

# **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.

• Div and Span Tags for Grouping



## **Module 5: HTML-Lists**

In this module, The HTML element is used to represent an item in a list. It must be contained in a parent element: an ordered list (), an unordered list (), 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.

- •
- >
- •
- •
- <caption>
- <thead>
- <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>, , <script>, <style> or <title>.this module will help you learn Meta tags, xhtml and deprecated tags

- HTML Meta Tag
- XHTML
- HTML Deprecated 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

# **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

#### **CSS Tables**

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

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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

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## **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 clear fix Hack





# Linux LAMP

## Introduction

Lamp stands for Linux, Apache, MySQL & PHP. Lamp training can equip individuals to run dynamic websites and servers. Due to its flexibility, customization Lamp training is effective tool in order to develop & create commercial web applications.

## Linux

Linux is the operating system that's now used on the majority of web servers. Even if your organization uses Microsoft Windows at the Desktop, you may find Linux behind the scenes.



# **Linux Course Syllabus**

- 1. Introduction to Red Hat Linux
- 2. Getting Started
- 3. Login in Linux (GUI & Console)
- 4. Directory Structure of Linux
- 5. Listing Files & Directories (ls)
- 6. Creating, Moving & Deleting Files and Directories
- 7. Searching for Files (locate & find)
- 8. Shells (Working effectively in the Command Line)
- 9. File System Basics & File Management
- 10. Pipes, Streams & Redirects
- 11. Processes Management
- 12. Finally, the vi Editor

# **Apache**

Apache is the most used Web Server worldwide; it's available for free (Open Source) and bristling with facilities. On the course, we download, install and test apache. We configure Apache, including virtual host support, access security, MIME type handling, and add modules to support extra facilities. We also cover error handling and log file analysis.

## **Apache Course syllabus**

!T Solutions

## **Apache Overview**

- 1. What is "Apache" and what does it do?
- 2. Other web servers.
- 3. Versions of Apache.

## Apache httpd - Sourcing, Installation, Testing

- 1. Downloading Apache.
- 2. Selecting a user account under which to run Apache.
- 3. Initial mandatory configuration.
- 4. Testing your installation.
- 5. Running apache as a daemon

## **Further httpd Configuration**



- 1. Available Modules and turning them on and off.
- 2. Associating file extensions with modules

## Apache httpd - virtual hosts

- 1. Virtual Hosts
- 2. Setting up so the browser can see multiple hosts
- 3. Configuring virtual hosts

## Apache httpd - log files and log tools

- 1. Configuring the access and error logs.
- 2. making logs available to the web site owner.
- 3. Tools to analyze log files.

## **MySQL**

MySQL is one of the most popular open source database management system recognized for its speed and reliability. It is commonly used with web pages. More than 11 million Websites are built around MySQL.

Current MySQL customers such as eBay, Google, Twitter, Yahoo, Facebook, and YouTube, SlashDot, Live Journal are perfect examples of how MySQL is used to organize and store multiple databases that can be quickly accessed by millions of people at once.

# !\*\* Solutions

## **PHP**

PHP is a powerful cross platform server side script language. It is a full featured programming language capable of managing huge database driven online environments. Using PHP, you can query databases, create images, read & write files, talk to remote servers - the possibilities are endless.

PHP is an HTML-embedded scripting language. Much of its syntax is borrowed from C, Java and Perl with a couple of unique PHP-specific features thrown in. The goal of the language is to allow web developers to write dynamically generated pages quickly

## **Linux Administration**



Linux Administration is an information technology topic that includes system architecture, Linux installation, commands, devices and file systems, shells and scripting, user interfaces, administrative tasks, system services, networking fundamentals, and security.

This course is comprised of 2 parts, 10 sections and 43 lessons covering IT security. Each lesson includes a combination of Wikipedia readings, YouTube videos, and hands-on learning activities. The course also assists learners in preparing for CompTIA Linux+ Certification.

Introduction to Unix & Linux

History of Unix & Linux

Basic Concepts of Operating Systems, Kernel, shell and file system structure

Basic Concepts of Linux

Basic Commands of Linux

**Advanced Linux Commands** 

Installation of Linux

**Interactive Installation** 

Kick start Installation

Network based Installation

Startup and Shutdown scripts

**Boot Sequence** 

Kernel Initialization

**INIT Process** 

Software Package Administration

Installing and deleting software packages



Querying and updating software packages

Dynamic Host Configuration Protocol (DHCP)

Configuring Linux as DHCP server

Configuring various clients for dhcp server (Windows & Linux)

NFS

Configuring NFS server

Mounting NFS exports on NFS clients

Network Information Service (NIS)

Basics of NIS

Configuring NIS master server, slave server and client

Creating NIS users

DNS with Bind

**Basis of Internet** 

Basic of DNS and BIND

Configuring DNS primary server, and secondary servers

Configuring DNS for multiple domains and sub domains

Configuring various clients (Windows & Linux)

Web Server (Apache)

Basics of web service

Introduction to Apache

Configuring Apache for main site

Configuring Apache for multiple sites using IP-based, port-based and name-based virtual hosting



FTP server (vsftp daemon)

Basics of File Transfer protocol

Configuring proftpd for anonymous ftp service

Mail Server (SMTP, POP3, IMAP)

Basics of Mail servers

Configuring SMTP services

Configuring POP3/IMAP service on Linux

Integrating Antivirus and Antispam.

Proxy Server (Squid)

Basics of proxy services

Configuring proxy services

Creating ACL's for controlling access to internet

Samba service

Basics of file sharing in Windows

Configuring samba to act as member server for Windows Network

Configuring samba service for file sharing with windows systems

RAID (Redundant Array of Inexpensive Disks)

Implementing RAID on Linux

Pre installation / Post Installation

RAID levels (0, 1, and 5) configuration using RAID tools.



Disk Partitioning and Mounting File System

Using fdisk, disk druid utilities for disk partitioning

Using mkfs, dd commands to create file systems

Mounting various file systems

Auto mounting of file system

Logical Volume Manager (LVM)

Quotas

**Enabling Quotas on partitions** 

Creating Quotas for users

Auditing quotas

Introduction to Graphical Environment

Use and customize the GNOME interface

Perform command tasks using the GNOME GUI

Launch applications from command line and GNOME interface

Customize X Window System

User and group administration

Creating and deleting users from the system

Modifying users profile

Creating and deleting groups

Important system files related to user administration

Advanced file permissions (ACL)

Assigning advanced files permissions i.e. SUID, SGID and Sticky bit

Creating, modifying and deleting ACL's



Backup and recovery

Introduction to various types of backup media

Backup and restoring data using dump / restore commands

Backup and restoring using tar and cpio commands

Automation of Jobs

Securing your Linux Server

Implementing local security

Implementing network security

Implementing data security

Basic elements of Fire Wall using IP Tables

Web Based Administration

Installing Webmin on Linux

Administrating the Linux machine remotely

Using Webmin as a Tool for configuring various services on Linux

!! Solutions

Troubleshooting your system

Recovering the super user password

Recovering the boot loader (GRUB)

Troubleshooting Xserver problems

Troubleshooting network related problems.

- Introduction to OpenStack
- Linux Security Fundamentals
- Automation is essential to running Linux in the enterprise effectively. Automation lets you minimize costs by reducing manual operations, helps ensure compliance across the data center, standardizes your software infrastructure and accelerates deployments for your bare-metal and cloud infrastructures.



#### **VISUAL STUDIO**

This course is a study of object-oriented programming through the use and practical application of the C# language. Topics include classes, objects, methods, GUI programming, graphics, databases, XML, Web pages and Internet

#### COURSE OUTCOME

On successful completion of this course, students will be able to

- Understand computer program design and the C# interactive development environment.
- Use C# tools to create a well-documented application based on client input or industry research.
- Produce programs that produce correct results and that are attractive, readable, and easy to maintain

# **Course Topics**

The following topics will be covered in the modules listed below..

Module 1: Getting Started/Course Introduction

Module 2: Introduction to Visual C#

Module 3: Processing Data

Module 4: Making Decisions

Module 5: Loops, Files and Random Numbers

Module 6: Modularizing Your Code with Methods

Module 7: Arrays and Lists

Module 8: More About Processing Data

Module 9: Classes and Multiform Projects

Module 10: Inheritance and Polymorphism

Module 11: Databases

Module 12: XML, Webpages and the Internet



## WORDPRESS

# **Course Description**

WordPress is the most popular Content Management System (CMS) available today. This hands-on course will teach you how to use the power of WordPress CMS to build modern, easy-to-navigate websites. Learn how to install, setup and publish websites using the core functionality of the WordPress platform. You will also be introduced on how to customize themes, build e-commerce shops, and implement basic SEO into your WordPress website.

## **Installing WordPress**

- •Uploading WordPress to your web server
- •Installing WordPress
- •Database Connectivity
- •Theme Customization

## **Configuring WordPress**

- Using the WordPress dashboard
- •Managing content in the Word Press dashboard
- •Types of users
- •The WordPress settings panel
- •Reading and writing settings
- Permalinks and RSS feeds
- •Creating and managing posts
- •Setting up post categories
- •Creating and managing pages
- Managing comments
- •Installing and updating plugins
- •Customizing WordPress themes
- •WordPress theme options



## **Advanced Topics**

- •WordPress Security / backup / domain transfers
- •Migration From Different Platforms
- Optimization of WordPress

## Website WordPress SEO(Overview)

- •On Page SEO
- •SEO Plugin

# **JOOMLA**

Joomla is a free and open-source content management system (CMS) for publishing web content, developed by Open Source Matters, Inc. It is built on a model-view-controller web application framework that can be used independently of the CMS.

## **Joomla Basics**

- Installing Wamp Server
- Installing Joomla on local server
- Installing Joomla on web server

## Joomla Backend

- Joomla Global Configuration
- Article Manager
- Archive Manager
- Frontpage Manager
- Section Manager
- Category Manager
- Media Manager
- Menu Manager



- Component Manager
- Content Manager
- Extensions Manager
- Module Manager
- Plugin Manager
- Template Manager
- Installing a New Module
- Installing a New Template
- Installing a New Plugin
- Installing a New Component
- Understanding the concept of Joomla Positions
- Changing the layout structure by changing the module position

## Joomla Frontend

- Understanding Basic Joomla Template
- Customizing Joomla Template
- Building Custom Joomla Template
- Understanding templateDetails.xml File
- Creating templateDetails.xml File using tmpl\_builder
- Linking CSS
- Linking JavaScript
- Understanding <jdoc> include
- Displaying content in XHTML
- Creating template installation package
- Creating Custom Forms
- Changing the Form appearance using CSS



## **Open ECommerce**

Electronic Commerce provides an overview of the fundamental concepts of online marketing, creating a web site, gaining customers online.

- Defining E-commerce
- The Development of E-commerce
- E-commerce Marketing
- E-commerce Security Issues
- E-commerce Security Requirements
- E-commerce Legal Considerations
- International Legal Considerations in E-commerce
- E-commerce Implementation Costs
- Online Auctions Including E-Bay
- Customer Service Expectations of the E-commerce Experience

