

CIW Site Designer Series Course: Design Methodology and Technology (Adobe CS4 Web Edition) v9.0



Design Methodology and Technology teaches you how to design and publish Web sites. General topics include Web Site Development Essentials (such as the site development process, customer expectations, and ethical and legal issues in Web development), Web Design Elements (such as aesthetics, the site user's experience, navigation, usability and accessibility), Basic Web Technologies (such as basic Hypertext Markup Language [HTML], Extensible HTML [XHTML] and extended technologies, image files, GUI site development applications, site publishing and maintenance) and Advanced Web Technologies (such as multimedia and plug-in technologies, client-side and server-side technologies, and Web databases).

In this course, you will work with popular production tools such as Microsoft Expression Web, and Adobe Dreamweaver and Flash. You will study design and development technologies such as Cascading Style Sheets (CSS), Extensible Markup Language (XML), JavaScript, Java applets, Dynamic HTML, plug-ins, multimedia and databases. You will also explore the extensibility of design tools, incompatibility issues surrounding these tools, and the functionality of current Web browsers.

Topics

Overview of Web Design Concepts

- Web Technology
- The Nature of the Web
- Web Design Concepts
- New Technologies
- Evaluating Your XHTML Skills

Web Development Teams

- Web Teams and Tasks
- Web Project Management
- Web Project Collaboration
- Your Web Design Portfolio
- Your Web Design Business

Web Project Management Fundamentals

- Web Project Management Phases
- Project Documentation and Communication

Web Site Development Process

- Bottom-Up Approach to Web Development
- Understanding the Business Process
- Defining a Web Site Vision
- From Vision to Strategy
- Web Site Specifications
- The Metaphor
- Mystery Meat Navigation
- The Mindmapping Process
- Creating a Web Site Wireframe
- Creating a Web Page Wireframe

Web Page Layout and Elements

- Web Users and Site Design
- Effective Web Page Layout
- Branding and the Web
- Color and Web Design
- Fonts and Web Design

Web Site Usability and Accessibility

- Audience Usability and Accessibility
- Defining Usability
- Web Site Usability Testing
- Web Page Accessibility

Browsers

- Browsers and Navigation
- Browsers and Design Considerations
- Browser Adoption
- Major, Minor and Alternative Browsers
- Creating Aliases with TinyURL
- Utilizing CAPTCHA

Navigation Concepts

- Why Is Navigation Critical?
- Primary and Secondary Navigation
- Navigation Hierarchy
- Site Structure, URLs and File Names
- Familiar Navigation Conventions
- Guided Navigation
- Navigation Action Plan

Web Graphics

- Web Site Images
- Digital Imaging Concepts
- Raster vs. Vector Graphics
- Graphics Applications
- Image File Formats
- Creating and Optimizing Images
- Essential Graphic Design Concepts

Multimedia and the Web

- Multimedia and Web Sites
- Current Multimedia Capabilities
- Animation and the Web
- Audio and the Web
- Video and the Web
- Goals of a Multimedia Site
- Multimedia Site Design Basics
- User Interaction
- Selecting Multimedia Elements

Ethical and Legal Issues in Web Development

- Ethics and Law in Web Development
- Ethical Issues and the Web
- Legal Issues and the Web

HTML and the Evolution of Markup

- Function of Markup Languages
- SGML: A Short History
- What Is HTML?
- HTML Goals
- The HTML Standard

HTML 1.0 and 2.0
 HTML 3.0 and 3.2
 HTML 4.0 and 4.01
 Separating Format from
 Structure in HTML
 Extensible HTML (XHTML)
 Reference Sites for Web
 Developers

XML and XHTML

What Is XML?
 XML Goals
 What Is an XML Document?
 Rules for Well-Formed XML
 HTML Transition to XML
 What Is XHTML?
 Applying a Single Standard
 Consistently

Web Page Structure — Tables and Framesets

Creating Structure with
 X/HTML Tables
 Diagramming a Basic
 X/HTML Table
 Borderless Web Page
 Structure
 X/HTML Frames and
 Framesets
 The X/HTML <frameset> Tag
 The X/HTML <frame> Tag
 Targeting Hyperlinks in
 X/HTML
 The X/HTML <noframes> Tag

Cascading Style Sheets

Style Sheets
 Cascading Style Sheets
 Defining and Using Styles
 Changeable Style Attributes
 Style Guides
 Changes from CSS1 to CSS2
 Page Layout with CSS
 The CSS Box Model
 Document Flow and
 Positioning
 CSS Positioning Schemes

Site Content and Metadata

Written Web Site Content
 Internet Marketing and
 Search Engine
 Optimization (SEO)
 Metadata
 The <meta> Tag and
 Document Identification
 The <meta> Tag and Search
 Engines
 The <meta> Tag and Delayed
 File Change

Site Development with Microsoft Expression Web 2 — Introduction

The Transition from
 FrontPage
 Microsoft Expression Web 2
 Expression Web Views
 Expression Web Menus and
 Toolbars
 Opening Web Sites and Files
 in Expression Web
 Developing W3C-Compliant
 Code with Expression Web

Site Development with Expression Web 2 — Basic Features

Page Layout Options in
 Expression Web
 Creating a New Web Site
 Using Expression Web
 Page Layout with CSS
 Inserting Images with
 Expression Web
 Creating Hyperlinks with
 Expression Web
 Creating Image Maps with
 Expression Web
 Creating Navigation Bars
 Using CSS
 Expression Web's Dynamic
 Web Templates
 Pasting Formatted Text with
 Expression Web
 Pasting X/HTML content
 with Expression Web

Site Development with Expression Web 2 — Advanced Features

Expression Web Styles
 Adding Interactivity to Web
 Pages
 Creating Web Forms with
 Expression Web
 Connecting to Databases
 Expression Web Reports
 Options for Replacing Old
 Webbots

Site Development with Adobe Dreamweaver CS4 — Introduction

Adobe Dreamweaver CS4
 Dreamweaver Layout Options

Site Development with Dreamweaver CS4 — Basic Features

Page Layout in Dreamweaver
 Creating Image Maps in
 Dreamweaver
 Creating Templates in
 Dreamweaver

Importing Content in
 Dreamweaver

Site Development with Dreamweaver CS4 — Advanced Features

Rollover Images in
 Dreamweaver
 Dreamweaver Web Forms
 Dreamweaver Behaviors
 Dreamweaver Assets and
 Library
 Editing X/HTML in
 Dreamweaver
 Jump Menus in
 Dreamweaver
 Site Search Forms in
 Dreamweaver
 Adobe Exchange

Creating Web Pages Using Open-Source Tools

Open-Source GUI Editors
 GUI HTML Editors vs. Text
 Editors
 Open-Source Text Editors
 Creating a Static Web Page
 Using Templates
 Checking Spelling

Image Editing with Adobe Fireworks CS4

Adobe Fireworks CS4
 Creating an Image Document
 in Fireworks
 Adding Text to Images in
 Fireworks
 Cropping Images in
 Fireworks
 Image Layers in Fireworks
 Image States in Fireworks
 Transparent Images in
 Fireworks
 Image Slices in Fireworks

Multimedia with Adobe Flash CS4

Adobe Flash CS4
 Flash Technology Features
 Developing with Flash
 Flash Shapes
 Color and Fills in Flash

Multimedia with Flash CS4 — Timeline, Layers, Symbols and Buttons

Flash Timeline
 Flash Layers
 Saving and Publishing Flash
 Movies
 Flash Symbols
 Flash Buttons
 Customizing the Flash
 Library

Multimedia with Flash CS4 — Tweens

Flash Tweens
Motion Tweens in Flash
Shape Tweens in Flash
Tweening Text in Flash

Multimedia with Flash CS4 — Movie Clips

Flash Movie Clips
Adding Sound to Flash Files
Adding Flash Movies to
X/HTML Files
Testing for the Flash Plug-In

Multimedia with Flash CS4 — ActionScript, Masks and Practical Uses

Flash ActionScript
Mask Layers in Flash
Using SWF and SVG Files on
the Web
Flash and Accessibility

JavaScript and DHTML Fundamentals

Why Script?
JavaScript and Common
Programming Concepts
What Is JavaScript?
JavaScript vs. Other
Languages
Embedding JavaScript into
X/HTML

Using JavaScript to
Communicate with the
User
JavaScript Functions
Using JavaScript for Browser
Detection
Dynamic HTML (DHTML)

Plug-Ins and Java Applets

Plug-In Technology
Plug-In Installation
Adobe Shockwave and Flash
Players
Adobe Reader
RealNetworks RealPlayer
Rich Media Content
Creating a Downloadable File
Introduction to Java
Java Applets
Applets and Animation
Applet Authoring Tools and
Resources

HTTP Servers and Web Applications

What Is an HTTP Server?
Accessing Servers and
Services
Basic HTTP Server
Administration
Server-Side Technologies
Web Servers and Cookies
Enabling, Disabling and
Deleting Cookies

Setting Cookie Files
XML and Web Applications
Syndicated Feeds

Databases

Web Design and Databases
Database Anatomy
Database Queries
Database Management
System (DBMS)
Connecting Web Pages to
Databases
Database Tools, Products
and Programs

Web Site Publishing and Maintenance

Web Site Testing
Web Site Publishing
Web Site Hosting
Web Publishing with an FTP
Client
Web Publishing with
Expression Web
Web Publishing with
Dreamweaver
Comparing Web Publishing
Tools
Maintaining Web Sites
Web Server and Web Site
Security

Target Audience

Web authors, marketing and communications professionals, PR professionals, Webmasters, graphic designers, desktop designers, technical writers, and library scientists.

Job Responsibilities

Implement and maintain hypertext -based Web sites using authoring and scripting languages; create Web content; use Web management tools and digital media tools; and apply human-factor principles to design.

Prerequisites

Prior to taking this course, students should complete the CIW v5 Foundations series of courses or be able to demonstrate equivalent Internet and X/HTML knowledge.