

Usability Testing with PWD

A pre-conference workshop

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Agenda

- Why usability testing?
- Planning your usability test
 - What to test (creating tasks)
 - Who to include
 - When and where
 - Operational considerations
- Conducting your tests
 - In-person
 - Remote
- Analyzing your results



Course objectives

As a result of this course, you will be able to:

- Design a usability study
- Identify participants
- Create testable tasks
- Recruit participants (including PWD)
- Conduct a test
- Analyze your test results

Introduction to Usability testing

Who, what, why, when, where and HOW

What is usability testing?

Because personal computers are just too hard to use, and it isn't the users' fault

What usability is *not*

- Quality assurance
- Zero defects
- Utility of design features
- Intrinsic in products

These are items typically of concern for physical products

What usability is:

The official ISO 9241-11 definition of usability is: “the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.”

A usable interface has three main outcomes:

1. It should be **easy for the user to become familiar with and competent in** using the user interface during the *first* contact with the website
2. It should be **easy for users to achieve their objective** through using the website.
3. It should be **easy to recall the user interface and how to use it on subsequent visits..**

Types of Usability Tests

- In person vs. remote
- Moderated vs. unmoderated



Operational Considerations

- Time
- Budget
- Suitable accessible location
- Access to PWD



Planning your usability test

Step-by step exercises

Exercise #1

- Break into groups of four to five
- Introduce yourselves to the others in your group.
- Discuss your current projects
- Select one of those projects that might be a good prototype or product to test.

Usability Testing Checklist

- What is the purpose of the test?
- What are you going to test? What is the scope of the test?
- Who are you going to include?
 - Do you have defined personas?
 - Will you be testing PWD?
 - How many people will you test?
- What tasks will you test?
- What is the environment for the test?



What you are going to test?

- Look for a product or prototype that has tasks that are easily defined.
- Keep the selection to less than five pages
- Keep the task list to fewer than five tasks

Examples would include purchasing a pizza online and selecting size, crust, sauce and toppings, as well as how the pizza will be acquired (pick up, delivery etc)

Prior to Testing

Do a basic accessibility audit

- E.g., text alternatives, headings, contrast text resizing, keyboard access, visual focus, etc.
- See WAI Easy Checks

<https://www.w3.org/WAI/eval/preliminary>

How to Write Good Tasks

- Make it simple
 - “Select the red sweater in size medium”
 - Select “Buy Now”
- Make it complex
 - “Buy a sweater”



Simple Tasks: What You'll Learn

- Whether there's appropriate alt-text on images
- Whether the red sweater is identified by color alone
- Whether the size drop-down works with a screen reader and keyboard
- Whether the "Buy Now" button work with a screen reader and keyboard

Simple Tasks: Limitations

- May not identify the most important usability issues
- May not allow participant to experience the full interface

Complex Tasks: What You'll Learn

- Whether participants can buy the sweater
- What tasks to focus on in a moderated study

Complex Tasks: Limitations

- If participants can't buy the sweater, they may not be able to say why, and you may or may not be able to infer (particularly in a remote or unmoderated test).
- You may be limited in the number of tasks you can complete in a session.

Exercise #2

In your groups:

- discuss the tasks you want to include in your test
- create the tasks
- validate the tasks

Who will you ask to test the product?

- Who are the primary users for this product or service? Are there other types of users?
- How will you find / recruit your participants?
- What do you need to know about them before selecting / including them?
- Will your users expect compensation? What kind and how much?

Talk about personas

Discuss options for recruiting – including the Knowbility service

Screeners

What You Can and Can't Learn

- Identify usability issues, especially those faced by PWD
- Won't identify all accessibility issues, only those that are encountered when performing your tasks

When to Include PWD

- Before and/or after manual accessibility testing
- Prior to redesign
- During the iteration process—as design validation
- Whenever you do a usability test

Why Include PWD in Usability Testing

- Find accessibility issues
- Find usability issues exacerbated by disability
- Set priorities for redesign
- Make it read (human face)
- Certification or other requirement



Exercise #3

- Define your audience / personas
- Discuss the various characteristics you would look for in appropriate participants
- Create a screener
- Decide where you would recruit these participants
- Discuss payment for participation

Exercise #4

- Create the script for your usability test
- Practice your script with your team

Conducting your tests

Time for a little practice

Exercise #5

- Conduct your usability test with the various participants.
- Be sure to change roles, where you rotate out who will be the conductor, who will be the greeter, who will be the observers (have at least two)
- Debrief between sessions

Demo: remote usability testing

Talk about personas

Discuss options for recruiting – including the Knowbility service

Screeners

Analyzing your results

What did you find out?

Analysis

Quantitative:

- Time on task
- SUS (System Usability Scale)
- How often did you see the same problem?
- Problem severity ratings (0-4)

Qualitative:

- When were the participants uncomfortable?
- Did you see similar problems / responses?

Debrief

- **What did you learn from this process?**
- **How is testing with PWD different from traditional usability testing?**
- **How did their insights change the way you look at your website / product / service?**

Resources

- *Don't make me think* (2011) Steve Krug
- *Usability testing and research* (2002) Carol Barnum
- Just Ask <http://www.uiaccess.com/accessucd/>
- (from Shawn Henry-- a GREAT guide about usability testing and accessibility)
- Usability.Gov <http://usability.gov/templates/index.html>

AccessWorks

Online panel of people with disabilities

- Include people who are blind or have low vision, a physical impairment, hearing impairment, and/or cognitive impairment
- Includes people who use a variety of assistive devices, including screen readers, screen magnification software, alternative input devices, keyboard only, etc.
- Includes people with a variety of demographics and computer skills

AccessWorks Use Cases

- Remote unmoderated test
 - Loop11, UserZoom
- Remote moderated test
 - Zoom, WebEx, etc.
 - Anonymous or not
- In person moderated test
- Surveys

AccessWorks: How it Works

- Send email to access-works@knowbility.org with subject “Testing Platform Inquiry”
- Tell us your requirements and schedule
- Set up your test in Loop11 or UserZoom
- Collect data and report!

Your presenters

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