Full Stack Web Developer

Technologies:

S.NO	Technologies	Days
1	HTML &CSS	3 DAYS
2	JavaScript, Object Oriented JavaScript& jQuery	5 DAYS
3	HTML5 &CSS3	5 DAYS
4	ANGULAR JS	5 DAYS
5	PHP&MYSQL	6 DAYS
6	CMS-DRUPAL or WORDPRESS Overview	2 DAYS
7	LIVE PROJECT WITH WEB ADMINISTRATION	2 DAYS
	TOTAL DAYS	**28 DAYS**

Objective:

- Understand the importance of the web as a medium of communication.
- Understand the principles of creating an effective & dynamic web page, including an in-depth consideration of Web Development..
- Exposure to become Web developer

Course Contents:

HTML/CSS

How the web works
- The internet versus the Web
- Serving Up your information
- A word about browsers
- Web Page Addresses (URLs)
- The Anatomy of a Web Page

Some Big Concepts You Need to Know
- A dizzying multitude of Devices
- Sticking with the standards
- Responsive Web Design
- One web for All (Accessibility)
- Site Performance

Creating a Simple Page

- A web page, Step by step
- Launch Text Editor
- Start with Content
- Give the Document Structure
- Identify Text Elements
- Add an Image
- Change the Look with a Style Sheet
- Validating Your Documents

Marking up Text

- Paragraphs
- Heading
- Lists
- More Content Elements
- Organizing Page Content
- The Inline Element Roundup
- Generic Elements (div and span)
- Some special characters
- Putting It all Together

Adding Links

- The href Attribute
- Linking to Pages on the Web
- Linking within Your Own Site
- Targeting a New Browser window
- Mail Links
- Telephone Links

Adding Images

- First, a word on Image Formats
- The img Element
- A Window in a window (ifram)

Basic Table Markup

- How Tables Are Used
- Minimal Table Structure
- Table Headers
- Spanning Cells
- Table Accessibility
- Wrapping Up Tables

Forms

- How Forms Work
- The form Element
- Variables and Content
- The Great Form Control Round-up
- Form Accessibility Features
- Form Layout and Design

Cascading Style Sheets

- The Benefits of CSS
- How Style Sheets Work
- The Big Concepts
- Moving Forward with CSS

Formatting Text

- The Font Properties
- Changing Text Color
- A Few More Selector Types
- Text Line Adjustments
- Underlines and Other "Decorations"
- Changing Capitalization
- Spaced Out
- Text Shadow
- Changing Lists Bullets and Numbers

Colors and Backgrounds

- Specifying Color Values
- Foreground Color
- Background Color
- Playing with Opacity
- Introducing.... Pseudo-class Selectors
- Pseudo-element Selectors
- Attribute Selectors
- Background Images
- Like a Rainbow (Gradients)
- The Shorthand background Property
- Finally, External Style Sheets

Thinking inside the Box

- The Element Box
- Specifying Box Dimensions

- Padding
- Borders
- Margins
- Assigning Display Roles
- Adding Drop Shadows to Boxes
- The Box Model in Review

Floating and Positioning

- Normal Flow
- Floating
- Positioning Basics
- Relative Positioning
- Absolute Positioning
- Fixed Positioning

Page Layout with CSS

- Page Layout Strategies
- Page Layout Techniques
- Multicolumn Layouts Using Floats
- Positioned Layout
- Top-to-Bottom Column Backgrounds

CSS Techniques

- A Clean Slate (CSS Reset)
- Image Replacement Techniques
- CSS Sprites
- Styling Forms
- Styling Tables
- Wrapping Up Style Sheets

Web Graphics Basics

- Image Sources
- Meet the Formats
- Image Size and Resolution
- Working with Transparency
- PNG-8 "Alpha" Transparency
- Summing Up Images

Learn and Mean Web Graphics

- General Optimization Strategies
- Optimizing GIFs
- Optimizing JPEGs
- Optimizing PNGs

- Optimize to File Size
- Optimization in Review

JavaScript

- Introduction to web development and JavaScript
- How to create a JavaScript application
- How to test and debug a JavaScript application
- 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 data

Object Oriented JavaScript

Introduction

- Object Oriented programming
- Object
- Classes
- Inheritance
- Polymorphism

Primitive Data Types, Arrays, Loops and Conditions

- Variables
- Primitive Data Types
- Strings
- Numbers
- Arrays
- Conditions and Loops
- Code blocks
- Comments

- Function
- Predefined functions
- Scope of variables
- Anonymous functions
- Functions are Data
- Callback functions
- Closures
- Scope Chain

Objects

- From arrays to objects
- The global object
- The constructor property
- Regex
- String Methods
- Replace callbacks

Prototype

- Prototype property
- Adding methods and properties using the prototype
- Enumerating properties
- Prototype gotchas

The Browser Environment

- Including JavaScript in an HTML page
- BOM and DOM
- Events
- Type of Events

Coding and Design Patterns

- Coding patterns
- Namespaces
- Design Patterns
- Singleton
- Factory
- Observer

JQUERY

Working with jQuery

- The jQuery Basics
- Managing the Element Selection
- Manipulating the DOM
- Manipulating the Elements
- Working with Events
- Using jQuery Effects

Using jQuery UI

- Setting Up jQuery UI
- Using the Button, Progress Bar, and Slider Widgets
- Using the Autocomplete and Accordion Widgets
- Using the Tabs Widget
- Using the Datepicker Widget
- Using the Dialog Widget
- Using the Drag & Drop Interactions
- Using the Other Interactions

Advanced Features

- Using the jQuery Utility Methods
- The jQuery UI Effects & CSS Framework
- Using Deferred Objects

HTML5 and CSS3

Introduction To HTML5 :

- Why HTML5
- Benefits Of HTML5 over HTML
- HTML 5 for Making Dynamic Page
- HTML5 for making Graphics
- HTML5 for making Visuals
- How to work with forms
- How to use forms and controls
- Other skills for working with forms
- How to use the HTML5 features for data validation
- How to use the HTML5 controls
- A web page that uses HTML5 data validation

How to add audio and video to your web site

- An Introduction to media on the web
- How to add audio and video to a web page
- A web page that offers both audio and video

How to format web pages for printing

- The skills for formatting printed web pages
- A two-column web page with special formatting for printing

Advanced HTML5

- How to embed fonts in a web page
- How to use the Geolocation feature
- How to use the web storage feature
- How to use the Canvas feature
- How to use the Drag and Drop feature

CSS3 features

- Introducing CSS3
- Media Queries
- Selectors
- Pseudo-classes and Pseudo-elements
- Web Fonts
- Text Effects and Typographic Styles
- Multiple Columns
- Background Images and Other Decorative Properties
- Border and Box Effects
- Color and Opacity
- Gradients
- 2D Transformations
- Transitions and Animations
- 3D Transformations
- Flexible Box Layout
- Template Layout
- The Future of CSS
- HTML5 & CSS3 for responsive web design
- OVERVIEW OF BOOTSTRAP 3.0

ANGULAR JS

Getting Ready

- What Do You Need to Know?
- Structure to understand.
- How Do You Set Up Your Development Environment?

Your First AngularJS App

- Using AngularJS
- Applying AngularJS to the HTML File
- Creating a Data Model
- Creating a Controller
- Creating a View

Putting AngularJS in Context

- Putting AngularJS in Context
- Understanding Where AngularJS Excels
- Understanding Round-Trip and Single-Page Applications
- Understanding the MVC Pattern
- Understanding Models
- Understanding Controllers
- Understanding Views
- Understanding RESTful Services

HTML and CSS Primer

- Understanding Void Elements
- Understanding the Document Structure
- Understanding Bootstrap
- Applying Basic Bootstrap Classes
- Using Bootstrap to Style Tables
- Using Bootstrap to Create Forms
- Using Bootstrap to Create Grids

A Real Application

- Creating the Data Structure
- Adding the Data
- Testing the Data Service

- Creating the Directory Structure
- Installing the AngularJS and Bootstrap Files
- Building the Basic Outline
- Displaying the Product Data
- Displaying the Product Details
- Displaying the Category List

Navigation and Checkout

- Using the Real Product Data
- Creating Partial Views
- Creating the Cart
- Adding URL Navigation
- Starting the Checkout Process

Administration

- Adding Form Validation
- Placing Orders
- Administering the Product Catalog

The Anatomy of an AngularJS App

- Working with Modules
- Using Modules to Define AngularJS Components
- Using Modules to Organize Code

Using Binding and Template Directives

- Why and When to Use Directives
- Using the Data Binding Directives
- Using the Template Directives

Using Element and Event Directives

- Using the Element Directives
- Handling Events
- Managing Special Attributes

Working with Forms

- Using Form Elements with Two-Way Data Bindings
- Validating Forms

- Providing Form Validation Feedback
- Using the Form Directive Attributes

Using Controllers and Scopes

- Why and When to Use Controllers and Scopes
- Understanding the Basics
- Organizing Controllers
- Explicitly Updating the Scope

Using Filters

- Why and When to Use Filters
- Filtering Single Data Values
- Filtering Collections
- Creating Custom Filters

Creating Custom Directives

- Creating a Custom Directive
- Working with jqLite

Creating Complex Directives

- Defining Complex Directives
- Using Directive Templates
- Managing Directive Scopes

Advanced Custom Directive Features

- Using Transclusion
- Using Controllers in Directives
- Creating Custom Form Elements

Working with Modules and Services

- Using Modules to Structure an Application
- Creating and Using a Service
- Using the Built-in Modules and Services

Services for Global Objects, Errors and Expressions

- Accessing the DOM API Global Objects
- Dealing with Exceptions
- Working with Dangerous Data
- Working with AngularJS Expressions and Directives

Services for Ajax and Promises

- Making the Ajax Request
- Receiving Ajax Responses
- Configuring Ajax Requests
- Setting Ajax Defaults
- Using Ajax Interceptors
- Getting and Using the Deferred Object
- Consuming the Promise
- Understanding Why Promises Are Not Regular Events
- Chaining Outcomes Together
- Grouping Promises

Services for REST

- Using the $http Service
- Hiding the Ajax Requests

Services for Views

- Using URL Routing
- Using Route Parameters
- Configuring Routes

Services for Animation and Touch

- Animating Elements
- Supporting Touch Events

Services for Provision and Injection

- Why and When to Use the Provision and Injection Services
- Registering AngularJS Components
- Managing Injection

Services for Testing

- Working with Karma and Jasmine
- Understanding the Mock Objects
- Testing a Controller
- Using the Mock Objects
- Testing Other Components

PHP-MYSQL

Introduction to Web Development with PHP

- The architecture of a web application
- The Product Discount application
- How to edit and test a PHP application
- How to use NetBeans to develop a PHP application

How to code a PHP application

- Basic PHP skills
- How to get data from a request
- How to work with data
- The Product Discount application
- How to code control statements
- The Future Value application
- How to use the PHP documentation

Introduction to relational database with MySQL

- An introduction to relational database
- The SQL statements for data manipulation
- An introduction to MySQL
- How to use phpMyAdmin

How to use PHP with a MySQL database

- PHP for working with MySQL
- How to get data from a result set
- The Product Viewer application
- The Product Manager application

How to Use the MVC pattern to organize your code

- How to use the MVC pattern
- The Product Manager application
- The Product Catalog application

How to test and debug a PHP application

- An introduction to testing and debugging
- How to debug with xDebug and Netbeans

How to work with form data

- How to get data from a form
- How to display data on a web page

How to code control statements

- How to code conditional expressions
- How to code the selection structures
- How to code the iteration structures

How to work with strings and numbers

- How to work with strings
- How to work with numbers
- Other skills for working with strings and numbers

How to work with dates

- How to use timestamps to work with dates
- How to use objects to work with dates

How to create and use arrays

- How to create and use an array
- How to create and use an associative array
- How to use functions to work with arrays
- How to work with array of arrays
- The Task List Manager application

How to work with cookies and sessions

- How to work with cookies
- How to work with sessions
- The Shopping Cart application

How to create and use functions

- Basic skills for working with functions
- How to create and use namespaces
- Advanced skills for working with functions
- The Shopping Cart application

How to create and use objects

- How to create and use classes
- How to code class constants, properties, and methods
- The object-oriented Product Manager application
- Additional skills for working with objects
- How to work with inheritance

How to use regular expressions, handle exceptions, and validate data

- How to use regular expressions
- How to handle exceptions
- The Registration application

How to design a database

- How to design a data structure
- How to normalize a data structure
- A database design tool

How to use SQL to create a MySQL database

- How to work with databases
- How to work with tables
- How to work with indexes
- How to work with users and privileges
- Other skills for creating a databases

How to use SQL to work with a MySQL database

- How to select data from a single table
- How to select data from multiple tables
- How to code summary queries
- How to code sub-queries
- How to insert, update, and delete rows

Professional PHP for working with MySQL

- Three ways to use PHP to work with MySQL
- How to work with PDO

A database-driven web site

- How to work with large text columns

How to create secure web sites

- How to use a secure connection
- How to use authentication
- How to work with encrypted data

How to send email and access other web sites

- How to send email
- How to get data from other servers

CMS : DRUPAL/WORDPRESS

Drupal 7

Introduction to CMS

- Drupal is a CMS for Building Dynamic Web Sites
- Drupal is an Application Framework
- What's in Drupal 7
- How Drupal Works
- Planning a Drupal Project: Designing from the Content Out
- Drupal 7 Installation

Drupal's Administration Menu

- Creating Content Type
- Adding Content and Blog
- Blocks: Creating a Mission Statement
- Taxonomy: Categorizing Content
- WebForm

Dursh and Git

- Download Drush
- Make Drush Executable

- Git: Development Grease
- Installing Git
- Working with Git

Drupal Modules

- Modules in Core
- Where to store contributed Modules
- Other Modules
- Members, Roles and Permissions
- Allowing People to Register
- Login with OpenId

Theming

- The Core Themes Directory
- Core Themes
- Themes Administration
- Defining Theme Metadata (.info Files)
- Installing Themes
- Global Theme Settings
- Template Files

Building Dynamic Pages Using Views

- Why are views?
- Download, Enable and Configure permission for the Views Modules
- Views Administration PageDrupal 7
- Available Views
- Creating Basic Views
- Views Filters
- Combining Sort with Logical Operators
- Views Format Settings

Panels

- Getting Started with Panels
- Select Layout
- Custom Layout

- Add contents
- Creating Landing Page
- Mini Panels

Security in Drupal

- Setting up a secure drupal site
- Keep text formats Tight and secure
- Security Process
- Writing Secure Code

Updating Drupal

- Why Update
- Preparation
- Manual Update
- Contributed Module

Overview Of Module Development

- A very Simple Module
- Where to put a custom module
- Create a Repository for you Module
- Terminology

WORDPRESS :

- Starting Out with WordPress
- The WordPress Landscape
- Signing Up with WordPress.com
- Installing WordPress on Your Web Host
- Part Two: Building a WordPress Blog
- Creating Posts
- Choosing and Polishing Your WordPress Theme
- Jazzing Up Your Posts
- Adding Pages and Menus
- Part Three: Supercharging Your Blog
- Getting New Features with Plug-Ins
- Adding Picture Galleries, Video, and Music
- Collaborating with Multiple Authors
- Attracting a Crowd
- Part Four: From Blog to Website

- Editing Themes: The key to Customizing Your Site
- Building an Advanced WordPress Site

Live Project With Web Administration