HTML5 & CSS3 - COURSE CONTENT

Ch1: History, Vision & Future of HTML5

- ☐ What Is HTML5?

- ☐ History And Major Actors

- ☐ A Little Retrospective - What Is The W3C? - What Is The WHATWG? -

- ☐ Vision And Philosophy Behind HTML5 -

- ☐ Compatibility

- ☐ Utility

- ☐ Interoperability

- ☐ Universal Access

- ☐ Future Of HTML5 - Timeline -

Ch2: Getting Started With HTML5

- ☐ The State Of Browser Support

- ☐ Feature Detection

- ☐ Support For Legacy Browsers

- ☐ Developer Tools

Ch3: Structure of a Web Page

☐ HTML5 DOCTYPE

☐ Page Encoding

☐ HTML5 Markup

☐ New And Updated Elements - Structural Elements - New Attributes - Deprecated Elements And Attributes -

☐ HTML5 And CSS3

☐ Browser Support

Ch4: Forms

☐ What Are The Needs For Web Applications?

☐ Current Solutions

☐ New Input Types

☐ New Attributes

☐ Form Validation

☐ Browser Support

Ch5: Audio and Video

☐ The State of Web Audio And Video Based On Plug-in

☐ The State Of Audio And Video Codec (e.g. H.264, WebM, etc.) - Video/Audio Codec And Browser Support -

☐ New Audio/Video Markup

☐ Attributes And Methods

☐ Understanding Audio/Video Events

☐ Customizing Audio/Video Controls

Ch6: HTML5 Canvas

☐ Overview Of Graphics In The Browser - Canvas Vs. SVG - Accessibility -

☐ Using A Canvas

- ☐ Context And Coordinates

- ☐ Drawing Shapes

- ☐ Working With Paths - Drawing Straight Lines - Drawing Circles Or Arcs -

- ☐ Drawing Text

- ☐ Drawing Images

- ☐ Working With Pixels

- ☐ Understanding Transforms - Translation - Rotation - Scaling -

- ☐ Browser Support

Ch7: Data Storage

- ☐ Problems With The Existing Cookie-based Model

- ☐ Hacks Prior To HTML5

- ☐ New Storage Options - Web Storage - tWeb SQL Storage -

- ☐ Browser Support

Ch8: HTML5 Offline Applications

- ☐ The Manifest File

- ☐ The application Cache Events

- ☐ Deployments And Updates

- ☐ Browser Support

Ch9: Geolocation

- ☐ Introduction To Geolocation

- ☐ Privacy Considerations

- ☐ Many Ways To Get User Location

- ☐ Two Main Methods

- ☐ The Position Object

- ☐ Handling Errors

☐ The Position Options Object

☐ Browser Support

Ch10: HTML5 Web Workers

☐ The Current JavaScript Execution Model

☐ Introduction To Web Workers

☐ Usage Of Web Workers

☐ Communication APIs

☐ Handling Errors

☐ Browser Support

Ch11: HTML5 Web Sockets

☐ Overview Of Web Communication Options

☐ The History (Comet) -

☐ Overview Of Web Sockets API And Protocol

☐ Advantages Of Web Sockets

☐ Browser Support

Ch12: Overview of CSS3 New Features

☐ Image free Visual Effects

☐ Box transformations

☐ Unique Fonts

☐ Powerful Selectors

☐ Transitions and Animations

☐ Multiple Column Layouts

Ch13: Improving Efficiency using Pseudo Classes

☐ New structural Pseudo-classes

☐ Changing background color

☐ Adding pure CSS3 animation

Ch14: CSS3 Graphics Effects

☐ Rounding the Corners

☐ Semitransparent Backgrounds

☐ Image-free Gradients

☐ Image-free Drop Shadows

☐ Image-free Text Shadows