

## HTML and Cascading Style Sheets (CSS)

### Overview

HTML and CSS go hand in hand for developing flexible, attractively and user friendly websites.

HTML (Hyper Text Markup Language) is used to show content on the page where as CSS is used for presenting the page. HTML describes the structure of a Website semantically along with presentation cues, making it a mark-up language, rather than a programming language. HTML allows images and objects to be embedded and can be used to create interactive forms.

### Module 1: Web Programming Introduction

In this module, you will learn basic introduction to web development. The fundamental technology used to define the structure of a webpage.

Web Development Introduction

### Module 2: HTML-Introduction

In this module, sets the stage, getting you used to important concepts and syntax, looking at applying HTML to text, how to create hyperlinks, and how to use HTML to structure a webpage.

- History of HTML
- What you need to do to get going and make your first HTML page
- What are HTML Tags and Attributes?
- HTML Tag vs. Element
- HTML Attributes:
- How to differentiate HTML Document Versions

### Module 3: HTML-Basic Formatting Tags

In this module, HTML is used to specify whether your web content should be recognized as a paragraph, list, heading, link, image, multimedia player, form, or one of many other available elements or even a new element that you define.

- HTML Basic Tags
- HTML Formatting Tags
- HTML Color Coding

### Module 4: HTML-Grouping Using Div Span

In this module, The HTML <div> and <span> element is the generic container for flow content and does not inherently represent anything. Use it to group elements for purposes such as styling (using the class or id attributes), and inline level and block level separation.

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- Div and Span Tags for Grouping

## Module 5: HTML-Lists

In this module, The HTML <li> element is used to represent an item in a list. It must be contained in a parent element: an ordered list (<ol>), an unordered list (<ul>), or a menu (<menu>). In menus and unordered lists, list items are usually displayed using bullet points, now we are going to check how to use html list

Unordered Lists

Ordered Lists

Definition list

## Module 6: HTML-Images

In this module, the Web was just text, and it was really quite boring. Fortunately, it was not too long before the ability to embed images (and other more interesting types of content) inside web pages was added. There are other types of multimedia to consider, but it is logical to start with the humble <img> element, used to embed a simple image in a webpage. This module will help you to make use of image mapping

- Image and Image Mapping

## Module 7: HTML-Hyperlink

In this module, Hyperlinks are important they are what makes the Web a web. This module shows the syntax required to make a link, and discusses link best practices.

- URL - Uniform Resource Locator
- URL Encoding

## Module 8: HTML-Table

In this module, representing tabular data on a webpage in an understandable, accessible way can be a challenge. This module covers basic table markup, along with more complex features such as implementing captions and summaries.

- <table>
- <th>
- <tr>
- <td>
- <caption>
- <thead>
- <tbody>

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- <tfoot>
- <colgroup>
- <col>

## Module 9: HTML-Iframe

In this module, The HTML <iframe> element represents a nested browsing context, effectively embedding

another HTML page into the current page. This module will help you make use of iframe tag

- Attributes Using
- Iframe as the Target

## Module 10: HTML-Form

In this module, Forms are a very important part of the Web — these provide much of the functionality you need for interacting with web sites, e.g. registering and logging in, sending feedback, buying products, and more. This module gets you started with creating the client-side parts of forms.

- <input>
- <textarea>
- <button>
- <select>
- <label>

## Module 11: HTML-Headers

In this module, The HTML <head> element provides general information (metadata) about the document, including its title and links to its scripts and style sheets.

- Title
- Base
- Link
- Style s
- Script
- Meta

## Module 12: HTML-Miscellaneous

In this module, The HTML <Meta> element represents metadata that cannot be represented by other HTML meta-related elements, like <base>, <link>, <script>, <style> or <title>.this module will help you learn Meta tags, xhtml and deprecated tags

- HTML Meta Tag

- XHTML
- HTML Depreciated Tags & Attributes

### **Module 13: CSS2-Introduction**

In this module CSS is used to style and lay out web pages — for example, to alter the font, colour, size and spacing of your content, split it into multiple columns, or add animations and other decorative features. This module gets you started on the path to css.

- Benefits of CSS
- CSS Versions History
- CSS Syntax
- External Style Sheet using <link>
- Multiple Style Sheets
- Value Lengths and Percentages

### **Module 14: CSS2-Syntax**

In this module, the basic goal of the Cascading Stylesheet (CSS) language is to allow a browser engine to paint elements of the page with specific features, like colors, positioning, or decorations. The CSS syntax reflects this goal and its basic building blocks are

- CSS Syntax
- single Style Sheets
- Multiple Style Sheets
- Value Lengths and Percentages

### **Module 15: CSS2-Selectors**

In this module, CSS selectors define the elements to which a set of CSS rules apply. In this module, you will find how many selectors are there how to use it

- ID Selectors
- Class Selectors
- Grouping Selectors
- Universal Selector
- Descendant / Child Selectors
- Attribute Selectors
- CSS – Pseudo Classes

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## Module 16: CSS2-Color Background Cursor

In this module, CSS Backgrounds and Borders is a module of CSS that lets you style elements backgrounds and borders. Backgrounds can be filled with a color or image, clipped or resized, and otherwise modified. Borders can be decorated with lines or images, and made square or rounded.

- background-image
- background-repeat
- background-position
- CSS Cursor

## Module 17: CSS2-Text Fonts

In this module, CSS Fonts that defines font-related properties and how font resources are loaded. It lets you define the style of a font, such as its family, size and weight, line height, and the glyph variants to use when multiple are available for a single character

- color
- background-color
- text-decoration
- text-align
- vertical-align
- text-indent
- text-transform
- white-space
- letter-spacing
- word-spacing
- line-height
- font-family
- font-size
- font-style
- font-variant
- font-weight



## Module 18: CSS2-Lists Tables

In this module, lists table that defines how to lay out table data.

- list-style-type
- list-style-position
- list-style-image
- list-style

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## **CSS Tables**

- I. border
- II. width & height
- III. text-align
- IV. vertical-align
- V. padding
- VI. color


## **Module 19: CSS2-Box Model**

In this module, CSS box model that defines the rectangular boxes—including their padding and margin—that are generated for elements and laid out according to the visual formatting model.

- Borders & Outline
- Margin & Padding
- Height and width
- CSS Dimensions

## **Module 20: CSS2-Display Positioning**

In this module, the position CSS property specifies how an element is positioned in a document. The top, right, bottom, and left properties determine the final location of positioned elements.

- CSS Visibility
  - CSS Display
  - CSS Scrollbars
  - CSS Positioning
1. Static Positioning
  2. Fixed Positioning
  3. Relative Positioning
  4. Absolute Positioning
    -  CSS Layers with Z-Index

## CSS Floats

In this module, the float CSS property specifies that an element should be placed along the left or right side of its container, allowing text and inline elements to wrap around it. The element is removed from the normal flow of the web page, though remaining a part of the flow (in contrast to absolute positioning).

- The float Property
- The clear Property
- The clearfix Hack



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## ASP.NET Web Forms Syllabus

### Overview:

ASP.NET is the simplest way to develop dynamic websites and web applications using MS.NET Framework. What many don't know is that ASP.NET is a Framework by itself and not a programming language. C# is the best choice of programming language used for writing code in ASP.NET websites.

### Module 1: Web Programming Introduction

In this module you will learn about how the browser and Server gets communicating with each other, life cycle of http, about the http protocol and also the importance of get and post methods.

- Communication between server and browser
- Http Request Life Cycle
- HTTP Protocol
- Request and Response Structure 5. Difference between Get and Post

### Module 2: HTML and JavaScript

In this module you will learn about HTML and JavaScript and also you will know how to handle JavaScript Events like mouse Events, how to change styles and the debugging techniques and also you will know how to perform client side validations and the importance of timer and windows DOM objects.

- HTML Overview
- HTML Tags Reference
- HTML Example
- Introduction to JavaScript
- JavaScript Examples
- Debugging JavaScript in VS.NET

### Module 3: Traditional ASP Basics

In this module you will learn about the difference between ASP and ASP.NET and you will know what are the ASP objects, how ASP works and you will get the idea how IIS will install on window operating system.

- Introduction to ASP
- How ASP works
- ASP Objects
- Installing IIS on Windows 7 or Windows 8
- Sample Programs

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- Importance of Form tag and how it works.

## **Module 4: ASP.NET Introduction & Controls**

In this module you will learn about ASP.NET server side controls, how to handle Events of controls and the importance about IsPostBack property.

- ASP.NET Introduction
- First ASP.NET Application
- AutoPostBack Property
- Event Handler Parameters
- Dynamically initializing Controls
- IsPostBack property of Page class
- ListControls
- Comparison between HtmlControls and WebControls
- Control Properties and Methods
- FileUpload Control

## **Module 5: ASP.NET Architecture**

In this module you will learn about Life cycle of web form, Life cycle of page and also how ViewState manages state of the page.

- What is AppDomain?
- Life Cycle of ASP.NET Page
- How Control Manages its State
- What is EnableViewState
- How control raises events
- Event handling in Web Forms
- Writing Custom Classes in WebApplication

## **Module 6: CSS & Themes**

In this module you will learn about how to use themes and also you learn here how the css styles can be added to the controls.

- Working with CSS
- Working with Themes

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## Module 7: Redirecting User to another Page

In this module you will learn about how user can able to redirect to other pages as part of your Web application. Here you will get clear idea about how ASP.NET provides the ways to you to get redirection into multiple Web pages.

- Redirecting Options
- Response. Redirect
- Server. Transfer
- Cross Page Postback
- Determine how the Page was Invoked
- Passing Values between Pages

## Module 8: Master Pages

In this module you will learn about how ASP.NET master pages allow us to create a consistent layout for the pages in our application.

- Introduction to MasterPage
- ContentPlaceHolder and Content tags
- Accessing controls of MasterPage in ContentPage
- URL's in MasterPages
- UniqueID and ClientID

## Module 9: Working with User Control

In this module you will learn about how to create a user control and use of it. You will get to know how user controls can be reused for both User Interface and Code at different places.

- Overview of User Controls
- Creating a User Control
- Adding Properties to User Control
- Adding Events to User Control
- Using User Control in Web Form
- Rendering Client Scripts using Page.ClientScript methods

## Module 10: Validation Controls

In this module you will learn about the validation controls available in ASP.NET and why they are frequently used in every web form.

- BaseValidator
- RequiredFieldValidator
- CompareValidator

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- RangeValidator
- RegularExpressionValidator
- CustomValidator
- CausesValidation Property
- Grouping – ValidationGroup Property
- Page.Validators and Page.IsValid

## **Module 11: ASP.NET State Management**

In this module you will learn about how Cookies will be used within the current session, various types of Cookies can be used and how Session object will be used within the current session and how an Application Object will be maintained in the server.

- Static Members
- View State
- Hidden Field in Form
- Query String
- HttpContext
- Cookies - HttpCookie
- Sessions - HttpSessionState
- Application – HttpApplicationState
- Summary of All Features.

## **Module 12: WebConfiguration File and Global.asax**

In this module you will learn about how an application settings can be provided in Web.Config file and the use of each and every section in that file and also we are going to discuss in this about Global.asax which contains the event handlers of HttpApplication object.

- Introduction to Configuration files
- Page settings in web.config
- Custom Errors
- URL Re-Writing
- Tracing
- Using ConfigSource Attribute
- Using Location Section
- HttpApplication class - Global.asax

## **Module 13: Authentication & Authorization**

In this module you will learn about how a secured Web application can be created using authentication and also you will learn how many types of authentication techniques we have in ASP.NET.

- What is Authentication and Authorization
- Types of Authentication
- Forms Authentication
- Role based Authentication
- Windows and Basic Authentication
- What is ASP.NET Impersonation
- Using location section in Web.config

## **Module 14: Application Service Providers**

In this module you will learn about Membership and Role Provider offers individual or access at management over the internet. It is required where you need to provide services for storing state in databases and various storage media.

- ASP.NET Providers Introduction
- Membership Providers Role Providers
- Writing Custom Providers
- Profile Providers
- Web Parts Personalization Providers

## **Module 15: Data Bound Controls**

In this module you will learn about how data is presented to the user using GridView, DetailView, ListView and importance of these controls.

- Databinding traditional way
- SqlDataSource
- GridView
- DetailsView
- FormView
- DataList
- Repeater
- ListView
- DataPager

## **Module 16: Web Caching**

Here in this module you will learn about how a high-performance Web application should be designed with caching in mind and the different types of caching techniques.

- Why Caching
- Types of Caching
- Output Caching

- Fragment Caching
- Substitution Caching
- Data Caching
- SQL Cache Invalidation

## **Module 17: Globalization and Localization**

In this module you will learn about how to create resource files for different cultures. This is required when you want to create an application that meets the needs of users from multiple cultures and also you will learn how to accommodate these cultural differences in your application.

- Definitions
- Creating Resource files for different cultures
- Designing the WebForm & linking controls to keys in Resource files
- Alternatives to initialize culture settings of the page.

## **Module 18: AJAX.NET**

In this module you will learn about how to make asynchronous calls for a particular task. In many cases you need not to get the fresh page when requested for the particular content every time, you can be there in same page and get the required content easily this can be done by Ajax.

- What is AJAX
- What is AJAX.NET
- Script Manager
- Update Panel
- Update Progress
- Timer
- AJAX Control Toolkit

## **Module 19: Routing**

In this module you will learn about how default URLs are mapped to user friendly URLs. You will learn how URLs will convert to meaningful and descriptive which will be easy to remember and will improve the search engine rank.

- What is Routing
- Mapping Route to Physical file
- Reading Route Parameters
- Route Expression
- Generate URL using Markup

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## **Module 20: Understanding & Publishing Web Application**

In this module you will learn about the advantages of IIS applications, how to create a web application in IIS, the use of Virtual directory and finally you will learn how to publish an ASP.NET Website.

- Introduction to ASP.NET Web Application
- Advantages of IIS Applications
- Creating web application in IIS
- Converting File System application to IIS Application
- Using Virtual Directory
- Publishing ASP.NET Websites



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## HTML 5

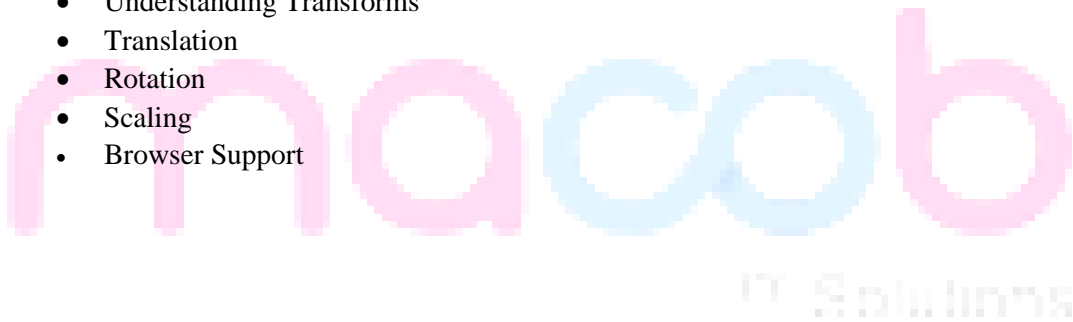
### Syllabus Covered (HTML5) History, Vision & Future of HTML5

- 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 Getting Started With HTML5
- The State Of Browser Support
- Feature Detection
- Support for Legacy Browsers
- Graceful Degradation
- Emulation
- Developer Tools Structure of a Web Page
- HTML5 DOCTYPE
- Page Encoding
- HTML5 Mark-up
- New And Updated Elements
- Structural Elements
- New Attributes
- Deprecated Elements And Attributes
- HTML5 And CSS3
- Browser Support Forms
- What Are the Needs for Web Applications?
- Current Solutions
- New Input Types
- New Attributes
- Form Validation
- Browser Support 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

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- New Audio/Video Mark-up
- Attributes and Methods
- Understanding Audio/Video Events
- Customizing Audio/Video ControlsHTML5 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



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