

Web Foundations Series

Site Development Associate v2.2



Site Development Associate teaches you essential Webpage development skills. You will learn to develop Websites using Hypertext Markup Language version 5 (HTML5) and Cascading Style Sheets (CSS3). 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 Webpages.

In addition to learning about HTML5 and CSS3 coding, you will learn how to use HTML5 Application Programming Interfaces (APIs) to extend the functionality of Webpages, 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 Webpage 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 Website development team. Hands-on labs include real-world scenarios based on the uCorp Website that has been constructed for the CIW Web Foundation courses. Note that students will build prototype pages using uCorp content. All CIW Web Foundations courses offer Case Studies for class discussion about real-world skills applications, and job-related topics such as project management and the relationship between technology and business operations. Guided, step-by-step labs provide opportunities to practice new skills. You can challenge yourself and review your skills after each lesson in the Lesson Summary and Lesson Review sections. Additional skill reinforcement is provided in Activities, Optional Labs, Lesson Quizzes and a Course Assessment that are available from your instructor.

Topics

Markup Language and Site Development Essentials

- Creating Webpages
- Mobile and Cloud Issues
- Text Editors and Markup Languages
- Graphical User Interface (GUI) Editors
- History of Markup Languages
- The HTML Web Development Trifecta: HTML5, CSS3 and JavaScript
- Website Development Principles
- Hosting and Web Service Providers
- The uCorp Website

HTML5 Coding

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

Cascading Style Sheets (CSS3) and Graphical Elements

- Cascading Style Sheets (CSS3)

- Syntactically Awesome Style Sheets (SASS)
- Separating Content in HTML
- Images in Webpages
- 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
- CSS3 Properties for All Table Elements
- Table and Data Alignment Options
- Height and Width of Table Elements
- Column and Row Spanning
- HTML Tables vs. CSS3 Page Structure
- Bootstrap Tables

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 <iframe> Element
- The <audio> Element
- Graphic Types
- Image Maps
- Image Transparency
- Image Interlacing
- Animation
- 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 Websites

Introduction to GUI HTML Editors
Types of GUI Editors
GUI HTML Editor Functionality
Creating Webpages with a GUI Editor
HTML Text Editors vs. GUI Editors
Previewing Pages and Validating Code
Website Publishing
Developing Webpages for Mobile Devices

Mobile Apps vs. Dedicated Mobile Websites vs. Responsive Design Websites
Optimizing a Website for Mobile Viewing
Working with the Latest Web Technologies

Website Development for Business

Developing a Business Website
E-Commerce Considerations

Internet Marketing and Search Engine Optimization (SEO)
E-Commerce Payment Technologies
Working in a Global Environment
Databases and Webpages
Optimizing the Impact of the Webpage
Front-End Issues
File Formats and Active Content
Back-End Issues
Bandwidth and Download Time
Naming Webpage Files

Target Audience

Students and professionals who are interested in Website development 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 *Site Development Associate* course and/or certification:

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

Prerequisites

No prior experience using the Internet, developing Webpages or configuring networks is necessary. However, students should be familiar with an operating system such as Microsoft Windows 10 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).