

CIWv5 Foundations Series

Site Development Foundations v2.0



Site Development Foundations teaches you essential Web page development skills. You will learn to develop Web sites using Hypertext Markup Language (HTML) and Extensible HTML (XHTML). You will learn to write code manually, as well as use graphical user interface (GUI) authoring tools. You will also learn to insert images, create hyperlinks, and add tables, forms and frames to your Web pages.

In addition to learning about XHTML and HTML coding, you will learn about CGI and use it to connect Web pages to databases. Other topics include validating your XHTML code, recognizing the importance of Internet marketing and search engine optimization, using style sheets to format Web page content, and implementing fundamental design concepts. Throughout the course, you will learn how Web sites are developed as managed projects. You will also identify e-commerce solutions and relate Web site development to business goals.

Site Development Foundations provides an introduction to tasks, job roles and careers in Web development. This course will teach you to work as a productive part of a Web site development team. Hands-on labs include real-world scenarios based on a previously live version of the Habitat For Humanity site. Note that students will build prototype pages using Habitat For Humanity content. This content is provided by Habitat For Humanity with permission to use it in labs teaching site development skills. The prototype pages that students build do not necessarily represent, duplicate or simulate the current live Habitat For Humanity Web site, which can be visited at www.habitat.org.

Topics

Introduction to Web Site Development

- Developing a Business Web Site
- Creating Web Pages
- Text Editors and Markup Languages
- Graphical User Interface (GUI) Editors
- Front-End Issues
- Back-End Issues
- The Habitat For Humanity Web Site

Markup Language and Site Development Essentials

- History of Markup Languages
- Web Site Development Principles

XHTML Coding

- Introduction to Using XHTML Markup Tags
- Document Structure Tags
- Web Site File Structure
- Preparing Your Development Environment
- Style Sheets
- Paragraph Formatting and Block-Level Elements
- Text-Level Elements
- Lists
- Good Coding Practice

Horizontal Rules and Graphical Elements

- Horizontal Rules in XHTML
- Images in Web Pages
- Special Characters

- Specifying Colors
- Page Colors and Backgrounds
- Specifying Font Information
- Web Design Issues

Hyperlinks

- Introduction to Hyperlinks
- The Anchor Tag
- Creating Local Hyperlinks
- Creating External Hyperlinks
- Using Images as Hyperlinks
- Creating Internal Links
- Managing Hyperlinks

HTML Tables

- Introduction to HTML Tables
- Table and Data Alignment Options
- Height and Width of Table Elements
- Column and Row Spanning
- Formatting Content in Tables

Web Forms

- Introduction to Web Forms
- Web Forms and CGI
- Basic Tags for Creating Web Forms
- Web Form Fields

Image Techniques

- Introduction to Web Image Techniques
- Image Maps
- Image Transparency
- Image Interlacing
- Animation
- Creating and Managing Images

HTML Frames

- Introduction to XHTML Frames
- The <frameset> Tag
- The <frame> Tag
- The Frameset Document
- The <noframes> Tag
- Targeting Frames with Hyperlinks
- Specifying a Base Target
- Borders, Margins and Scrolling
- Inline Frames
- Appropriate Use of Frames
- Frames and Search Engine Optimization

GUI HTML Editors

- Introduction to GUI HTML Editors
- Types of GUI Editors
- GUI HTML Editor Functionality
- Creating Web Pages with a GUI Editor
- HTML Text Editors vs. GUI Editors
- Previewing Pages and Validating Code
- Web Site Publishing

Advanced Web Technologies

- Extending HTML
- Server-Side and Client-Side Languages
- Server-Side Languages
- Client-Side Languages
- Connecting to a Database
- Styling Techniques with CSS
- Dynamic HTML (DHTML)
- Document Object Model (DOM)

Developing Web Pages for PDAs and Smart Clients
Web Application Frameworks
Creating Aliases with TinyURL
Working with Advanced Web Technologies
Hosting and Web Service Providers

E-Commerce Practices
Traditional Commerce vs. E-Commerce
E-Commerce Models
Business and Internet Technologies
Internet Marketing and Search Engine Optimization (SEO)

E-Commerce Information-Formatting Technologies
E-Commerce Payment Technologies
Working in a Global Environment

Target Audience

All professionals required to use the Internet in their daily job functions. Information in this course is required for all levels of specialization in the CIW program.

Job Responsibilities

Understand the common core of Internet knowledge, and apply the foundation skills required for further specialization.

Prerequisites

No prior experience using the Internet, developing Web pages or configuring networks is necessary. However, students should be familiar with an operating system such as Microsoft Windows XP before taking this course. The CIW Foundations courseware does not provide entry-level computer literacy. Rather, it builds upon computer literacy training and certifications such as Microsoft Office Specialist (www.microsoft.com) and IC³ (www.certiport.net).