HTML 5

DURATION:

2 Days

COURSE DESCRIPTION:

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

WHO SHOULD ATTEND:

BENEFITS OF ATTENDANCE:

- 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

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.

LAB SETUP:-

• Sublime Text Editor/Notepad++

- Web browsers a recent version of one or more of the following:
 - Google Chrome
 - Mozilla Firefox
 - o Internet Explorer (9 or later)
 - Safari (5 or later)
 - o Opera
- If space on a web server is available, students may also wish to bring their mobile devices so they can test how pages appear on these devices.

COURSE OUTLINE:

- Introduction
- Laying out a Page with HTML5
 - o Page Structure
 - New HTML5 Structural Tags
 - Page Simplification
- HTML5 How We Got Here
 - The Problems HTML 4 Addresses
 - The Problems XHTML Addresses
 - The New More Flexible Approach of HTML5 Paving the Cowpaths
 - New Features of HTML5
 - o The HTML5 Spec(s)
 - Current State of Browser Support
- Sections and Articles
 - The section Tag
 - The article Tag
 - Outlining
 - Accessibility
- HTML5 Audio and Video
 - Supported Media Types
 - The audio Element
 - Audio Formats
 - Multiple Sources
 - Audio Tag Attributes
 - Getting and Creating Audio Files
 - o The video Element
 - Video Tag Attributes
 - Creating and Converting Video Files

- Accessibility
- o Scripting Media Elements
- o Dealing with Non-Supporting Browsers
- HTML5 Forms
 - Modernizr
 - New Input Types
 - search
 - tel
 - url and email
 - date/time input types
 - number
 - range
 - min, max, and step attributes
 - color
- HTML5 New Form Attributes
 - o autocomplete
 - novalidate
- HTML5 New Form Field Attributes
 - required
 - placeholder
 - o autofocus
 - o autocomplete
 - o form
 - o pattern
- New Form Elements
 - o datalist
 - o progress and meter
- HTML5 Web Storage
 - o Overview of HTML5 Web Storage
 - Web Storage
 - Browser Support
 - Local Storage
 - Session Storage
 - Prefixing your Keys
 - Other Storage Methods
 - Web Database Storage
 - Indexed Database API
- HTML5 Canvas
 - Getting Started with Canvas
 - Drawing Lines
 - Multiple Sub-Paths

- The Path Drawing Process
- The fill() Method
- o Color and Transparency
- o Rectangles
- Circles and Arcs
- o Quadratic and Bezier Curves
- o Images
 - drawImage() Basic
 - drawImage() Sprites
- o Text
- Integrated APIs
 - o Offline Application API
 - Cache Manifest File
 - The HTML File
 - Managing ApplicationCache with JavaScript
 - A Sample Application
 - o Drag and Drop API
- Conclusion