CSS 3

DURATION:

2 Days

COURSE DESCRIPTION:

Developing Cascading Style Sheets course teaches attendees how to format text and layout pages using CSS.

BENEFITS OF ATTENDANCE:

- Style elements using the new selectors, pseudo classes, and pseudo elements.
- Use font and text effects, including @font-face.
- Use the new gradient, mask, and background image techniques.
- Implement animations, transitions, and 2D and 3D transforms.
- Render content appropriately for mobile and tablet devices using media queries.
- Understand vendor-specific prefixes and browser support for various CSS3 techniques.

PREREQUISITES:

Prior hands-on experience with HTML and CSS is required.

LAB SETUP:

- Windows or Mac OS X with at least 3 GB RAM
- 2 or more browsers of your choice (recent versions):
    - Google Chrome
    - Mozilla Firefox with the Firebug extension installed
    - Internet Explorer 10 or later [Windows users]
    - Safari 5 or later
- Web development tool of your choice (should support CSS syntax highlighting)

COURSE OUTLINE:

- Introduction

- What Is CSS3?
  - The History of CSS
  - How to Add CSS: Inline Styles, Head Styles, External Files
  - General Syntax: Attributes, Selectors, Cascades, etc.
  - Current State of Browser Support for CSS3
  - How We'll Check This: caniuse.com, IETester, tools.css3.info
- HTML and CSS
  - How HTML Relates to CSS
  - A Basic Overview of HTML5
- Selectors, Pseudo Classes, and Pseudo Elements
  - E[foo^="bar"], E[foo$="bar"], etc.
  - :nth-child, :root, etc.
  - :before, :after, ::selection
- Fonts and Text Effect
  - @font-face
  - Using Web Fonts: Google, Typekit, etc.
  - Font Properties
  - Text Shadow, Text Outline, Text Stroke, etc.
  - Word Wrapping
- Color, Gradients, Background Images, and Masks
  - Opacity
  - New Color Names
  - Nonimage Gradients
  - Multiple Background Images
  - Background-size, Background-origin, Background-clip
  - Image Masks
- Border and Box Effects
  - Rounded Corners
  - Resizing
  - Outline Offsets
  - Appearance
  - Image Borders
  - Box Shadow
- Transforms, Transitions, and Animations
  - translate(), rotate(), etc.
  - 3D: rotateX(), rotateY()
  - changing, for example, the width of a div on hover (without JS)
  - animations: @keyframes, animation
- Layout: Columns, Flexible Box
  - Column-count, Column-gap, Column-rule

- o Multiple Column Layouts
- o Gaps between Columns
- o Box-orient, Box-pack, Box-align, Box-flex, etc.
- o Display: box
- o Grouping and Changing Orientation
- o Alignment
- Vendor Prefixes
    - o Current status of -moz, -o, etc.
    - o When and Why to Use
- Embedding Media
    - o Simplified Video
    - o Audio Embedding with HTML5/CSS3
- Accessibility Features
    - o Speech
    - o Others
- Forms
    - o HTML5
    - o New Form Elements
    - o Capabilities
- Media Queries
    - o Targeting Device Capabilities: Width, Screen Size, Color Depth, etc.
    - o Building Responsive Sites: Implications for Mobile
- Implementing CSS3 in the "Real World"
    - o Modernizr
    - o HTML5 Shims
    - o jQuery
    - o LESS, SASS, and Other CSS Preprocessors
    - o CSS Grid Systems
    - o CSS Frameworks
- Conclusion