

INT250 : HTML5 and CSS3

Code : INT250

Duration : 2 days

Category : Internet

Audience :

This course is intended for experienced HTML designers who want to learn how to use HTML5 and CSS3 to make modern state of the art Web sites.

Prerequisites :

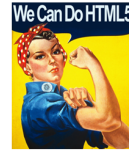
To join this course knowledge of and experience with HTML and CSS is required.

Realization :

The subjects are discussed on the basis of presentation slides. The subject matter is clarified with demos. The theory is interspersed with exercises. The code is tested in different browsers. The course material is in English.



HTML5 and CSS3



Contents :

In this HTML5 course you will learn authoring, testing and publishing content in the HTML5 and CSS3 languages, even as the standard itself continues to evolve. HTML and CSS are the two languages that shape most web sites on the internet. HTML dictates the content of a website (text, images, and media plugins) and CSS defines the style (colors, fonts, and layouts). Although HTML4 and CSS2 have been foundational in the development of a functional and stylistic internet, HTML5 and CSS3 represent the next step in web technologies. HTML5 and CSS3 are expected to become dominant technologies in developing interactive and aesthetically-appealing websites.

Module 1 : HTML5 Intro

- What is HTML5?
- HTML5 History
- W3C and WHATWG
- HTML5 Vision
- Compatibility
- HTML5 Usage
- Interoperability
- Universal Access
- Future of HTML5
- Browser Support
- Browsers In Mobile Devices
- Feature Detection
- Legacy Browser
- Gracefull Degradation

Module 2 : Page Structure

- HTML5 Page Structure
- HTML5 DocType
- Page Encoding
- HTML5 Markup
- New Page Elements
- Updated Page Elements
- Deprecated Elements
- Structure Elements
- New Attributes
- Deprecated Attributes
- HTML5 and CSS3
- Browser Support

Module 3 : HTML Forms

- HTML5 Forms
- Gathering Input
- New Input Types
- Color Input Type
- Date Input Type
- Email Input Type
- New Attributes
- Form Validation
- Complex Validation
- Using Regular Expressions
- Browser Support

Module 4 : Audio and Video

- Audio and Video
- Using Plugins
- Using Codecs
- Multiple Sources
- New Audio Markup
- New Video Markup
- Attributes and Methods
- Audio and Video Events
- Customizing Controls

Module 5 : Styling Pages

- New CSS properties
- Rounded corners
- Drop shadows
- Color effects
- Transparency using RGBA
- Gradients
- Rotation
- Scale to page elements
- Transitions
- Page movement without JavaScript
- Advanced selectors like nth-child
- Target exactly the right elements
- Embed using @font-face!
- Using custom fonts
- Using text on the page instead of images
- Support for @font-face
- Work arounds

Module 6 : Canvas

- HTML5 Canvas
- Canvas versus SVG
- Accessibility
- Using a Canvas
- Context and Coordinates
- Drawing Shapes
- Working with Paths
- Drawing Straight Lines
- Stroked Path
- Drawing Circles or Arcs
- Drawing Text
- Drawing Images
- Working with Pixels
- Understanding Transforms
- Translation and Rotation
- Scaling

Module 7 : Data Storage

- Data Storage
- Cookies Model
- Pre HTML5 Solutions
- New Storage Options
- Web Storage
- Storage Interface
- Session Storage
- Local Storage
- Web SQL Storage
- Browser Support

Module 8 : Offline Applications

- Offline Applications
- Manifest File
- Cache Section
- Network Section
- Fallback Section
- applicationCache Events
- Deployments And Updates
- error Event
- updateReady Event

Module 9 : Geolocation

- HTML5 Geolocation
- Privacy Considerations
- Get User Location
- Geolocation Object
- getCurrentPosition
- watchPosition
- Position Object
- Latitude
- Longitude
- Handling Errors
- PositionOptions

Module 10 : WebWorkers

HTML5 WebWorkers
JavaScript Execution Model
WebWorker Usage
Communication API
Handling Errors
ErrorEvent Interface

Module 11 : Messaging

HTML5 Messaging API's
Same Origin Policy
Workarounds
JSON with Padding
Using a Proxy
Cross Document Messaging
Sending Messages
Receiving Messages
XMLHttpRequest Level 2
Cross Origin Resource Sharing
Progress Event

Module 12 : WebSockets

Web Sockets
Real Time Solutions
Polling Architecture
Long Polling Architecture
Web Sockets API
Web Sockets Protocol
Web Sockets Handshake
Advantages Web Sockets