

Creating Accessible Web Sites

CDT751

Making Web sites accessible to people with disabilities is important for legal, ethical and practical reasons. This course provides all that you need to know about Web accessibility, whether you are a Web designer or developer who wants your sites to be accessible, or a manager who wants to know the impact that the Web accessibility laws will have on your Web sites.

Audience

- Web designers and developers who want to create accessible products
- Managers who need to monitor compliance with Web accessibility laws and guidelines

Prerequisites

- CDT750, HTML/XHTML Web Page Programming with CSS

Course Length

- Two days

Learning Objectives

- Understand what Web accessibility is and is not.
- Identify applicable Web design guidelines and laws that address accessibility.
- Identify assistive technologies for the Web.
- Understand the use of screen readers and assistive browsers in making the Web accessible.
- Understand the Web accessibility guidelines for content, navigation, data input, CSS, JavaScript, Flash, and PDF.
- Identify both manual and automated methods of testing accessibility.
- Understand the guidelines that make up WCAG 2.0.

Teaching Methods

- Lecture
- Hands-on exercises
- Case study

Course Outline

TG5

Introduction

- Understanding Web Accessibility
- Overview of Law and Guidelines

Overview of Accessible Technologies

- HTML & XHTML
- CSS
- JavaScript
- Flash
- PDF
- SMIL
- QuickTime, Windows Media, and RealPlayer
- SVG
- Java
- XML and XSL

Assistive Technology: Screen Readers and Browsers

- Screen Readers
- Talking and Text-Only Browsers
- Screen Magnification
- Browser Checks of Website Accessibility

Accessible Content

- Guidelines: WCAG 1.0 & WCAG 2.0
- Using Text Equivalents for Images
- Using Text Equivalents for Audio
- Using Color
- Creating Accessible Tables
- Flicker Issues

Accessible Navigation

- Navigation Considerations
- Reading Order
- Heading Navigation
- Skip Navigation Links

- Accessible Image Maps
- Layout and Navigation
- Accessible Links

Accessible Data Input

- Guidelines for Data Input Forms
- Accessible Forms
- Mandatory Fields, Errors, and Help for Forms
- PDF Forms
- Accessibility of Forms for People Who Are Deaf
- Timed Responses

CSS for Accessible Web Pages

- How Style Sheets Benefit Accessibility
- CSS Basics
- Color and Backgrounds
- Text and Fonts
- Image Replacement Techniques
- Layout and Positioning
- Alternative Style Sheets
- Non-Screen Media
- Testing and Validation

Accessible JavaScript

- The JavaScript Saga
- Why JavaScript Has a Bad Reputation
- JavaScript Considerations
- Unobtrusive JavaScript
- Accessible Forms and JavaScript

Accessible Flash

- User Requirements
- Technical Requirements
- Key Concepts for Accessible Flash Design
- Flash Accessibility Best Practices

PDF Accessibility

- Accessibility Features in Adobe Reader
- Tagged PDFs
- Accessibility Repair and Optimization
- Accessible PDF Forms

Accessibility Testing

- What Testing Is Possible?
- Accessibility Checking Software
- The Test File Set and Results

Introduction to WCAG 2.0

- Standards vs. Guidelines
- WCAG 2.0 From 50,000 Feet
- What's in WCAG 2.0
- Example of Using WCAG 2.0 Guidelines
- Section 508 and WCAG

Retrofitting Case Study

- The Original Site
- The Redesign
- Does the Design Solve the Original Problems?
- Problems Along the Way – Lessons Learned
- The Implementation of the New Design

