

Accessibility 101

You want me to do what?

Accessibility Defined



Usable by as many people with as many different abilities as possible.



Can I use this

- 1. ...with my mouse
- 2. ...without my mouse
- 3. ...without speakers or headphones
- 4. ...with my mobile phone
- 5. ...with my mobile phone in bright sunlight
- 6. ...with my assistive software
- 7. ...without help from someone else





Mouse users need



- 1. A simple logical workflow
- 2. Obvious indications of what they can click on
- 3. Things that are easy to hover over and click on
- 4. Clear instructions and prompts
- 5. Interactions that don't interrupt their workflow
- 6. Error indications and interactions that are simple to understand and interact with



Keyboard users need

- 1. A link that they can see that allows them to skip to what they need
- 2. A way to tell where they are
- 3. Predictable navigation with the tab key





Keyboard demonstration – importance of tab order

Mobile Users Need

Content that fits their screen
Controls that work by touch
Controls that are easy to use
Content that loads quickly
Content works inside and out





People with minor visual impairments need

- 1. Text that can be made bigger.
- 2. Good contrast.
- 3. Ability to hide images without loosing information





Demonstration of browser magnification and high contrast settings

People who use screen magnifiers need

1. Content that is easy to find

- 2. Content that's easy to read
- 3. Content that reflows properly





WOWSlider.com

People who use screen reading software need

- 1. Code that tells the software what something is.
- 2. Code that tells the software what something does.
- 3. Ways to identify things that don't depend on shape, position or color.





Screen reader demo

People who use text to speech software need

1. The computer to call things the same thing that they do.





Dragon demo

People with cognitive disabilities need.

- 1. Well organized content
- 2. Easily understood language
- 3. No surprises
- 4. Clear steps



Compare with what anyone needs

Health and Human Services

Things to think of

- 1. Does it need to be this hard?
- 2. Who is making mistakes and why?
- 3. What information do we need?
- 4. What decisions need to be made and by who?





Development Challenges



- 1. Applications and websites are not static
- 2. Business and funding landscapes are continually shifting
- 3. Deadlines and priorities change constantly

Can anyone name more

Health and Human Services

Sprint Cycle Process





Details of functionality need to include:

Keyboard interaction without a mouse

Logical flow through the system. Can staff move from one field to the next using the

tab key or do they need to jump around?

Is the text used for instruction and prompts clear and easy for inexperienced staff to understand?

If fields are only active if certain actions are taken – why do we see them? Is operation efficient?



Ideal user stories

Specify how users with different abilities will interact with the interface.

Any mouse actions require an equivalent keyboard action.

Create success criteria that will measure success for each type of user who will interact

with the interface

Mouse users

Keyboard users

Mobile users

AT users

Discovery/Sprint Planning





Functional requirements are different than interface design. Business value of accessibility Legal compliance (ADA, Rehab Act, TAC) Employee retention Hiring opportunities

Release Readiness



Functionality details must include validation of accessibility – at a minimum they must include keyboard functionality.

EXAS

Health and Human Services

Acceptance Criteria

- 1. Development teams must document accessibility test results
 - a. Automated/WAVE results
 - b. Keyboard functional testing
 - c. Screen reader testing (work closely with the CRO EIR Accessibility Team here)



Testing demonstration

Health and Human Services



Examples

Easy Accessibility



Headings and Lists

SNAP

What it offers

Helps people buy the food they need for good health. People also can buy garden seeds with SNAP benefits.

SNAP food benefits are put on to the Lone Star Card and can be used just like a credit card at any store that accepts SNAP.

SNAP can't be used to:

- Buy tobacco.
- Buy alcoholic drinks.
- Buy things you can't eat or drink.
- Pay for food bills you owe.



Simple Tables

Maximum monthly income limits		
Family size	Monthly amount of income allowed	
1	\$1,659	
2	\$2,233	
3	\$2,808	
4	\$3,383	
5	\$3,958	
For each additional person, add:	\$575	



Present examples here

Simple Form Fields

	Client	applied	for	Food	Stamp	s
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• EDG
◯ Non Financial
OResource
◯ Financial
\bigcirc EDBC (Non Financial, Resource, Financial)

NO 🗸

Select Process

Non - Texas Disaster County/Parish:







Examples

Slightly Harder



Tabbed Interfaces

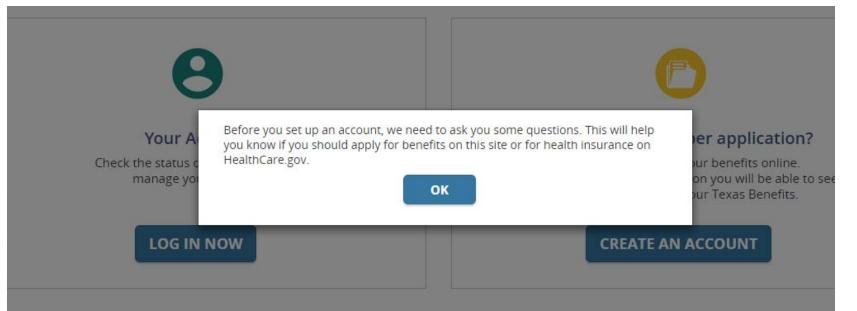
Learn About benefit programs Apply For new benefits Manage Your account or applications



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Demonstration

Modal Dialogs





Accordions

Online Training

 Introduction to Electronic and Information Resources (EIR) Accessibility Course

Note: This training course is only available to HHS staff.

In this course, you will learn the following:

- What accessibility is and why it's important.
- How people with disabilities access electronic information and benefit from accessibility.
- What accessibility laws have been passed and what they require.
- How you can make your own workplace accessible.

To take the Introduction to Electronic and Information Resources (EIR) Accessibility & course, log into System Training Solutions (STS) with your employee ID number and agency's name (HHSC or DSHS). Upon successful completion of this course, you will receive a certificate of completion.

- Microsoft Office 2013 and 2016 Online Training
- Basic Web Accessibility Tutorial

https://accessibility.hhs.texas.gov/training.htm



Complex Menu

Accessible Mega Menu Test Page

This example menu use Adobe's open source Accessible Mega Menu. For an explanation see my

	About	Academics	Admissions	Visitors
To exit the menu, press tab a	A	ccessibility		Leadership
	Admissions			Mission Statement
	D	iversity		Research
	Governance			Teaching



http://terrillthompson.com/tests/menus/accessible-mega-menu/test.html

Navigation Tree





Complex Tables

EXAMPLE:					
	Mars		Venus		
	Produced	Sold	Produced	Sold	
Teddy Bears	50,000	30,000	100,000	80,000	
Board Games	10,000	5,000	12,000	9,000	



https://www.w3.org/WAI/tutorials/tables/irregular/

Editable Tables

Example 2: Sortable Data Grid With Editable Cells

Transactions January 1 through January 7

Date 🔺	Туре	Description	Category	Amount	Balance
01-Jan- 16	Deposit	Cash Deposit	Income	\$1,000,000.00	\$1,000,000.00
02-Jan- 16	Debit	Down Town Grocery	Groceries	\$250.00	\$999,750.00
03-Jan- 16	Debit	Hot Coffee	Dining Out	\$9.00	\$999,741.00
04-Jan- 16	Debit	The Filling Station	Auto	\$88.00	\$999,653.00
05-Jan- 16	Debit	Tinker's Hardware	Household	\$3,421.00	\$996,232.00
06-Jan- 16	Debit	Cutey's Salon	Beauty	\$700.00	\$995,532.00
07-Jan- 16	Debit	My Chocolate Shop	Dining Out	\$41.00	\$995,491.00



Examples

Very Difficult



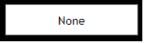


Drag and Drop

Favourite Artists

Art Brut
Babyshambles
Flo Rida
Kasabian
Reverend and the Makers
ХТС

Tolerable Artists



Rejected Artists



https://dev.opera.com/articles/accessible-drag-and-drop/example.html

TEXAS Health and Human

Services







https://codepen.io/ericwinton/pen/XjdNyY/





