier in this chapter.

The Inclusive Design Toolkit,⁴³ created by the Inclusive Design Group in the Department of Engineering at the University of Cambridge, emphasizes that every design decision can affect the user experience. According to the Inclusive Design Group, “understanding the range of user capabilities and the impact they have on product use is vital to producing inclusively designed products.” The Inclusive Design Toolkit includes examples of the range of user capabilities, such as vision, hearing, thinking, reach and dexterity, and mobility.⁴⁴

Kim Christen, professor and director of Digital Technology Culture at Washington State University, describes the use of UX research and design methods when system designers created Mukurtu.⁴⁵ Mukurtu is an open source, digital content management system originally developed in collaboration with Warumungu Aboriginal community members and

built upon Warumungu knowledge systems. Christen describes the challenge of curating Indigenous communities' cultural heritage materials, as well as solutions and outcomes. Among its many development steps, Mukurtu collaborators and developers used cognitive walkthroughs (individuals were asked a series of tasks) and user stories (short descriptions of a software function from the end-user perspective). Part of the success of Mukurtu was building in relationships with the Indigenous community (the end-users) in the development process, which is a good framework to model when creating an inclusive DH project.⁴⁶

This chapter does not attempt to reinvent an inclusive design toolkit or guide. Rather, the purpose of this chapter is to highlight relevant work being done and resources for user-centered design, user experience research and design, and inclusive design. The following Inclusive Design Checklist is meant to serve as a resource when developing DH projects. This can be seen as a compilation of curated qualities that are critical to the various methodologies presented in this chapter (UX research, UX design, UCD, design thinking, inclusive design, usability, etc.).

The framework for this Inclusive Design Checklist is to help DH project collaborators create and design for 1) the potential audience of a DH project, not just the intended audience, and 2) both the expert user and casual user. Designing with users and addressing this framework will help increase many aspects of inclusion in DH projects. To help stay on track with this framework, consider adapting the checklist below.

Inclusive Design Checklist

This is not an ordered list, rather it is diverse, complex, and iterative in nature. There are two versions, a brief checklist for reference, and an expanded checklist with detailed explanations.

BRIEF CHECKLIST

- You ≠ user
- Avoid bias
- Be mindful
- Prioritize content
- Be consistent
- Offer choice
- Document

EXPANDED CHECKLIST

You Are Not the User

No matter what your role is (DH specialist, librarian, researcher, designer, etc.), it is best to identify users (of varying kinds) and design for intended and potential users of a product or service rather than design based on your own interests or preferences. When conducting user research or usability testing, be sure to avoid asking leading questions to users, as this can also create bias (a leading question encourages the participant to answer in a particular way). Examples of leading questions to avoid include: Do you find this feature frustrating to use? Would you rather use this version or that version? A lot of people don't like this website, what do you think? (There are other ideas in the Additional Resources section.) The effectiveness of a design improves when this mindset is applied (and undergoes user testing!), which helps save time and money in the long run.

Avoid Bias and Generalizations

It is important to recognize unconscious and conscious bias and generalizations and purposefully avoid them in the design. Making presumptions and assumptions that are not based on user research is not an effective design method. Therefore, it is critical to recruit users for research, design, and testing phases, to base the design on real information from a diverse group of users.

Be Mindful of Images, Text, and Color

Avoid unnecessary elements and keep the language clear. A simple, uncluttered interface or product is always the best route. Any extraneous information can detract from the relevant or important content. Use color strategically to draw attention toward or away from items, while staying away from color palettes that may be challenging for people with vision difficulties. Select images that are appropriately labeled and have meaning and use alt text and captions. Select a typeface for the text that will help increase scan-ability and readability. (Content style and visual design guides are available in the Additional Resources section.)

Prioritize Content

Content should be navigable and easy to find. Consider the spatial relationships among items on a page (or product) and structure the layout based on importance (also known as information architecture). Keep in mind the variety of users, many of whom may scan the content rather than read

thoroughly. Carefully place and prioritize content to give attention to important pieces near the top of a webpage or product. (Information architecture guides are available in the Additional Resources section.)

Be Consistent

Try to follow industry standards (i.e. common UI elements) and develop and document your own standards to follow for consistency. The content style and visual design section of the Additional resources list provides a link to common UI elements. Be consistent with words and actions so users do not have to guess if something means the same thing. Develop a style guide for fonts, typeface size, colors, and structure such as headings and captions, and use this to keep all content consistently formatted. This helps with branding and marketing, as well as user satisfaction.

Offer Choice, Give Control

People appreciate options; that is one reason why it is important to design for both the expert and casual user. Options may include the ability to select all and filter results, the ability to toggle the closed captions on or off for an embedded video, the ability to zoom in or out of a page, or the ability to go back, undo, or exit an unwanted action. Options like these give users a choice and a sense of control, which benefits the user experience.

Document

The best products don't need explanation. However, if a feature can help one user, then it will likely help others. Provide open documentation on the project website. Do not archive it where it cannot be found or accessed. Keep user documentation concise and communicate updates with users (if applicable). Other forms of documentation may include instructions on how to maintain or update the product, README files, enhancements, use cases, outcomes, and others. Use strategies to keep track of documentation such as collection archives, project management software, or code repositories.

Summary

There is so much that can be learned from the methodologies described in this chapter: design thinking or UCD, UX research, UX design, usability, accessibility, and inclusive design. They are interconnected, important, and useful to solving problems that affect DH, the academy, social change, industry standards, and everyday interactions.

Don Norman, author of “The Design of Everyday Things,” highlights how common everyday things such as tiny fonts on labels, low-contrast instructional manuals, or door handles should not be just designed for one population (i.e., the elderly or people with disabilities), but to use inclusive design for a simple reason: it helps everyone. Norman also describes how “curb cuts were meant to help people who had trouble walking, but it helps anyone wheeling things: carts, baby carriages, suitcases.”⁴⁷ In recent years, the world has taken a closer look at the lack of inclusive measures, and we have seen how non-inclusive designs were used to create CPR training mannequins, spacesuits, military equipment, car crash dummies, smartphones, sports attire, science gear, and office spaces.⁴⁸ Certain products are starting to be re-designed with a focus on human diversity—the variety of users needing to use those products. These same diverse users are also the potential audience of DH projects and websites. As designers of those DH projects, we have the responsibility to transform digital humanities into a positive user experience.

In its most simple form, a user-centered design, regardless of the problem, is most likely to be the best solution. Involving users from the start in the design and testing of a product or service will help create trust in the product or service, increase usability, and prolong sustainability. It can also help save time and money because inclusive designs are “less brittle, easier to update, requires fewer accessibility patches, fewer service calls, shorter training, and generally lasts longer.”⁴⁹ Inclusive design and UX are worthwhile investments for the DH and beyond.

Groups and individuals who seek ways to enhance or become involved in DH and UX can get started learning strategies, such as design thinking, that can yield better insights into user behavior, wants, and needs. By applying this user-centered thinking, DH researchers can better connect with users. More importantly, DH practitioners (and libraries in general) that use UX practices can reach wider audiences and help their current audiences even more with inclusive, human-centered practices that use the elements in this chapter and in the inclusive design checklist. Adapting a UX mindset can help connect libraries and DH practitioners with the transformations taking place in their fields (and the world in general). UX and inclusive design can help bridge the gap or push the boundaries of their work, creating better user experiences for everyone.

Resources

- d.School Starter Kit, Stanford University. <https://dschool.stanford.edu/resources/dschool-starter-kit>
- Hemingway App. <https://hemingwayapp.com/>
- Humans in User Experience. <https://hue.humspace.ucla.edu/resources/>
- IDEO, Design Thinking Defined. <https://designthinking.ideo.com>
- Inclusive Design Research Centre, The Inclusive Design Guide. <https://guide.inclusivedesign.ca/>
- Accessibility guidelines for UX Designers. <https://uxdesign.cc/accessibility-guidelines-for-a-ux-designer-c3ba775539be>
- Nielsen Norman Group. <https://www.nngroup.com>
- UX@UA, podcast listing. <https://uxua.arizona.edu/learn-ux/our-guide-ux/getting-started>
- Vox Media, Accessibility Guidelines: The Checklist. <https://accessibility.voxmedia.com/>
- W3C Web Accessibility Initiative, Diverse abilities and barriers. <https://www.w3.org/WAI/people-use-web>.
- WebAIM, Contrast checker. <https://webaim.org/resources/contrastchecker>
- WebAIM, WAVE Web Accessibility Evaluation Tool. <https://wave.webaim.org>
- Web Content Accessibility Guidelines. <https://www.w3.org/WAI/standards-guidelines/wcag>

Resources by Topic

Content Style and Visual Design (Typeface, Color, Shapes, Alt Tags, Captions)

- Content style guides. <https://theuxcookbook.com/content-style-guides>
- Visual Design Basics. <https://www.usability.gov/what-and-why/visual-design.html>
- Designing for Web Accessibility. <https://www.w3.org/WAI/tips/designing/>
- Design System. <https://ux-guide.18f.gov/design/use-a-design-system/>
- Images Tutorial. <https://www.w3.org/WAI/tutorials/images/>
- UI Elements. <https://www.usability.gov/how-to-and-tools/methods/user-interface-elements.html>

- Principles of Inclusive Design. <https://uxua.arizona.edu/learn-ux/inclusive-design-accessibility>

Human-Centered Design

- Design Kit. <https://www.designkit.org/>
- Human-centered design methods. <https://methods.18f.gov/>
- UX Design Guide. <https://ux-guide.18f.gov/>
- Inclusive Design Guide. <https://guide.inclusivedesign.ca/>

Information Architecture

- Information Architecture Basics. <https://www.usability.gov/what-and-why/information-architecture.html>
- Tree testing. <https://theuxcookbook.com/tree-testing>
- Card sorting. <https://theuxcookbook.com/card-sorting>

Interaction Design

- Complete Beginner's Guide to Interaction Design. <https://www.uxbooth.com/articles/complete-beginners-guide-to-interaction-design/>
- Interaction Design Basics. <https://www.usability.gov/what-and-why/interaction-design.html>

Planning

- Gerry McGovern, “What Really Matters: Focusing on Top Tasks.” <http://alistapart.com/article/what-really-matters-focusing-on-top-tasks/>
- Methods. <https://methods.18f.gov/>
- Project Management Basics. <https://www.usability.gov/what-and-why/project-management.html>
- Research planning. <https://theuxcookbook.com/research-planning>

UX Research

- Usability.gov, User Research. <https://www.usability.gov/how-to-and-tools/methods/user-research/index.html>.
- 18F Methods. <https://methods.18f.gov/>

UX Writing

- Alejandra Rodriguez, “UX Writing: Creating Microcopy That Speaks to Users.” <https://www.uxmatters.com/mt/archives/2019/08/ux-writing-creating-microcopy-that-speaks-to-users.php>
- Writing for Web Accessibility. <https://www.w3.org/WAI/tips/writing/>
- Writing for the Web. <https://theuxcookbook.com/writing-for-the-web>

Usability and Accessibility

- Accessibility. <https://accessibility.18f.gov/>
- Making Audio and Video Media Accessible. <https://www.w3.org/WAI/media/av/>
- Usability.gov. <https://www.usability.gov/what-and-why/index.html>

For Questions to Apply to User Interviews, Usability Testing, or Leading Questions to Avoid

- User Interviews. <https://theuxcookbook.com/user-interviews>
- Usability Testing. <https://theuxcookbook.com/usability-testing>
- Running a Usability Test. <https://www.usability.gov/how-to-and-tools/methods/running-usability-tests.html>

Notes

1. See *Human Centered Design* sources listed under “Resources by Topic” at the end of the bibliography.
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