

Accessible Web

**Thanks to Scott Williams at the UM Office for Institutional
Equity for his materials
<http://umich.edu/webaccess/>**

Goals

- **Learn what a web accessibility professional does**
- **Understand how disabilities relate to the web**
- **Introduce the four principles of accessible interface design**

What does a “web accessibility coordinator” do?

- **Helps guide policy and purchasing decisions**
- **Evaluates web interfaces for accessibility**
- **Assists those with disabilities to access online infrastructure**
- **Keep pace with changing technology**

1 in 5 People Have a Disability

- **There are 60 million people with disabilities in the U.S.**
 - **Half are impeded using the internet**
- **Visual Issues**
- **Hearing Issues**
- **Motor Issues**
- **Cognitive Issues**

Visual Disabilities

- **Blindness, low-vision, color-blindness**
- **8 million have difficulty reading ordinary newsprint (even with glasses)**
 - **1.8 million are completely blind**
- **How is your font-size, color-contrast, font-style?**

Hearing Disabilities

- **Partial to total deafness**
- **8 million have difficulty hearing a normal conversation**
 - **1 million are completely deaf**
- **Do your videos include closed-captioning? Are you blaring music?**

Motor Disabilities

- **Inability to use a mouse or physical keyboard, slow response time, limited fine motor control**
- **Dexterity issues—8 million Americans have difficulty using their arms or hands**
- **What happens when someone tries to “tab” through your page? Do you require a steady hand?**

Cognitive Disabilities

- **Learning disabilities, distractibility, dyslexia, inability to remember or focus on large amounts of information**
- **Adults with ADD/ADHD: 16 million**
- **38% of soldiers, 31% of Marines and 49% of National Guard members returning from combat report psychological conditions such as TBI and PTSD**
- **Cognitive disabilities number greater than physical and perceptual disabilities combined**

More Stats

- **8.3% of the U.S. population have 2 or more disabilities**
- **40,000 people the in U.S are both deaf and blind**
- **41 percent of adults 65 and older have a disability**
- **8.7 million people with disabilities are poor**
- **70% of disabled are unemployed or underemployed**

The web offers unprecedented opportunities for disabled

- **Education**
- **News**
- **Commerce**
- **Social**
- **Benefits of web are amplified for disabled!!**
- **Web is an enabling technology**

Legal

- **DOJ is in the process of revising Title II and III of the ADA to include online resources of state and local entities**
- **Case law—individuals or entities can file civil rights complaints, e.g., Penn State, NYU, Northwestern, FSU, Target, Southwest Airlines, Priceline.com, Ramada, Kindle, etc.**

What is web accessibility?

- Making the web accessible for the *widest possible audience*
- This audience includes Temporarily Able-Bodied users (TABs)
- Currently, online infrastructure is *hostile* to those with disabilities
- Inseparable from SEO, mobile, and usability: improve one and you improve the others
- *Best way to accomplish accessibility? Adherence to standards.*

W3C WCAG 2.0

- W3C Web Content Accessibility Guidelines are principle-, not technology-based
- The four principles (POUR):
 - Perceivable
 - Operable
 - Understandable
 - Robust

가장한 수준이 아닌 4가지 원칙 준수
→ 접근성 ↑

Review

- **Designing with accessibility in mind** is the right thing to do for many reasons
- **Adhering to standards** (not flashy, cool effects) **is key**
- **Pay special attention to the semantics** behind the HTML5 tags

Acknowledgements/Contributions

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