HTML 5 Training

Course Summary

Description

This class is intended for experienced HTML developers with some JavaScript experience, teaches the new features of HTML5 and how to put them to immediate use.

Objectives
By the end of this course, students will be able to:

- Build HTML5 pages
- Understand the major benefits of HTML5
- Understand the difference between HTML5 and HTML 4
- Use the new elements and attributes of HTML5
- Work with audio and video in HTML5

- Work with new Canvas element to create code-based drawings in HTML5
- Use Web Storage for offline applications
- Use all of the new HTML5 form elements
- Understand the current state of browser support for HTML5 and how to make your HTML5 sites degrade gracefully

Topics

- Introduction
- Laying out a Page with HTML5
- Page Structure
- HTML5 - How We Got Here
- Sections and Articles
- HTML5 Audio and Video
- HTML5 Forms

- HTML5 New Form Attributes
- HTML5 New Form Field Attributes
- HTML5 Web Storage
- HTML5 Canvas
- Integrated APIs
- Conclusions

Prerequisites

- All attendees must be fluent in HTML 4 and have practical experience with the basics of CSS and JavaScript. Prior knowledge of JSON, DOM, and Ajax is helpful but not required.

Duration

Two days

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Course Outline

I.   Introduction

II.   Laying out a Page with HTML5
A. Page Structure
B. New HTML5 Structural Tags
C. Page Simplification

III.   HTML5 - How We Got Here
A. The Problems HTML 4 Addresses
B. The Problems XHTML Addresses
C. The New More Flexible Approach of HTML5
   - Paving the Cowpaths
D. New Features of HTML5
E. The HTML5 Spec(s)
F. Current State of Browser Support

IV.   Sections and Articles
A. The section Tag
B. The article Tag
C. Outlining
D. Accessibility

V.   HTML5 Audio and Video
A. Supported Media Types
B. The audio Element
   1. Audio Formats
   2. Multiple Sources
   3. Audio Tag Attributes
   4. Getting and Creating Audio Files
C. The video Element
   1. Video Tag Attributes
   2. Creating and Converting Video Files
D. Accessibility
E. Scripting Media Elements
F. Dealing with Non-Supporting Browsers

VI.   HTML5 Forms
A. Modernizr
B. New Input Types
   1. search
   2. tel
   3. url and email
   4. date/time input types
   5. number
   6. range
   7. min, max, and step attributes
   8. color

VII.   HTML5 New Form Attributes
A. autocomplete
B. novalidate

VIII.   HTML5 New Form Field Attributes
A. required
B. placeholder
C. autofocus
D. autocomplete
E. form
F. pattern

IX.   New Form Elements
A. datalist
B. progress and meter

X.   HTML5 Web Storage
A. Overview of HTML5 Web Storage
B. Web Storage
   1. Browser Support
   2. Local Storage
   3. Session Storage
   4. Prefixing your Keys
C. Other Storage Methods
   1. Web Database Storage
   2. Indexed Database API

XI.   HTML5 Canvas
A. Getting Started with Canvas
B. Drawing Lines
   1. Multiple Sub-Paths
   2. The Path Drawing Process
   3. The fill() Method
C. Color and Transparency
D. Rectangles
E. Circles and Arcs
F. Quadratic and Bezier Curves
G. Images
   1. drawImage() - Basic
   2. drawImage() - Sprites
H. Text

XII.   Integrated APIs
A. Offline Application API
   1. Cache Manifest File
   2. The HTML File
   3. Managing ApplicationCache with JavaScript
   4. A Sample Application
B. Drag and Drop API

XIII.   Conclusion