



THE WEB WE MAKE

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SEATTLE PHP

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WHAT IS THE WEB?

GLOBAL INFORMATION SYSTEM

- ▶ Communications
- ▶ Publishing
- ▶ Distribution

WHAT IT DOES

- ▶ Expands your world
- ▶ Provides opportunity
- ▶ Access to resources
- ▶ How we participate in modern society

WHY WE MAKE THE WEB

- ▶ We make the web for people
- ▶ We create solutions
- ▶ We share what we know
- ▶ It connects all of us
- ▶ It's our job

ACCESSIBILITY

**ACCESSIBLE WEBSITES
BENEFIT EVERYONE, NOT JUST
THOSE WITH DISABILITIES.**

United Nations
<http://www.un.org/webaccessibility/>

P.O.U.R. — THE PRINCIPLES OF ACCESSIBILITY

- ▶ Perceivable
- ▶ Operable
- ▶ Understandable
- ▶ Robust

<http://webaim.org/articles/pour/>

PERCEIVABLE

3 SENSES FOR PERCEIVING CONTENT

- ▶ Sight
- ▶ Sound
- ▶ Touch

PERCEIVABLE SOLUTIONS

- ▶ Provide text alternatives for non-text content.
- ▶ Provide captions and alternatives for audio and video content.
- ▶ Make content adaptable; and make it available to assistive technologies.
- ▶ Use sufficient contrast to make things easy to see and hear.

OPERABLE

OPERABLE SOLUTIONS

- ▶ Make all functionality keyboard accessible.
- ▶ Give users enough time to read and use content.
- ▶ Do not use content that causes seizures.
- ▶ Help users navigate and find content.

UNDERSTANDABLE

UNDERSTANDABLE SOLUTIONS

- ▶ Write your text in easy to understand language.
- ▶ Make content appear and operate in predictable ways.
- ▶ Help users avoid and correct mistakes.

**I LOOKED THROUGH IT, BUT THE
ONLY THING I UNDERSTOOD
WERE THE COMMAS**

**Buffy Summers
Season 3 Episode 21**

ROBUST

ROBUST SOLUTIONS

- ▶ Maximize compatibility with current and future technologies
- ▶ Write content using semantic HTML
- ▶ Keep CSS and JS separate
- ▶ Tab index, Alt Text, Buttons

**BE CONSERVATIVE IN WHAT
YOU SEND, AND LIBERAL IN
WHAT YOU ACCEPT**

Postel's Law

FOUR ABILITIES

- ▶ Sight
- ▶ Sound
- ▶ Cognitive
- ▶ Motor

SIGHT

VISUAL DISABILITIES

- ▶ Blind - total loss of sight
- ▶ Color blind – inability to distinguish certain colors
 - ▶ Red / Green most common: 8%
- ▶ Low Vision – need to zoom

SOUND

HEARING (AURAL) DISABILITIES

- ▶ Degrees of Hearing Loss
 - ▶ Mild, Moderate, Severe, Profound
- ▶ Hard of Hearing

COGNITIVE

PERCEPTION AND ACUITY

COGNITIVE DISABILITIES

- ▶ Memory
- ▶ Problem Solving
- ▶ Attention
- ▶ Reading, Linguistic, and Verbal Comprehension
- ▶ Math Comprehension
- ▶ Visual Comprehension

MOTOR

TOUCH AND PHYSICAL CONTROL

MOTOR DISABILITIES

- ▶ Spinal Cord Injury
- ▶ Damage or Loss of Limb
- ▶ Multiple Sclerosis
- ▶ Arthritis
- ▶ Parkinson's Disease
- ▶ Muscular Dystrophy

SO WHAT?

WHY DOES IT MATTER?

WHY DOES IT MATTER?

- ▶ Legislation Requires It
- ▶ Better Backward Compatibility
- ▶ Better Future Friendliness
- ▶ Website is more robust and fault tolerant

STATUS CAN CHANGE

- ▶ Age
- ▶ Repetition
- ▶ Accidents
- ▶ Disease





MORE THAN DISABILITY

MORE THAN JUST DISABILITY

Accessibility is the intersection of people, devices, and circumstances.

A website can be inaccessible to anyone.

LACK OF VISUAL CONTRAST

- ▶ White on Gray
- ▶ Projected Presentations

TYPOGRAPHY

- ▶ Font Size is too small
- ▶ Poor Font choices
 - ▶ A Middle English choice for article text
 - ▶ Sans serif font for code example

USABILITY

- ▶ Menus that require hover on mobile devices
- ▶ Hit area is too small for your finger
- ▶ Cannot navigate by keyboard

SITUATIONAL

- ▶ You're wearing headphones
- ▶ You broke your wrist
- ▶ Computer Screen in Sunlight

IT'S HARDER WITH A DISABILITY

Every combination of factors that makes it hard to you to use a website, makes it at least twice as hard for someone who has a disability.

PROGRESSIVE ENHANCEMENT

PHILOSOPHY

- ▶ Start with a strong, common foundation
- ▶ Feature Detection
- ▶ Enhance!

**IT'S NOT ABOUT WORKING TO THE
LOWEST COMMON DENOMINATOR.
IT'S ABOUT STARTING THERE**

Jeremy Keith

LAYERED APPROACH

- ▶ Content - Contained in markup
- ▶ Presentation - CSS Determines the site appearance
- ▶ Behavior - JS Augment and add features

VALUE OF PROGRESSIVE ENHANCEMENT

- ▶ Lets browser deliver its best experience
- ▶ Creates more robust solution
- ▶ Fault Tolerant
- ▶ Doesn't expect sites to look the same in every browser
- ▶ Prevents "Looks best in ..." problem

FAULT TOLERANT

- ▶ Browsers don't fail on:
 - ▶ Unknown HTML tags
 - ▶ Unknown CSS Selectors or Rules
- ▶ Unobtrusive Javascript
- ▶ Feature Detection

FOUNDATION

- ▶ Accessibility
- ▶ Responsive Design
- ▶ New Features
- ▶ Backwards Compatibility

ETHOS

WHY AM I TELLING YOU THIS

- ▶ We are the builders of the web
- ▶ Designers are important – We need them
- ▶ Your code is important

WE ARE PHP

- ▶ 80% of the web runs PHP
- ▶ We can have a significant impact
- ▶ PHP Native Templates

PHP Usage Stats: bit.ly/1B6GJRL

THANK YOU

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@awoods



RESOURCES

- ▶ The Web Ahead - <http://thewebahead.net/>
- ▶ A List Apart - <http://www.alistapart.com/>
- ▶ UN Accessibility Guidelines - bit.ly/1PV51TJ
- ▶ Simply Accessible - <http://simplyaccessible.com/articles/>