

WASHINGTON STATE BOARD FOR COMMUNITY AND TECHNICAL COLLEGES

Using human-centered design to create usable websites

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anthrotech

Introductions



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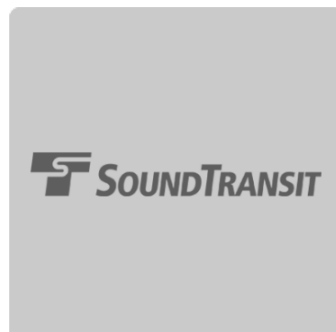
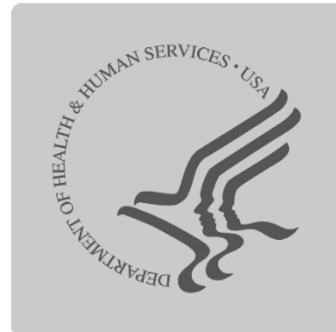
SENIOR USER EXPERIENCE DESIGNER

INTRODUCTIONS

INTRODUCTIONS

We're a human-centered design consultancy focused on government agencies, nonprofits, and enterprises with a social-impact mission.

Clients



Services



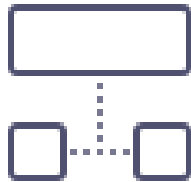
User research



User interface
& interaction design



Training
& mentoring



Information
architecture &
content strategy

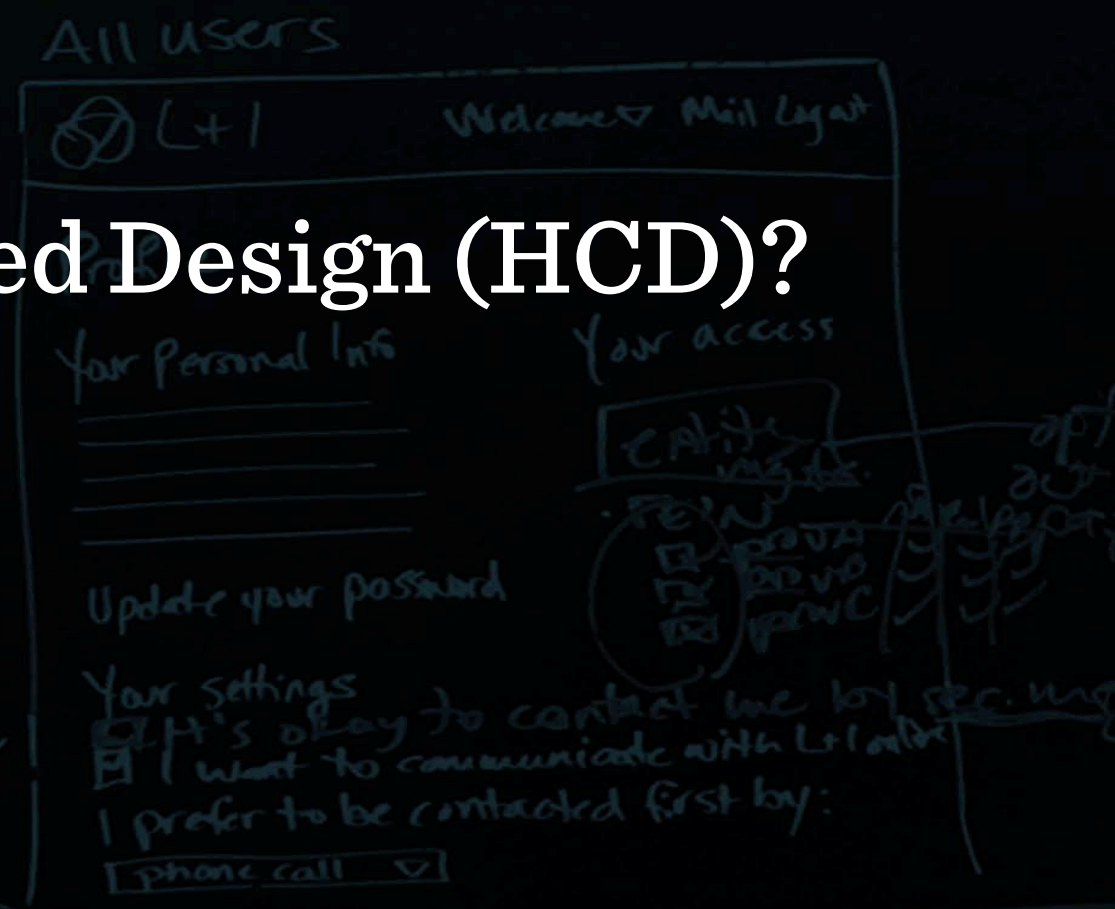


Digital
accessibility



Strategy & change
management

What is Human-Centered Design (HCD)?



either choose which claim / acct msg is about
pop up modal window if not subscribed
to related sub-entity * Also need to update related
shared mailbox settings
and location.

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profile for all users
cally opt users IN to online
t preference for contacting?
(secmsg, letter)
Send vs.
receive
How extensive
are these
settings?

An approach to designing products, services and systems that prioritizes the needs, behaviors, and experiences of the people who use them

HCD aims to make solutions more usable

- ④ **A solution is usable if the intended audience can:**
 - Quickly understand what they can and want to do with it
 - Successfully complete their task in the time and effort that they think it is worth
 - Know if there is something they want to do next
- ④ **Usable solutions can provide several benefits:**
 - improved productivity
 - enhanced user well-being, avoidance of stress
 - increased accessibility, reduced risk of harm

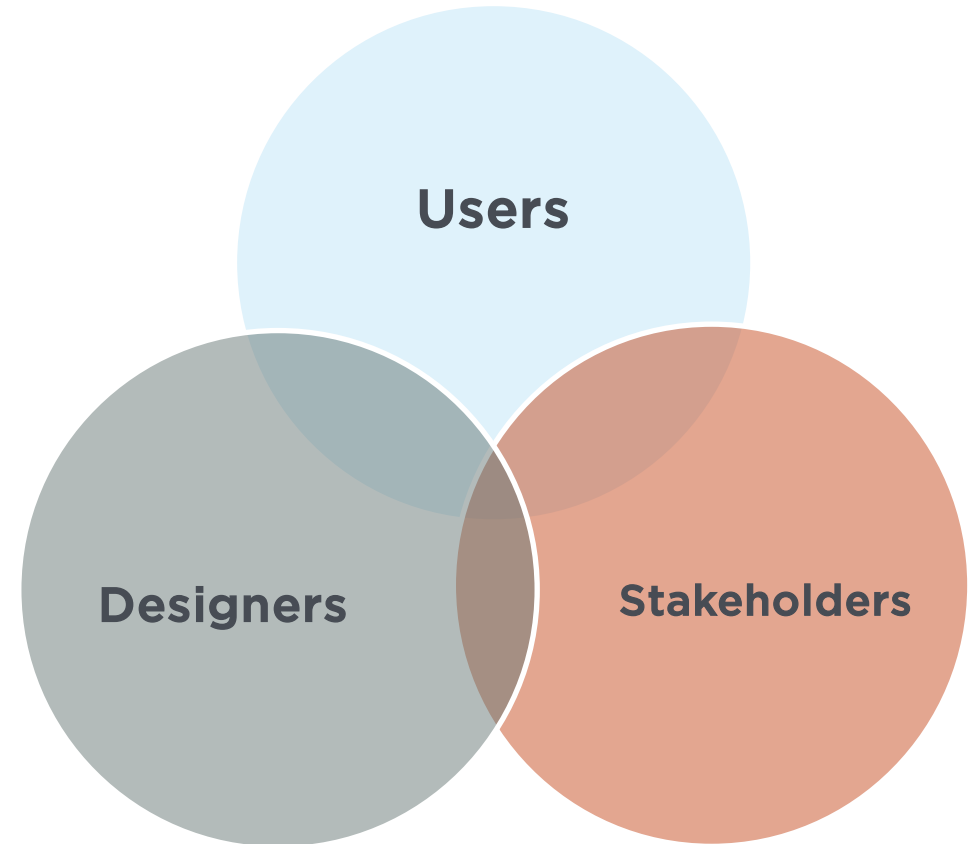


The 5 Dimensions of a Usable Website

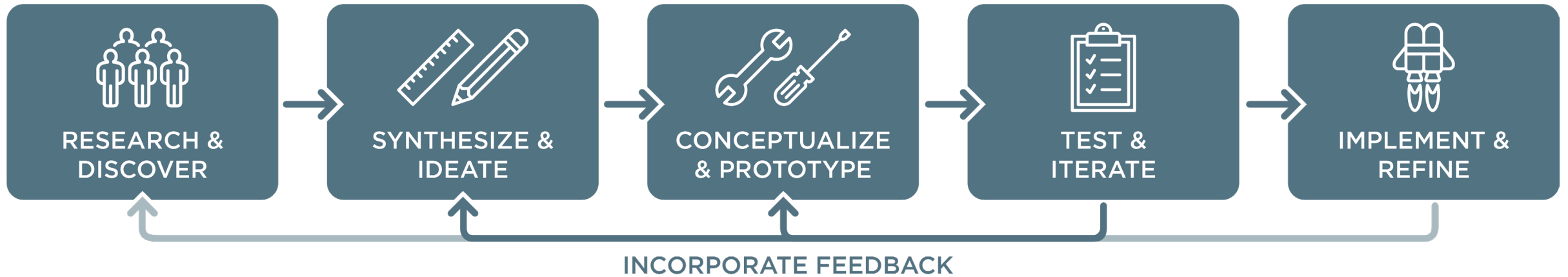
From the work of Whitney Quesenbery
WQUsability.COM

Who is involved in HCD?

- ④ **Users** – interacting through the system, those who are experiencing the problem you are working to solve
 - Front end and/or back end users
- ④ **Designers** – planning, creating, or altering the experience
 - Product and project teams
 - Business owners and partners
- ④ **Stakeholders** – have the power to affect or are affected by the design
 - the ones supporting the system that aren't involved in design



The HCD Process

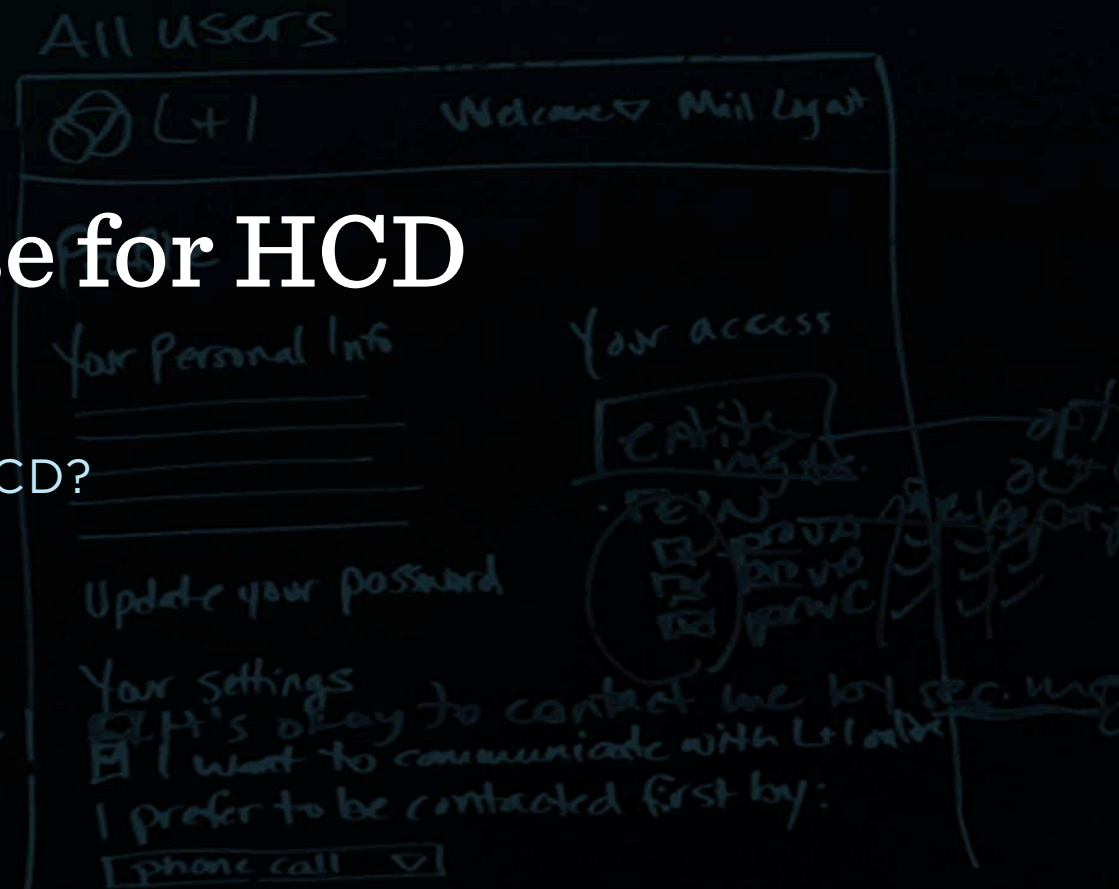


Principles of HCD

- ④ **Understand end users**
- ④ **Consider entire experience**
- ④ **Engage with users throughout**
- ④ **Test and revise solutions**
- ④ **Iterate frequently**
- ④ **Collaborate across disciplines**

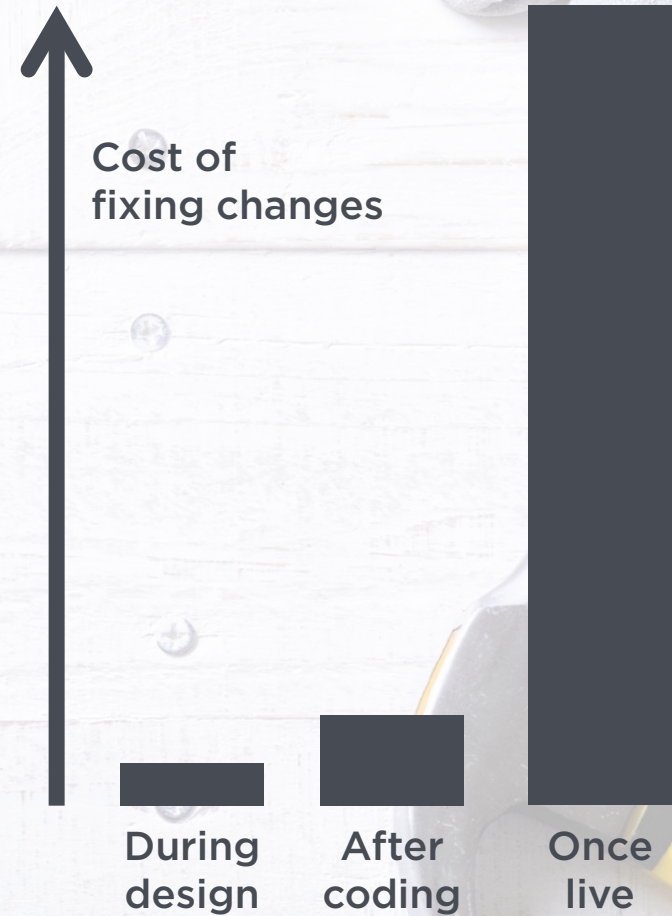
The business case for HCD

Why practice HCD?



Why use HCD?

- ④ **HCD saves time, effort and money!**
 - Less rework during development
 - Improved productivity
 - Fewer phone calls
 - Less training and documentation

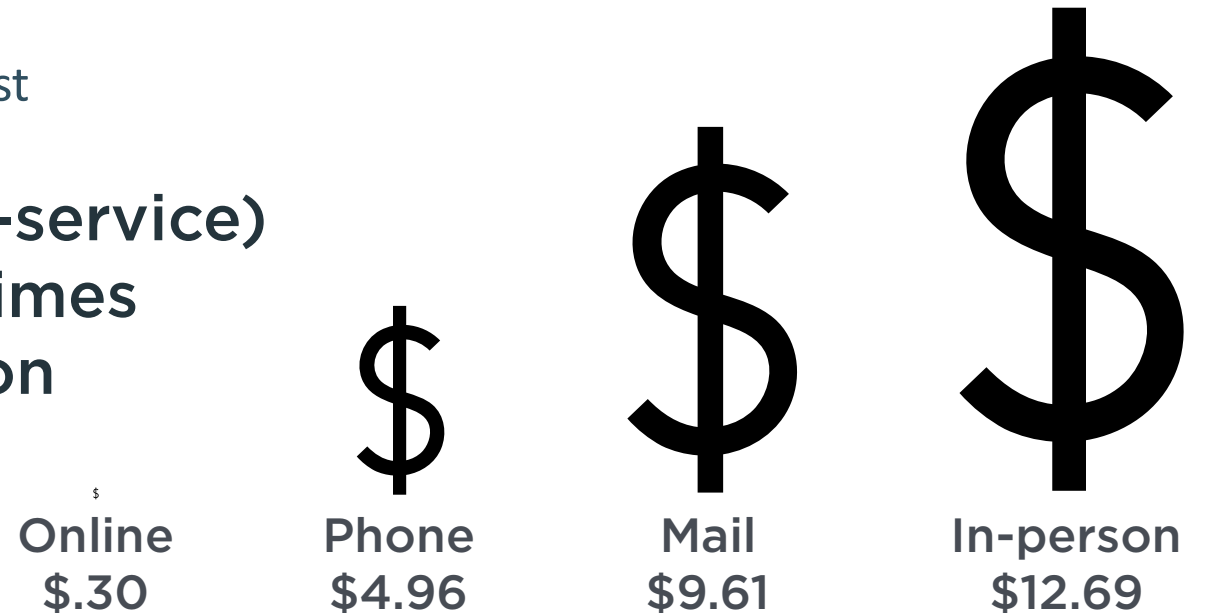


The benefits of a usable website

④ Customers expect effective online service delivery

- 81% of customers try to solve issues themselves before contacting a representative
- Online is customers' preference, more convenient, and the most accessible option
- People want to minimize their interaction cost


④ For the business, an online (self-service) transaction costs roughly 42.3 times less than an in-person transaction




Consequences of a poor experience

⦿ Visitors:

- Get frustrated
- Make mistakes
- Waste time
- Abandon the website
- Use the phone instead
- Say they won't return
- Have a bad impression of the organization



“This doesn't even look related to what I'm looking for. I'm going to give up.”



“I'm going to call. I'm wasting my time.”

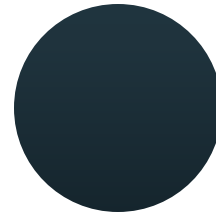
What can we use HCD to do?

- ④ **Bring order to competing priorities**
- ④ **Identify gaps in processes and systems that aren't meeting users' needs**
- ④ **Find out early that you've made a mistake, or the idea isn't going to work**
- ④ **Explore new ideas in a cheap way, prove an idea will work and is worth development**

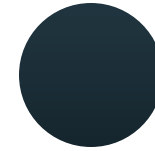


HCD principles can be applied to any size project

Understand users' needs



Observation

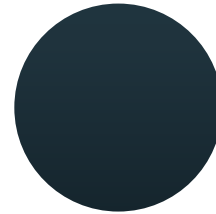


Interviews

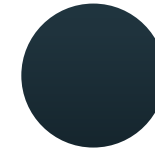


Email users

Create concepts / prototypes



Full HTML

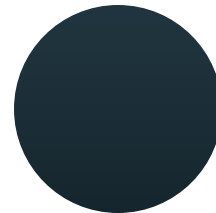


Clickable mockup

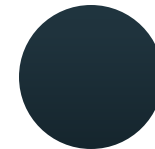


Paper prototype

Iteratively test & improve



Formal usability lab tests

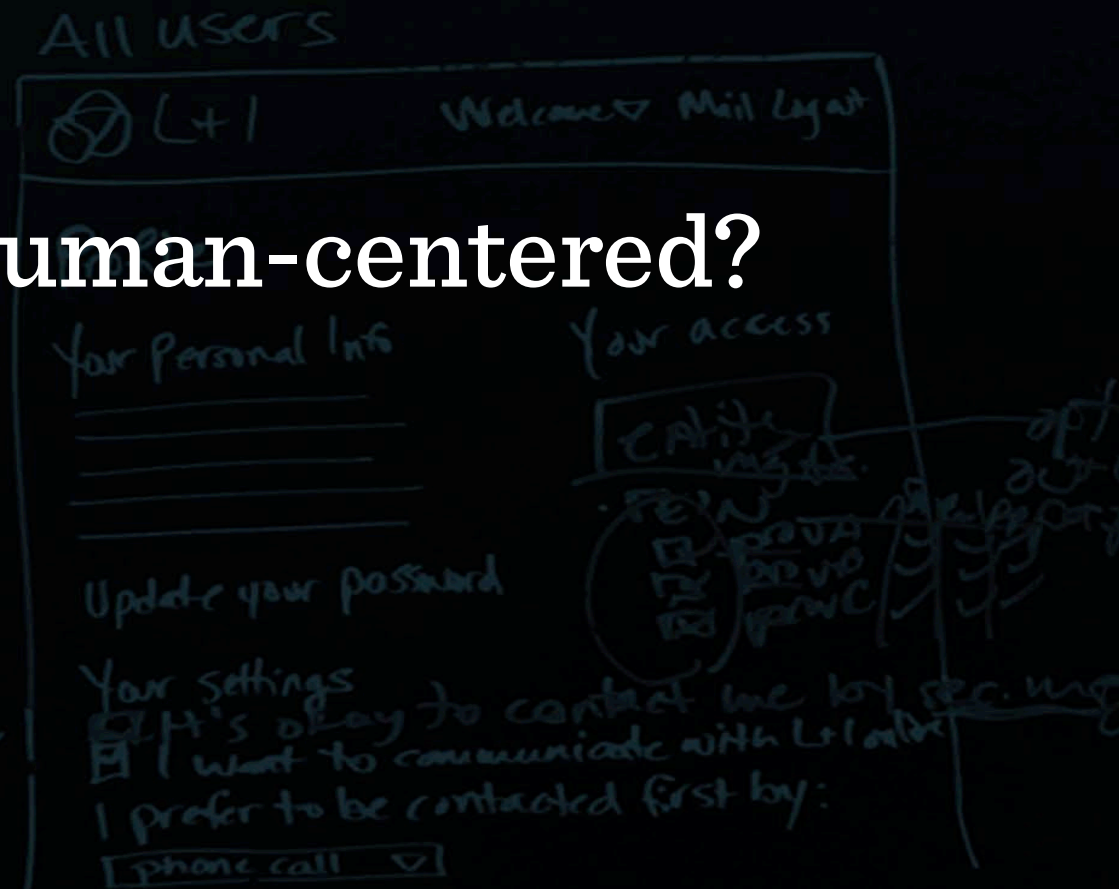


Intercept sessions



Cubicle tests

How can you be more human-centered?



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pop up modal window if not subscribed
to related sub-entity * Also need to update related
shared mailbox settings
and location.

allow users to set
their online comm's
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Send vs.
receive

Learn about your users
(and their needs!)

Use existing data, surveys, and conversations to understand who is using the website

- ④ **What are their needs and goals?**
- ④ **How do they think and talk about the information on your website?**
- ④ **How are user groups different?**
 - Students
 - Faculty and staff
 - Prospective students/parents and high school counselors
 - Community members

Look at existing data

- ④ **What are analytics telling you about the most visited pages or top search terms?**
- ④ **Has your college done any surveys with your user groups?**
- ④ **What types of phone calls, emails, or social media messages are departments receiving? Can you start to track common questions or question themes?**
- ④ **Validate observations by triangulating data**

How to understand what users need

④ Ask them!

- Use real users
- YOU are not your user

④ Observe how people complete tasks

- Don't ask them what they want

④ Consider how their environment affects their experience

- Technical, physical, mental, social, cultural

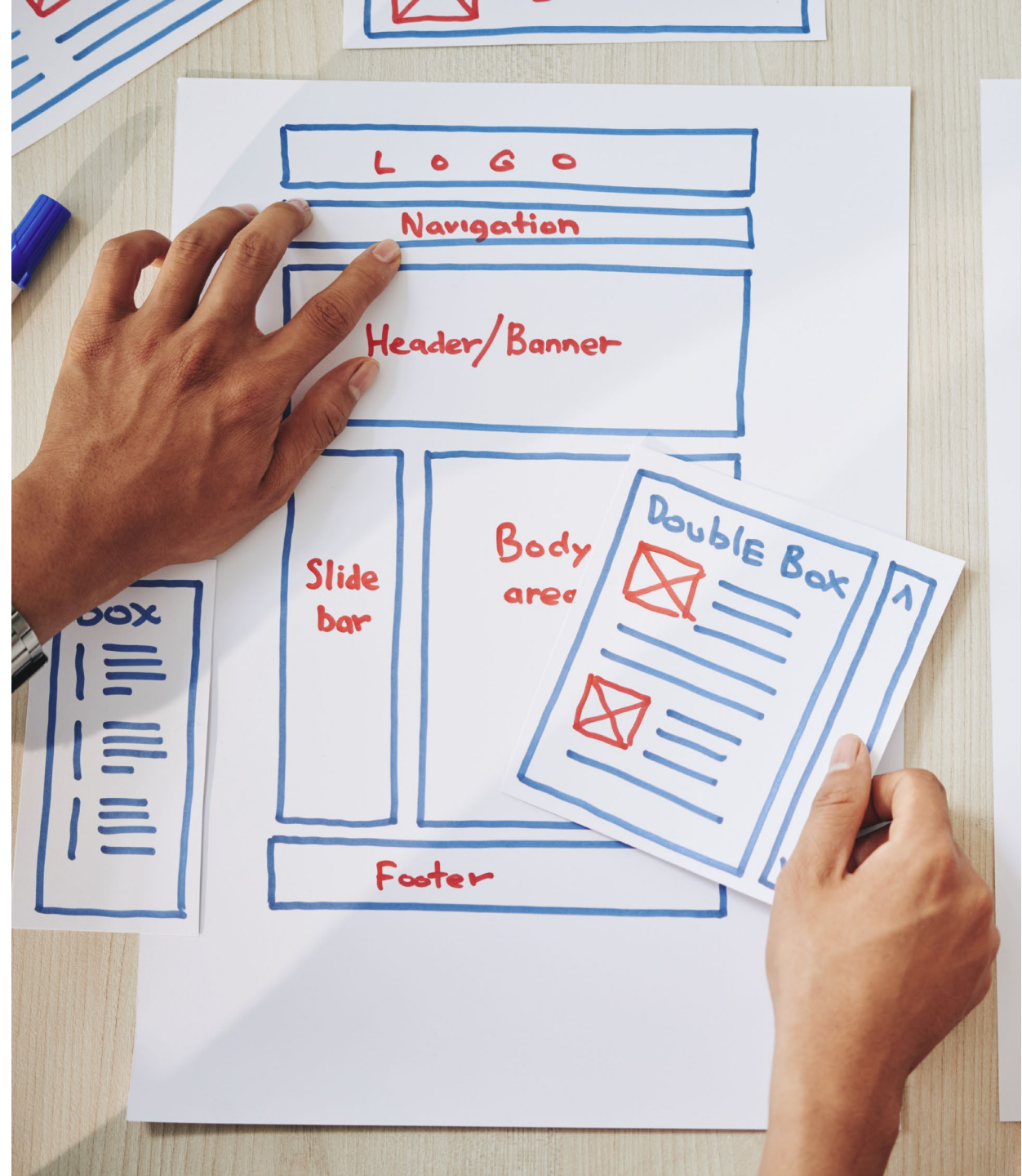
“The most obvious approach– to find the actual user and ask him– doesn't work for a number of reasons, but the main one is that **merely being the victim of a particular problem doesn't automatically bestow on one the power to see its solution.** The actual user is still a valuable resource, and we devote considerable attention to him or her, but we never let the user directly affect the solution.”

– The Inmates Are Running the Asylum: Why High-Tech Products Drive Us Crazy and How to Restore the Sanity, Alan Cooper, 2004

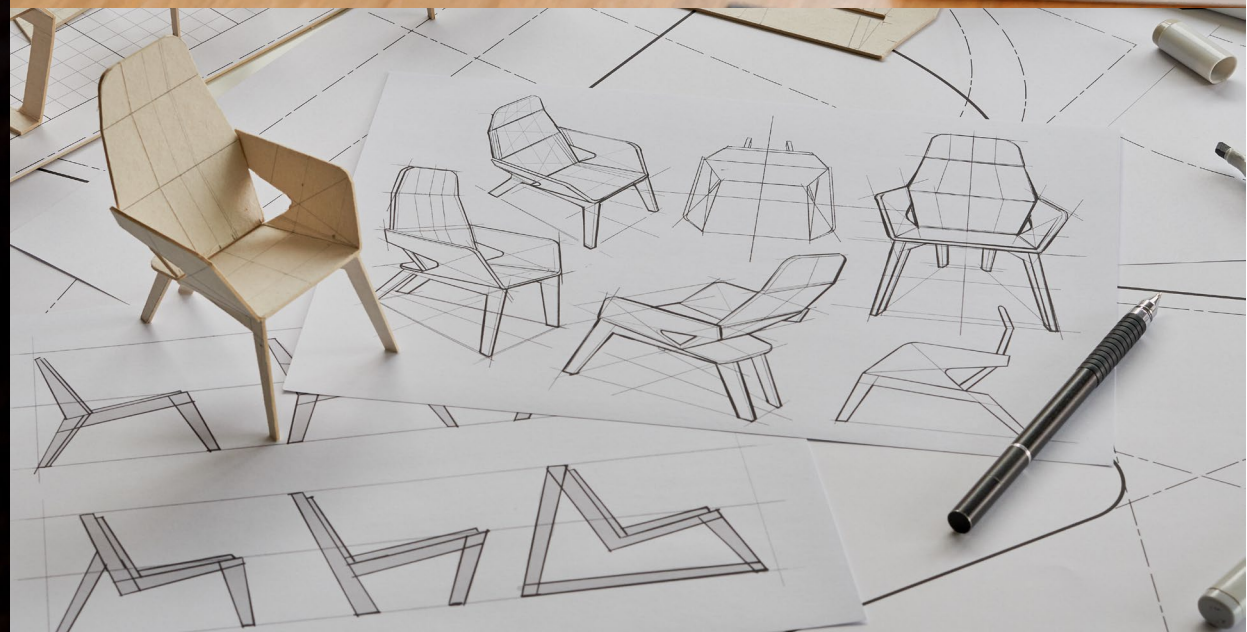
Test before you build!

Use prototypes, but don't overthink it!

- ④ Use simplified, incomplete models of the design
- ④ Explore many ideas
- ④ Elaborate requirements, refine specifications
- ④ Test functionality



Prototype examples



Take baby steps

Start with quick wins

- ④ **Quick wins are low effort, high impact changes to solve demonstrated issues**
- ④ **Identify how you'll measure impact**
 - What KPI's do you anticipate the change will impact? (Revenue, site visitors, mobile users, customer satisfaction, reduction in help desk calls, etc.)
- ④ **Observe and monitor**
 - How did the changes affect users' ability to complete tasks?
 - What is still an issue? Are there any new issues?
 - How have your KPI's been impacted?
- ④ **Revisit priorities!**

HCD Resources

HCD Resources

Organizations to check out

- ④ [Luma Institute](#)
- ④ [Neilsen Norman Group](#)
- ④ [W3.org](#)
- ④ [18F](#)
- ④ [Interaction Design Foundation](#)
- ④ [Digital.gov/usability](#)

Tools to use today!

- ④ [Eight Shapes color contrast checker](#)
- ④ [Hemingway Editor to check readability](#)
- ④ [Google Analytics to monitor trends](#)
- ④ [BrowserStack to see how it looks on different devices and browsers](#)
- ④ [Color blind simulator](#)

5 common (perceived) barriers to a usable website

AND TACKLING THEM USING HCD



**Our business is too complex and complicated to
have a website that works for everyone.**

HCD tames complexity

- ④ **Includes the perspectives of diverse audiences and stakeholders in an intentional and data-driven way**
 - Highlights the things that make user groups and tasks different so you can account for them in the design
- ④ **Evolves solutions through iterative cycles of design, test, and improve**
 - Necessary to get the right data and the right experience
- ④ **Reduces risk and uncertainty when there are high stakes or no proven design patterns to start with**
 - When the cost of making an error is high

We don't have the resources to do user research.

Start small to gain buy-in

④ **You probably already have data to start with!**

- Google analytics
- Social media posts and inquiries
- Contact form submissions
- Help desk phone calls or emails

④ **Show how using real data can improve the quality of products and efficiency of decision making**

④ **Describe your users so everyone has a shared understanding**

- Likely a siloed organization serving the same users
- Few people in the organization have visibility across the entire organization, so can't really understand the users' perspective

A VIP wants their content on the home page of your website, but so does everyone else!

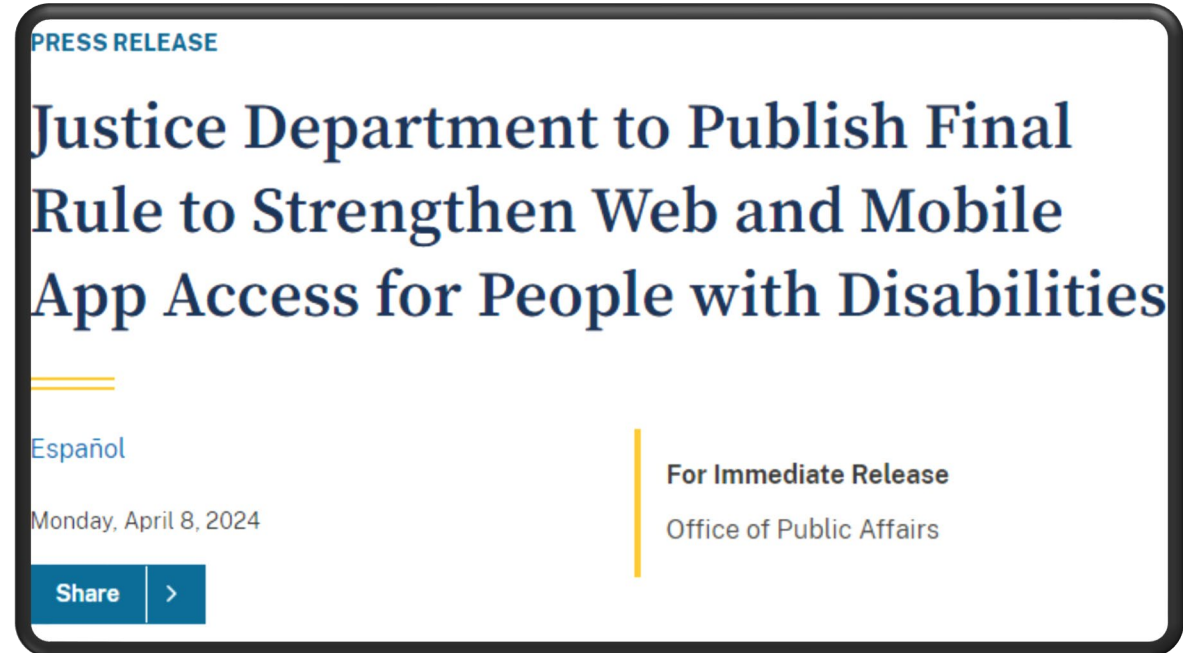
Validate (or decline) the request with data

- ④ **What user need does this solve? What task will it help them complete?**
 - Provide analytics on how people are accessing this information currently
 - Ask for data showing that this content is in-demand by users and should be prioritized over the content currently on the homepage
- ④ **If the homepage tries to meet everyone's needs, it will end up meeting no one's needs**

Our website is not compliant/accessible.

What does it mean to be compliant/accessible?

- ④ Title II of the Americans with Disabilities Act was updated April 24, 2024 to include specific requirements for web content and mobile apps
- ④ WCAG 2.1 Level AA is now the technical standard for state and local governments
 - Includes public schools, community colleges, and public universities
 - WCAG = Web Content Accessibility Guidelines
- ④ Have 2 years to comply with the new rule
- ④ Technical standards won't guarantee full accessibility



Compliance won't happen overnight

- ④ **Make sure you have clear contact information on your website for someone who needs information in an alternative format**
- ④ **Consider user needs to help prioritize what to fix first**
- ④ **Create a roadmap to tackle the rest**
- ④ **Test your site with users with disabilities to SHOW decision makers where you have opportunities for improvement**

Can't we just copy that other school's website?

Is that what you really want?

④ **You are unique!**

- HCD helps you figure out what to prioritize based on your users and your business goals
- Priorities differ across organizations; what will you optimize your experience for?

④ **Your users are unique!**

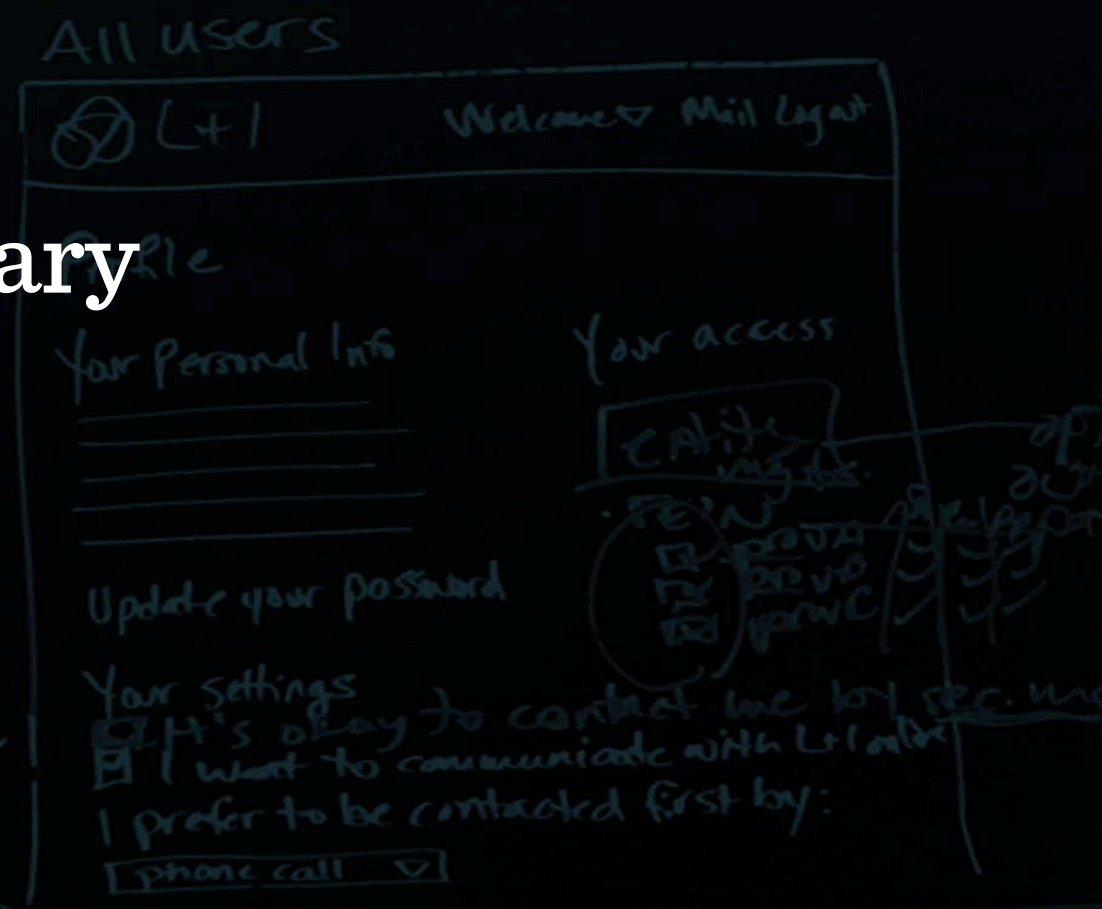
- If you copy someone else's site, you may miss the mark on serving your unique audiences and business

④ **Leverage best practices for usability and accessibility**

... utter choose which claim / acct msg is about
subscribe
pop up modal window if not subscribed
to related sub-entity * Also need to update related
shared mailbox settings
and location.

...nal users to set
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profile for all users
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(secmsg, letter)
Send vs.
receive

In Summary



How extensive
are these
settings?

Top takeaways from today!

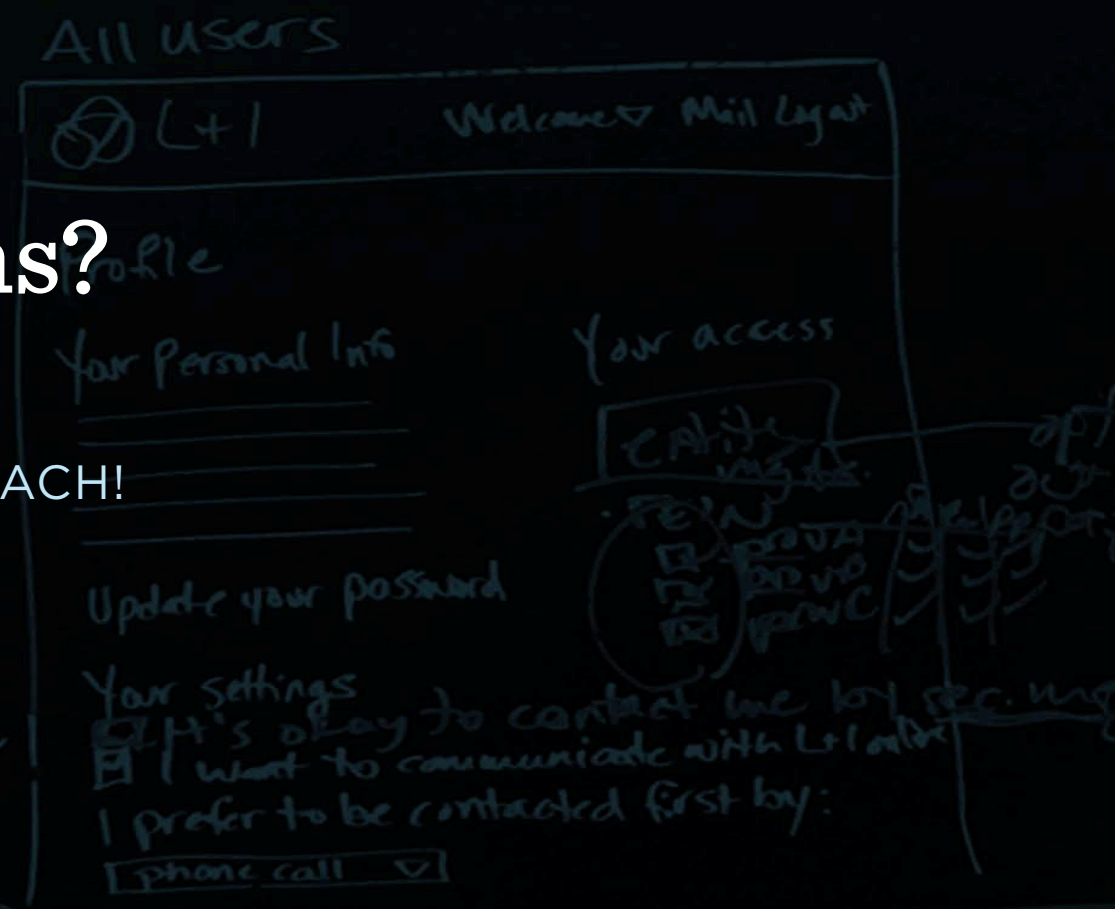
- ④ **Prioritize user needs**
- ④ **Start small**
- ④ **Talk to your users**
- ④ **Explore new solutions, be innovative!**
- ④ **Test before you build**
- ④ **Use what you learn**
- ④ **Do it again**

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Questions?

ASK AN HCD COACH!



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Thank you!

Thank You

Contact Us



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