uCertify

Course Outline

Web Development

06 Jul 2024

1. Pre-Assessment
2. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons

   Syllabus

   Chapter 1: Introduction

   Chapter 2: Foundation of the Internet and Web Development

   Chapter 3: Building Basic Websites with HTML5

   Chapter 4: Introduction to CSS for Styling Web Pages

   Chapter 5: Mastering Layout Design with CSS

   Chapter 6: Introduction to JavaScript and Dynamic Behavior

   Chapter 7: Manipulating Elements and Responsive UIs

   Chapter 8: JavaScript Concepts and Web Applications

   Chapter 9: Appendix A: Project

   Videos and How To
8. Practice Test

   Here's what you get

   Features
9. Live labs

   Lab Tasks

   Here's what you get
10. Post-Assessment

1. 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.

2. Exercises

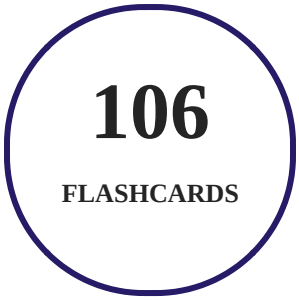
There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

3. Quiz

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: Introduction

- About This Course
- Who Should Read This Course?
- How This Course Is Organized
- Course Features

Chapter 2: Foundation of the Internet and Web Development

- Introduction to Hardware
- Introduction to Software

- Introduction to Operating Systems
- Introduction to the Internet
- Introduction to Networking
- Introduction to the World Wide Web
- Introduction to AI Hardware
- Summary

Chapter 3: Building Basic Websites with HTML5

- Introduction to HTML5
- Document Structure in HTML5
- Introduction to Elements
- Format Text Content
- Use of Hyperlinks for Navigation
- Semantic and Non-Semantic Elements
- Activity 1: Creating an HTML Page
- Summary

Chapter 4: Introduction to CSS for Styling Web Pages

- Introduction to CSS
- CSS Syntax and Selectors
- Responsive Web Design
- Introduction to CSS3 Techniques
- Summary

Chapter 5: Mastering Layout Design with CSS

- The Box Model
- Create Tables
- Format Tables
- Activity 2: Styling with CSS
- Summary

Chapter 6: Introduction to JavaScript and Dynamic Behavior

- Introduction to JavaScript
- Develop HTML5 Forms
- Summary

Chapter 7: Manipulating Elements and Responsive UIs

- Improve Forms with HTML5
- HTML5 Attributes for the <form> Element
- Submit Forms with the <button> Element
- Concepts and Techniques for Validating User Input
- Validate User Input with HTML5 Attributes
- Validate User Input with JavaScript
- Summary

Chapter 8: JavaScript Concepts and Web Applications

- User Events and JavaScript Event Handlers
- Introduction to JavaScript Functions
- Define a Function
- Call a Function
- Methods as Functions
- JavaScript Animations
- Promises, Modules, Async/Await, and Closures
- AJAX and JSON
- Errors In JavaScript

- Activity 3: Initializing the Quiz Application Using JavaScript
- Summary

Chapter 9: Appendix A: Project

Videos and How To

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

46	02:13
VIDEOS	HOURS

11. Practice Test

Here's what you get

50	50
PRE-ASSESSMENTS QUESTIONS	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

Foundation of the Internet and Web Development

- Installing Motherboard Components

- Installing an NIC on the Motherboard of a CPU
- Installing Input and Output Devices
- Connecting a USB Flash Drive to a CPU
- Connecting Devices in a Peer-To-Peer Architecture
- Identifying Clients and Servers
- Connecting an iPhone to a Wi-Fi Network

Building Basic Websites with HTML5

- Using Headings in HTML5
- Using Paragraphs in HTML5
- Exploring HTML5 Ordered List Type Attributes
- Using Control List Counting
- Using Unordered Lists for a To-Do List
- Exploring Unordered Lists Style Types
- Using the Description List
- Using Nested Lists in HTML
- Exploring Structural Elements in HTML5
- Using the Target Attributes of Links
- Linking with the Same Document

Introduction to CSS for Styling Web Pages

- Applying Inline CSS Styles
- Applying Internal CSS Styles
- Integrating External CSS into an HTML Document
- Importing an External CSS Stylesheet
- Using the Element Selector
- Using the Class Selector
- Using the Class Selector for the Specific HTML Element
- Using an id Selector
- Using the Grouping Selector
- Using the Universal Selector
- Using the Absolute Length Measuring Units
- Using the Relative Length Measuring Units

- Understanding the Difference Between Percentage and Pixel Units
- Implementing Media Queries
- Using the 2D Transform rotate() Method
- Using CSS3 Transitions
- Using the animation-timing-function Property

Mastering Layout Design with CSS

- Setting the Height and Width of an Element
- Using the Padding Longhand Property
- Using the Padding Shorthand Property
- Using the Border Longhand Property
- Using the Border Shorthand Property
- Using the Margin Longhand Property
- Using the Margin Shorthand Property
- Using the HTML Table Tags
- Adding a Border to the HTML Table
- Formatting a Table Using Rowspan and Colspan
- Using the <thead>, <tbody>, and <tfoot> Tags

Introduction to JavaScript and Dynamic Behavior

- Exploring the document.write Method in JavaScript
- Using the Assignment Operator in JavaScript
- Exploring the Object Data Type
- Using the Search Input Type
- Using New HTML5 Input Types
- Using the HTML5 <datalist> Element
- Using the <fieldset> and <legend> Elements
- Using the <textarea> Element with the placeholder Attribute

Manipulating Elements and Responsive UIs

- Using the HTML5 autocomplete Attribute with the <form> Element
- Using the HTML5 autofocus Attribute with the <input> Element
- Accessing the button Object

- Exploring the <button> Element type Attributes
- Using the HTML5 <input type="url"> Element
- Creating a Registration Form with JavaScript Validation

JavaScript Concepts and Web Applications

- Using the onmouseover and onmouseout Events
- Using the onfocus and onblur Events
- Integrating an External JavaScript File into an HTML File
- Using Functions, Arguments, and Return Values in JavaScript
- Understanding Operator Precedence in JavaScript
- Understanding Global and Local Variables in JavaScript
- Using the parseInt() and parseFloat() Methods in JavaScript
- Using the setTimeout() Method
- Using the setInterval() and clearTimeout() Methods
- Exploring Promises in JavaScript

Here's what you get

70	70	01:20
LIVE LABS	VIDEO TUTORIALS	HOURS

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.