

Web Foundations Series

Site Development Associate



Site Development Associate teaches you essential Web page development skills. You will learn to develop Web sites using Hypertext Markup Language version 5 (HTML5) and Cascading Style Sheets (CSS). 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, video, and audio to your Web pages.

In addition to learning about HTML5 and CSS coding, you will learn how to use HTML5 Application Programming Interfaces (APIs) to extend the functionality of Web pages, such as geolocation, drag-and-drop, canvas, and offline Web applications. Other topics include validating your HTML code, recognizing the importance of search engine optimization (SEO), using style sheets extensively 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 Associate 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

Markup Language and Site Development Essentials

- Creating Web Pages
- Mobile and Cloud Issues
- Text Editors and Markup Languages
- Graphical User Interface (GUI) Editors
- History of Markup Languages
- The HTML Web Development Trifecta: HTML5, CSS and JavaScript
- Web Site Development Principles
- Hosting and Web Service Providers
- The Habitat for Humanity Web Site

HTML5 Coding

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

Cascading Style Sheets (CSS) and Graphical Elements

- Cascading Style Sheets (CSS)
- Separating Content in HTML Images in Web Pages
- HTML Entities
- Specifying Colors

- Page Colors and Backgrounds
- Specifying Font Information
- Web Design Issues
- HTML5 and Older Browsers

Hyperlinks

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

HTML Tables

- Introduction to HTML Tables
- CSS Properties for All Table Elements
- Table and Data Alignment Options
- Height and Width of Table Elements
- Column and Row Spanning
- HTML Tables vs. CSS Page Structure

Web Forms

- Introduction to Web Forms
- Web Forms and CGI
- HTML5 and Forms
- Basic Tags for Creating Web Forms
- Web Form Fields

Video, Audio and Image Techniques

- Introduction to Web Video, Audio and Image Techniques
- The <video> Element
- The <audio> Element

Graphic Types

- Image Maps
- Image Transparency
- Image Interlacing
- Animation
- Mobile Device Issues with Animation and Plug-Ins
- Creating and Managing Images

Extending HTML

- Extending HTML
- Server-Side and Client-Side Languages
- Server-Side Languages
- Client-Side Languages
- Dynamic HTML (DHTML)
- Document Object Model (DOM)
- HTML5 APIs
- Canvas
- Offline Web Application
- Geolocation
- Drag-and-Drop Functionality
- Web Application Frameworks
- Connecting to a Database

GUI HTML Editors and Mobile Web Sites

- 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

Developing Web Pages for Mobile Devices
Mobile Apps vs. Mobile Web Sites
Converting a Web site for Mobile Users
Working with Web 2.0

Web Site Development for Business

Developing a Business Web Site
E-Commerce Considerations
Internet Marketing and Search Engine Optimization (SEO)
E-Commerce Payment Technologies
Working in a Global Environment

Databases and Web Pages
Optimizing the Impact of the Web Page
Front-End Issues
File Formats and Active Content
Back-End Issues
Bandwidth and Download Time
Naming Web Page Files

Target Audience

Students and professionals who are interested in Web site development can benefit from the CIW *Site Development Associate* course and/or certification:

- IT professionals
- Marketing professionals
- Graphic artists
- Web site designers

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 7 before taking this course. The CIW Web 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).