# Course Ou

## CIW: Advanced HTML5 and
## (1D0-620)

11 Mar 2024

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## 1. Course Objective

Kick start your prep for the CIW 1D0-620 exam with the CIW Advanced HTML5 & CSS3 Specialist course and Lab. The lab is cloud-based, device-enabled, and can easily be integrated with an LMS. The course covers the 1D0-620 exam objectives and provides candidates the essential HTML5, Cascading Style Sheets (CSS3), and JavaScript knowledge used in web development. The course has 1D0-620 practice tests to strengthen your knowledge by providing hands-on learning in real-world scenarios.

## 2. Pre-Assessment

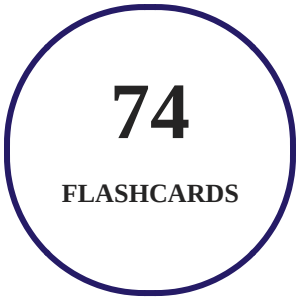
Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

## 3. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

## 4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.




## 5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.

## 6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution
- **2015**
    1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**
  1. Best Virtual Learning Solution
  2. Best Education Cloud-based Solution
  3. Best College and Career Readiness Solution
  4. Best Corporate / Workforce Learning Solution
  5. Best Postsecondary Learning Content Solution
  6. Best Postsecondary LMS or Learning Platform
  7. Best Learning Relationship Management Solution

- **2017**
  1. Best Overall Education Solution
  2. Best Student Assessment Solution
  3. Best Corporate/Workforce Learning Solution
  4. Best Higher Education LMS or Learning Platform

- **2018**
  1. Best Higher Education LMS or Learning Platform
  2. Best Instructional Solution in Other Curriculum Areas
  3. Best Learning Relationship Management Solution

- **2019**
  1. Best Virtual Learning Solution
  2. Best Content Authoring Development or Curation Solution
  3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

## Syllabus

### Chapter 1: HTML5 Essentials

- Introduction to HTML5 and CSS3
- Migration to Mobile Devices
- The Web Development Trifecta
- The Evolution of HTML5
- HTML5 Structure Elements
- Validating HTML5 Code
- The <video> Element

- The <audio> Element
- HTML5 APIs
- Optional Lab
- Lesson Summary

## Chapter 2: Using Cascading Style Sheets (CSS) Technology

- Cascading Style Sheets (CSS)
- Style Guides
- CSS and HTML
- CSS Terms and Syntax
- Applying CSS Styles
- Page Layout with CSS
- CSS Positioning Schemes
- The CSS Box Model
- Optional Lab
- Lesson Summary

## Chapter 3: Introduction to CSS Version 3 (CSS3)

- Introduction to CSS3

- CSS3 Selectors and Properties
- CSS3 Background Properties
- CSS3 Border Properties
- CSS3 Font Properties
- CSS3 Text Effects
- Optional Lab
- Lesson Summary

## Chapter 4: Using Advanced CSS3 Techniques

- Introduction to Advanced CSS3 Techniques
- CSS3 2D and 3D Transformations
- CSS3 Transitions
- CSS3 Animations
- CSS3 User Interfaces
- Creating Menus and Buttons with CSS3
- Optional Lab
- Lesson Summary

## Chapter 5: Introduction to JavaScript

- HTML5 and JavaScript
- Introduction to Scripting
- JavaScript Characteristics
- JavaScript vs. Other Languages
- Embedding JavaScript into HTML5 Documents
- JavaScript and Common Programming Concepts
- Objects, Properties and Methods
- Variables
- Expressions and Operators
- Optional Lab
- Lesson Summary

## Chapter 6: JavaScript Events, Functions and Methods

- User Events and JavaScript Event Handlers
- Introduction to JavaScript Functions
- Defining a Function
- Calling a Function
- Methods as Functions

- Errors In JavaScript
- Optional Lab
- Lesson Summary

## Chapter 7: Using HTML5 APIs

- Introduction to HTML5 APIs
- Document Object Model (DOM)
- Common HTML5 APIs
- The Canvas API
- The Offline AppCache API
- The Geolocation API
- The Drag-and-Drop API
- The File API
- The History API
- Retrieving Data with XMLHttpRequest
- Manipulating Data with jQuery
- Optional Lab
- Lesson Summary

## Chapter 8: Developing HTML5 Forms

- Introduction to HTML5 Forms
- Cross-Browser Compatible HTML5 Forms
- HTML5 Form Input Types
- New Form Elements in HTML5
- HTML5 Global Attributes for Form Elements
- Optional Lab
- Lesson Summary

## Chapter 9: Completing, Submitting and Validating User Input Forms

- Improving Forms with HTML5
- HTML5 Attributes for the <form> Element
- HTML5 Attributes for the <input> Element
- Submitting Forms with the <button> Element
- Concepts and Techniques for Validating User Input
- Validating User Input with HTML5 Attributes
- Validating User Input with JavaScript

- Optional Lab
- Lesson Summary

## Chapter 10: Designing for Mobile Devices

- Introduction to Mobile Design
- Mobile Web Sites vs. Mobile Apps
- Designing Web Sites for Mobile Devices
- Page Layout for Mobile Devices
- Navigation and Hyperlinks for Mobile Devices
- Images and Mobile Design
- Validating and Testing Mobile Web Pages
- Responsive Web Design
- Lesson Summary

## Chapter 11: Appendix A: CIW Advanced HTML5 And CSS3 Specialist Objectives and Locations

## Chapter 12: Appendix B: Web Developer Resources

- A List Apart: For People Who Make Web Sites
- W3Schools

- HTML Goodies: The Ultimate Web Resource
- Google Developers
- Some Helpful Links

Chapter 13: Appendix C: Works Consulted

## Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

| 10 | 26 |
| --- | --- |
| VIDEOS | MINUTES |

## 11. Practice Test

## Here's what you get

| 55 | 3 | 102 |
|---|---|---|
| PRE-ASSESSMENTS QUESTIONS | FULL LENGTH TESTS | POST-ASSESSMENTS QUESTIONS |

## Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 12. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

# Lab Tasks

**HTML5 Essentials**

- Structuring and validating a Web page
- Embedding video with the HTML5 <video> element
- Embedding audio with the HTML5 <audio> element
- Researching HTML5

**Using Cascading Style Sheets (CSS) Technology**

- Formatting text with CSS
- Laying out a page's structure using CSS
- Positioning images relative to text using CSS
- Modifying elements using CSS margins, borders and padding
- Supporting legacy browsers

**Introduction to CSS Version 3 (CSS3)**

- Using CSS3 selectors
- Adding CSS3 backgrounds and transparency
- Creating buttons and shadows with the CSS3 border properties
- Using CSS3 fonts and text effects
- Using the CSS3 text-overflow and word-wrap properties

**Using Advanced CSS3 Techniques**

- Creating 2D and 3D transformations with CSS3
- Using CSS3 transitions
- Creating CSS3 animations
- Using the CSS3 resize property
- Creating a CSS menu
- Using CSS3 to animate a text box

**Introduction to JavaScript**

- Using the JavaScript alert() method
- Using the JavaScript prompt() method
- Using the JavaScript document.write() method
- Using the JavaScript navigator object

**JavaScript Events, Functions and Methods**

- Creating a user-defined function in JavaScript
- Using functions, arguments and return values in JavaScript
- Calling a function from within another function in JavaScript
- Using JavaScript event handlers
- Calling functions and using arguments
- Using a JavaScript conversion function
- Creating an external JavaScript file

**Using HTML5 APIs**

- Using the HTML5 Canvas API
- Creating an offline Web application with HTML5
- Using the Geolocation API to obtain geographical information
- Adding drag-and-drop elements to a Web page with HTML5
- Using the HTML5 File API
- Using jQuery in a Web page

**Developing HTML5 Forms**

- Using new HTML5 input types
- Using the HTML5 <datalist> element
- Using the <fieldset> and <legend> elements
- Using the <textarea> element with the placeholder attribute
- Using the search input type

**Completing, Submitting and Validating User Input Forms**

- Using the HTML5 autocomplete attribute with <form>
- Using the HTML5 autofocus attribute with <input>
- Using the <button> element to submit forms
- Using the HTML5 required attribute
- Using the HTML5 pattern attribute
- Using the pattern attribute with HTML input types
- Using the HTML5 formtarget attribute

**Designing for Mobile Devices**

- Modifying a site for mobile users

## Here's what you get

**50**

**LIVE LABS**

## 13. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.