|  |
| --- |
| **HTML5 and CSS3** |
| 4 days |

|  |  |
| --- | --- |
| **Introduction** | Participants will learn how to use latest HTML5 and CSS3 features to author powerful web pages. |
| **Learning Objectives** | * Learn the major benefits of HTML5 and CSS3 * Write applications using HTML5, CSS3 and JavaScript(Jquery) * Build applications with rich and interactive UI * Solve complex problems using HTML5 which otherwise was difficult with HTML4 * Understand how HTML 5 fits into smart phone and tablet based applications |
| **Prerequisites** | HTML, XML and Javascript, JQuery |
| **Hardware/Software** | * Microsoft Windows Vista Professional / Windows 7 Ultimate * Preferred Google Chrome, Mozilla Firefox (Latest version) and Internet Explorer 9 * Aptana Standalone Studio 3 * Aptana Standalone Studio plugin for Eclipse * Apache Tomcat Server 6.x or higher * Eclipse JEE Helios * MySQL Server 5.x * Ms office 2007 or above * Internet Connection |
| **Recommended Books** | [HTML5 & CSS3 For The Real World](http://search.safaribooksonline.com/book/web-development/9780980846904), [HTML5 Cookbook](http://search.safaribooksonline.com/book/-/9781449318444), [CSS3: Visual QuickStart Guide, Fifth Edition](http://search.safaribooksonline.com/book/web-development/css/9780131389892), [The Book of CSS3](http://search.safaribooksonline.com/book/web-development/css/9781593272869) |
| **Relevant Trainings** | RBT Jquery, RBT Ajax and DHTML |
| **Remarks, If any.** |  |

|  |  |
| --- | --- |
| **Contents** | |
| **Module1: Getting Started With HTML5** | * + The State Of Browser Support     - Browsers In Mobile Devices     - Feature Detection   + Support For Legacy Browsers     - Graceful Degradation     - Emulation   + Developer Tools |
| **Module2: 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 |
| **Module 3: CSS3 Basics** | * + Selective Styling   + [Working with Pseudo-classes](http://search.safaribooksonline.com/book/web-development/css/9780131389892/selective-styling/ch04lev1sec3)   + [Working with Pseudo-elements](http://search.safaribooksonline.com/book/web-development/css/9780131389892/selective-styling/ch04lev1sec4) |
| **Module 4: Working with Text, Color, Background and Table** | * + HTML5 Text formatting Tags   + CSS3 Font and Text properties   + CSS3 Color and Background properties   + CSS3 List and Table properties |
| **Module5: Layout your Webpages** | * + CSS3 Box properties   + CSS3 display, float, margin, position properties   + Multi column layout |
| **Module6: CSS3 Visual Formatting, Transformation and Transition Properties** | * + Stacking objects   + Using shadow and Opaque properties   + [Transforming an Element](http://search.safaribooksonline.com/book/web-development/css/9780131389892/transformation-and-transition-properties/ch12lev1sec1)   + [Adding Transitions Between Element States](http://search.safaribooksonline.com/book/web-development/css/9780131389892/transformation-and-transition-properties/ch12lev1sec2) |
| **Module7: Forms** | * + Current Solutions   + New Input Types   + New Attributes   + Form Validation   + Browser Support |
| **Module8: Audio And Video** | * + The State of Web Audio And Video Based On Plugins   + New Audio/Video Markup   + Attributes And Methods   + Understanding Audio/Video Events |
| **Module9: HTML5 Canvas** | * + Overview Of Graphics In The Browser     - Canvas Vs. SVG   + Using A Canvas   + Context And Coordinates   + Drawing Shapes and images   + Using gradients   + Browser Support |
| **Module10: HTML5 Geolocation** | * + Introduction To Geolocation   + Two Main Methods   + The Position Object   + Handling Errors |
| **Module11: HTML5 Data Storage** | * + Problems With The Existing Cookie-based Model   + New Storage Options     - Web Storage     - Web SQL Storage   + Browser Support |
| **Module12: HTML5 Web Workers** | * + The Current JavaScript Execution Model   + Introduction To Web Workers   + Usage Of Web Workers   + Communication APIs   + Handling Errors |
| **Module13: HTML5 Offline Applications** | * + The Need For Offline Mode   + The Manifest File   + The applicationCache Events   + Deployments And Updates   + Browser Support |
| **Module14: HTML5 Messaging APIs** | * + Cross-document Messaging     - Dealing With The Origin Concept   + XMLHttpRequest Level 2     - Cross-document XMLHttpRequest     - Progress Events   + Server-sent Event   + Browser Support |
| **Module15: HTML5 Web Sockets** | * + Overview Of Web Communication Options   + The History (Comet)   + Overview Of Web Sockets API And Protocol   + Advantages Of Web Sockets |
| **Module16: HTML5 and CSS3 best practices** |  |