



Certification Exam: 1D0-61B

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 websites are developed as managed projects. You will also identify e-commerce solutions and relate website 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 website, which can be visited at www.habitat.org.

Candidate Profile

All students preparing to enter or continue in the workforce can benefit from the CIW Site Development Associate course and/or certification:

- High school students
- College students
- Technical/trade school students

Professionals in all industries can benefit from the CIW Internet Business Associate course and/or certification:

- IT professionals
- Marketing professionals
- Graphic artists
- Website designers

Career Profile

This course aligns with the Department of Labor Standard Occupational Classification for the following:

SOC: 15-1254 Web Developers

Web developers design, build, and maintain websites and web applications. They write and test code, ensure sites function properly, fix issues, and collaborate with team members to meet user and business needs.

SOC: 15-1255 Web and Digital Interface Designers

Web and Digital Interface Designers design the layout, visuals, and user experience of websites and digital applications. They create wireframes and prototypes, ensure interfaces are visually appealing and easy to use, and collaborate with developers to implement designs that meet user and business requirements.

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

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