PHP – Course Plan

## Introduction to php

* Why PHP
* Usage of PHP
* System Requirements
* Installation and setup

## Fundamentals of php

* Variables
* Constants
* String Functions
* Regex
* Array Functions
* Indexed Array
* Associative array
* Multidimensional array
* Array functions
* Merging array
* Split array
* Array difference
* Loop Control Structures
* For Loop
* While Loop
* Do-while Loop
* Foreach Loop
* Usage of Break and Continue
* Iterate an array with all loops
* Populating array of data in select dropdown
* Calculate the sum and maximum number of array
* Printing Multidimensional array of user data in table
* Decision Making
* Using if...else statement
* Using elseif statement
* Using switch statement
* Operators
* Arithmetic Operators
* Comparison Operators
* Logical (or Relational) Operators
* Assignment Operators
* Conditional (or ternary) Operators
* Functions
* Built-in Functions
* User - Defined Functions
* Returning Values
* Default Values to parameters
* Scope of the variables in PHP
* Pass by Value vs Reference
* Dynamic Function Calls
* Conditional functions
* Functions within functions
* Anonymous functions
* Using date and time function
* Using implode / explode
* Swapping Two variables using references
* Factorial recursion program
* Form Handling
* GET Method
* POST Method
* Single Page Form Processing
* Multiple Page Form Processing
* Page Redirection
* Cookies & Sessions
* Setting Cookies with PHP
* Accessing Cookies with PHP
* Deleting Cookie with PHP
* Create a cookie which expires in 10 seconds
* Language Preference - Storing user selected language preference in cookie
* To Implement Remember Password
* Server Session Storage
* Setting and Reading Session Data
* Shopping Cart - Storing an array of product ids in cart
* Authenticate pages with login using session

## More on PHP

* Working with files
* Creating Files, Directories
* File Modes
* Reading, Writing to Files
* Closing, Deleting Files
* Checking if File Exists
* File Operations
* Upload a csv file and parse it and display in table
* Bulk directory Creation
* Website Counter - Each visitor increments the counter written to a file.Show the counter in table cells
* Program to store contact form collected information in csv file
* E-mail Handling
* Send email using mail () function
* Send email using SMTP
* Collecting form data and send in email
* Sending file Attachments

## Learning MySQL

* MYSQL Introduction
* Basic Queries like Insert / Update / Delete / Drop / Truncate
* Join Queries
* Math operational Queries
* Getting started with PHPMyAdmin Panel

## Database Connectivity

* Database Connection
* Inserting, Updating, Deleting a record
* SQL Injection
* Escaping strings for MySQL

## Learn HTML

## Learn CSS

## Oops in php

* Understanding Object-Oriented Programming
* Understanding Objects and Classes
* Structuring Classes
* Defining Class Properties
* Defining Class Methods
* Magic Methods in OOP
* Using Constructors and Destructors
* Using Class Inheritance
* Visibility of Properties and Methods (Public, Private Protected, Static)
* Object-Oriented vs Procedural Code
* Simple Multilevel Inheritance
* Method Overloading and Overriding (Polymorphism)
* Exception Handling with Try Catch and Finally
* Design Simple class to show understood concepts of OOPs.
* Interfaces and Abstract Class
* Namespaces
* Lazy Loading

## PHP & jQuery

* Introduction to JavaScript
* Introduction to jQuery (JavaScriptlibrary)
* Basic DOM handling with jQuery
* AJAX concept
* Implementing AJAX with jQuery
* JSON handling with jQuery
* Form Validation
* Using third party library

## Regex

* Delimiters
* Meta characters
* Quantifiers
* Matching and Extracting Strings

## Advanced – CMS

* Usage of CMS
* WordPress / Joomla

## Advanced – Frameworks

* MVC Pattern
* Laravel / Code Igniter

## Mini Project Using Frameworks

* Admin panel – Login, Add / Edit/ Delete
* Display data in front end

## API Handling

## PDF generation using Library

## Image Processing using Library

* Image GD / Imagick Extensions
* Upload image and resize / thumbnail
* Adding Text on Images
* Applying Watermark to Images

## PayPal Payment Gateway Integration

## Facebook API Integration

## Work on Live Project

## Publishing the project

* Uploading local application to live server
* Handling Cpanel
* Handling FileZilla