



# Advanced HTML5 & CSS3 Specialist

Certification Exam: 1DO-620

## Exam Objectives

### Domain 1: HTML5 Essentials

- 1.1: Consider HTML5 development skills you can apply to both traditional and non-traditional delivery platforms, including mobile apps.
- 1.2: Compare "apps" to mobile Websites.
- 1.3: Identify the Web development trifecta and explain its significance.
- 1.4: Explain the evolution of HTML and its relevance to modern design techniques.
- 1.5: Explain the importance of universal markup creation.
- 1.6: Create and deploy HTML5 structure tags.
- 1.7: Perform HTML5 code validation, including mobile Webpages, which includes explaining the practical value of code validation and listing the steps to validate HTML5 code.
- 1.8: Apply HTML5 Multimedia Elements (including: video, audio, embed and canvas).
- 1.9: Define common elements of HTML5 application programming interfaces (APIs).
- 1.10: Create appropriate navigation elements and hyperlinks for mobile Webpages.
- 1.11: Use images appropriately on mobile Webpages.

### Domain 2: Cascading Style Sheets (CSS) Technology and CSS Version 3 (CSS3)

- 2.1: Explain the function and purpose of the Cascading Style Sheets (CSS) technology.
- 2.2: Explain the importance of using style guides when designing sites and documents.
- 2.3: Define common CSS terms and syntax.
- 2.4: Apply CSS styles to format pages.
- 2.5: Develop and apply page layouts with CSS.
- 2.6: Use the CSS Box Model.
- 2.7: Describe general concerns for developing Web documents that will be delivered on mobile devices.
- 2.8: Define common CSS positioning schemes and apply document flow.
- 2.9: Develop appropriate page layouts for use on mobile devices.
- 2.10: List the features added to CSS functionality in CSS version 3 (CSS3).
- 2.11: Apply common CSS3 properties and selectors.
- 2.12: Apply backgrounds, borders, fonts and text effects with CSS3.
- 2.13: Determine cross-browser compatibility for traditional and mobile Webpages.
- 2.14: Describe essential Responsive Web Design (RWD) techniques and principles. (Previously 10.8)

### Domain 3: Using Advanced CSS3 Techniques

- 3.1: Apply 2D and 3D transformations with CSS3.
- 3.2: Apply transitions and animations with CSS3.
- 3.3: Create accessible user interfaces with CSS3.
- 3.4: Create menus and buttons with CSS3.
- 3.5: Create transparencies and overlays with CSS3.
- 3.6: Explain SASS and why it is an extension to CSS.

**Domain 4: Introduction to JavaScript**

- 4.1: Define scripting languages and explain their functionality in Web development.
- 4.2: Define JavaScript, describe its main features and uses, and list characteristics of JavaScript that affect Web developers and design.
- 4.3: Compare JavaScript to other languages used in Web development.
- 4.4: Embed JavaScript code into HTML5 documents.
- 4.5: Define the roles of JavaScript objects, properties and methods in scripting and programming.
- 4.6: Define the role of JavaScript variables in scripting and programming.
- 4.7: Define the role of JavaScript expressions and operators in scripting and programming. (Including conditional statements, arrays, loops, scope isolation and iterators)

**Domain 5: JavaScript Events, Functions and Methods**

- 5.1: Define user events, and identify and use JavaScript event handlers.
- 5.2: Describe the role of functions in JavaScript development.
- 5.3: Use JavaScript code to define functions.
- 5.4: Use JavaScript code to call functions.
- 5.5: Use methods as functions in JavaScript code.
- 5.6: Use functions including promises, modules, Async, await and closures.
- 5.7: Identify common errors in JavaScript.

**Domain 6: Using HTML5 APIs**

- 6.1: Define the Document Object Model (DOM).
- 6.2: Define application programming interface (API), and list the common HTML5 APIs.
- 6.3: Use the HTML5 Canvas API for advanced techniques.
- 6.4: Use the HTML5 Geolocation API to obtain geographic information about a user.
- 6.5: Create drag-and-drop Webpages using the HTML5 Drag-and-Drop API.
- 6.6: Use the HTML5 File API to interact with files.
- 6.7: Use the HTML5 History API to manipulate a browser's history.
- 6.8: Retrieve and manipulate HTML5 data using XMLHttpRequest and jQuery.

**Domain 7: Developing HTML5 Forms**

- 7.1: Describe the purpose and functionality of HTML5 forms.
- 7.2: Develop cross-browser compatible forms using HTML5.
- 7.3: List the new form input types available in HTML5.
- 7.4: Use the HTML5 <datalist> element.
- 7.5: Explain the function of the HTML5 <output> element.
- 7.6: Use HTML5 global attributes for HTML form elements including <fieldset>, <legend>, <label>, <select> and <textarea>.

**Domain 8: Completing, Submitting and Validating User Input Forms**

- 8.1: Use HTML5 attributes for completing and submitting forms, including new attributes for the <form>, <input> and <button> elements.
- 8.2: Describe general concepts and techniques used to validate user input from forms.
- 8.3: Validate user input from forms using HTML5 attributes.
- 8.4: Validate user input from forms using JavaScript.

**Domain 9: Copyright, Ethics and Legal considerations**

- 9.1: Explain the importance of copyright rules in coding practices
- 9.2: Describe accessibility compliance (including ADA and Section 508) responsibilities in Website development
- 9.3: Implement accessibility compliance in Website coding
- 9.4: Identify appropriate netiquette and cultural references as it applies to Website design.
- 9.5: Differentiate between ethical and legal responsibilities
- 9.6: Compare local and international privacy laws (e.g., HIPPA, GDPR, etc.) and Website development responsibilities.
- 9.7: Consider appropriate security standards as it applies to Website design to protect personal and business information.
- 9.8: Formulate standards to apply ethical reasoning and judgment on issues affected by technological advances (e.g., coding, hacking, spying).

**Domain 10: Project Management and Critical Thinking**

- 10.1: Demonstrate Project Management strategies and tasks for Website development.
- 10.2: Compare and contrast various management styles in technological organizations.
- 10.3: Identify a work-based learning experience in a local business environment.
- 10.4: Develop appropriate personal standards for leadership techniques, customer service strategies and personal ethics.
- 10.5: Identify various potential Website issues, and troubleshoot their causes and symptoms. (including: conformance to standards, site rendering, audience interaction and validation)
- 10.6: Solve problems using critical thinking, creativity and innovation skills.
- 10.7: Discuss the importance of time management, both professionally and personally.