

Web Designing with HTML,CSS, JAVASCRIPT,JQUERY

Course Contents:

HTML and CSS

1.Overview of HTML5:

Introduction, The HTML5 Advantages, HTML vs. HTML5, What's new in HTML5, Semantic Markup, New HTML5 Semantic Tags.

2. Semantic Markup and Selector APIs : Semantic Markup, Selector APIs

3. The Canvas API

Introduction,Understanding Canvas, Context, Coordinates, Browser Support & Alternate Content, Working with Canvas, Checking for browser support, Writing Text on Canvas, Drawing a line, Applying Transformations to Drawings, Translate in Canvas,Working with Stroke Styles, Working with Rectangle, Working with Fill Styles, Working with Curves,Insert Image into Canvas, Linear Gradient, Radial Gradient, Background Pattern, Scaling Canvas Object, Canvas Text, Applying Shadows

4. Scalable Vector Graphics in HTML5

Overview of HTML 5 & CSS 3, Working with SVG in HTML5,Transforming SVG, Reusing SVG Elements, Drawing Paths,Using Patterns and Gradients with SVG, A small Application using SVG, Multimedia in HTML5,Introduction to Multimedia, Codecs and Containers, Browser support for

5. Audio/ Video, Checking the Browser Support

Working with Audio/ Video Elements, Using Autoplay, More attributes, Control Functions, Adding Subtitles for Accessibility, Exclusive Video Attributes, Video Timeline Browser

6. Understanding Geolocation API

Overview, Sources of Location Information, Privacy Protection, Checking for Browser Support, Position Request, One-Shot Position Request, Repeated Position Updates, Showing Location on Google Map

7. Working with Forms API

Overview of Forms, Functional Forms, The Input Catalog, Common Input Types like, text, password, submit, radio,checkboxHTML 5 & CSS 3, button, HTML5 Input Types, number, date, color, range, month, week, time, datetime-local,email,search, tel, url, HTML5 Form Attributes and Functions, Validating Form Elements in HTML5, A complete Application

8. Communications API in HTML5

Introducing Cross Document Messaging, Sending a message, Receiving a message, Listening to the Message Events, Sample Application using postMessage. Progress Events, Cross-Origin Requests, Using Progress Events, Complete Application,

9. Working with WebSockets

Understanding WebSockets, WebSocket Handshake, WebSocket Interface, Methods,WebSocket Framing,Adding Event Listeners,

10. Working with Web Workers

Understanding Web Workers, Web Workers API,Browser Support, HTML 5 & CSS 3, Working with Web Workers, Initialization,Stopping, Error Handling,Shared Web Workers

11. Working with Drag-and-Drop

Understanding the Concept, Drag-and-Drop API HTML5, Drag-and-Drop Events, The Event Flow,Functions and Properties,FileHandling,A complete Application

12. Using Storage APIs

Understanding Storage,Setting and Retrieving Values,Resolving Data Leaks,Storage API Attributes and Functions, Web Storage Updates, Web Storage ExplainedComplete Implementation

13. Offline Web Applications with HTML5

Offline Web Applications,Cache and Web Application,Cache Manifest File, Complete Illustration.

14. Introduction to CSS3

Brief Description, Writing CSS, Defining Styles External Style Sheets,Inline Style Sheets, Declaration Block, selectors, Browser-specific Prefixes, Adding Comments to a CSS

15. Basic Selectors

Understanding Selectors, The Document Object Model (DOM)

HTML 5 & CSS 3, Working of Selectors,Types of Selectors, Universal Selectors, Type Selectors, Class Selectors, ID Selectors, Descendant Selectors, Attribute Selectors, Pseudo-classes, Pseudo-elements,Grouping Selectors,Styling Links,Playing with Cursor

16. Working with Sizes, Colors and Files

Sizes and Measuring Units, Relative Units, Example of Relative Units, Angles, Computing Length Values with calc(),Exploring Colors, Color Names, Hexadecimal Notations, RGB Format, RGBA Format,HSL Format, HSLA Format,Background Images

17. Styling Text

Working with Fonts, font-family, font-size,font-style, font-variant,font-weight,Dealing with Line Spacing,Changing the Text Color, Text Formatting, text-alignHTML 5 & CSS 3, text-decoration, text-indent, text-transform, vertical-align, white-space, text-overflow,Adding Text Shadows, Text Shadow, Adding Blur Effect to Shadow, White Text with Black Shadow, Adding Multiple Shadows

18. Web Fonts

Desktop Fonts vs. Web Fonts, Adding Web Fonts to Sites, Font Hosting Service, Storing Fonts to the Web Server,Font Formats and the Supporting Browsers ,Embedding Web Fonts

19. Background, Borders and Shadows

CSS Background, background-color, background-image, background-repeat, background-position, background-attachment, Adding Multiple Images to the Background , Defining Borders, Border-style, Border Width, Border Color, Border Shorthand,Additional Border Properties, Single Sided

Border, Border with Alpha Transparency, Rounded Corner Borders, Using Border Images, Image Border Properties, Adding Drop Shadows, Adding Drop Shadow
HTML 5 & CSS 3, Using Inset, Outline Styling

20. Gradients without Images

Understanding Gradients, Creating Linear Gradients, Browser support, Specifying Colors, Specifying Direction, Controlling Transparency, Creating Radial Gradients, Differently Spaced Color Stops, Specifying Shape, Specifying Size, Repeating Gradients, Using Multiple Gradients

21. Advanced Selectors

Why Advanced Selectors, First, Last and Only Child Instances, first-child Selector, last-child Selector, only-child Selector, first-of-type Selector, last-of-type Selector, Difference between :first-child and :first-of-type, Styling Selectors Based on Positions, Styling Selectors Based on Relationships, Styling Selectors Based on States, Negative Selectors, Other Pseudo Classes

22. Lists and Navigation Menus

Working with Lists, List Styling Properties, Navigation Menus, Creating Vertical Navigation Bars, Creating Horizontal Navigation Bars,

23. Exploring Generated Content

What is Generated Content, Inserting the Generated Content, Setting the Selectors Attribute as Generated Content

HTML 5 & CSS 3, Inserting Text as Generated Content, Enclosing Content in Quotes, Image (url) as Generated Content, Working with Counters, Incrementing the Counter, Initializing the Counter, Using before and after as Pseudo Classes

24. Transforms and Transitions

Transforms in CSS3, Changing the Transform Origin, 2D Transform Methods, CSS3 Transitions, The transition Property, Controlling the Transition Speed Curve

Delaying the Transitions, Adding Transformation to the Transition

25. Animating Elements with Keyframes

Animation vs. Transitions, Creating Animations Using Keyframes, @keyframes Rule, Animating a Text- Example, Delaying Animations, Running Animation for a Number of Times, Setting the Animation Play State, The animation-fill-mode, Setting the Animation Direction, Setting the Speed Curve of Animation,

26. Styling Tables

Table Structure, Table Border, Table Headings, Cell Padding, Aligning Data, Table Cells Spanning Many Columns, Table Cells Spanning Many Columns, Adding Caption to a Table, Defining Styles for tables, Grouping Table Rows, Table Layout Interpretation by Browsers

HTML 5 & CSS 3, Column Groups, Styling Tables in CSS

27. Elements Positioning

Understanding the Elements Positioning, Positioning Types, Positioning Elements, Specifying the Position Type, Overlapping Elements, Fixing Elements in the Browser Window, Creating Tooltips,

Styling Tooltips, Drop Down Menus, Creating Child Selectors, Creating submenus, Masking an Absolutely Positioned Element

28. Working with Layouts

Introduction to CSS Box Model, Setting Element Dimensions, Setting Box Size, Height and Width, Paddings and Margins, Specifying Paddings, Specifying Margins

Collapsing Margins, Removing Default Margins, Changing Layout with display, Controlling Visibility, Floating Elements, The float Property, Specifying Margins with Floating Elements, Clearing Float, Centering the Image, Adding Captions to Images, Using Multiple Classes

29. Multi-Column Layouts with CSS3

The Multi-Column Layout, Multi-Column Properties, Specifying Multiple Columns, Specifying the Column Gap

HTML 5 & CSS 3, Setting the Rule between Columns

Spanning Columns, Specifying the Column Width, Filling the columns, Dealing with Column Breaks

30. Dealing with Cross Browser Layouts

Creating Columnar Layouts using float, Single-Column Layout, Two-Column Layout using float, Three-Column Layout, Introducing Flexbox, The flex Properties

31. Media Queries

Understanding Media Queries, Specifying Media Queries, Media Features, Media Query Expressions, A Complete Illustration, Media Queries with Alternative Conditions, Setting Viewport, The HTML meta Tag, The viewport CSS, Handling Images with Media Queries

32. Print CSS3

Introduction, Media Types, The @media Rules, Defining Page Margins, Specifying Page Breaks, Breaking Content

jQuery

The jQuery Basics and managing the Element Selection. Manipulating the DOM. Manipulating the Elements. Working with Events. Using jQuery Effects. Working with Data and Ajax. Using Data Templates. Working with Forms. Using jQuery UI. Button, Progress Bar, and Slider Widgets, Autocomplete and Accordion Widgets, Tabs Widget, Datepicker Widget, Dialog Widget, Drag & Drop Interactions, Other Interactions, Using jQuery Mobile, Getting Started with jQuery Mobile, Pages and Navigation, Dialogs, Themes, and Layouts, Buttons and Collapsible Blocks, Using jQuery Mobile Forms, jQuery Mobile Lists,

Advanced Features, Using the jQuery Utility Methods, The jQuery UI Effects & CSS Framework, Using Deferred Objects

JavaScript



Introduction to JavaScript, Introduction to web development and JavaScript, How to create a JavaScript application, How to test and debug a JavaScript ,application, XHTML, CSS,How to get input and displays output,How to work with numbers, strings, dates, How to code control statements, How to create and use array, How to create and use function, How to create and use objects, How to use regular expressions, handle exceptions, and validate dataDOM Scripting, Basic DOM scripting, Advanced event handling, Advanced DOM manipulation, How to script CSS, How to script tables and forms, Animation with DOM scripting,Other JavaScript Skills, How to control the web browser, How to use JavaScript libraries