



PHP Full Stack

What you will Be Able to Achieve During This Course

This course will enable you to build real-world, dynamic web sites. If you've built websites using plain HTML, you realize the limitation of this approach. Static content from a pure HTML website is just that - static. It says the same unless you physically update it. Your users can't interact with the site in any meaningful fashion.

Using PHP language and database MySQL allows you to make our sites dynamic: To have them be customizable and contain real-time information. In this course, we describe how to approach real-world projects and take you through design planning and building e-commerce based projects. Using this course you are able to develop projects like:

- User authentication and personalization
- Shopping Carts
- Content-management Systems
- Web based email
- Mailing list manager
- Web forums
- PDF document generation, etc...

Who Should Attend

These are creating dynamic, database-driven web sites. Basic experience with HTML is assumed. Programming such as C or PERL experience is helpful but not required.

Hands-On Training

In this course, you develop PHP scripts to perform a variety of tasks, culminating in the development of a full database-driven Web page. Exercises include:

- Accessing command line arguments from PHP scripts
- Generating web pages dynamically using PHP
- Retrieving Web Pages manipulating from data
- Personalizing Web site content using Session and Cookies
- Tracking user navigation on your Web site
- File handling with PHP script
- Regular Expression with PHP to Make strong validation
- Object Oriented Concept to make more Powerful Web Application
- Exception Handling
- Integrating database content to generate dynamic Web pages
- Building modular Scripts to enable code reusability

Introductory Session

- Web Architecture
- Overview of PHP Platform
- Origins of PHP in the open source community

- Why we use PHP?
- Some of PHP's strengths:
- Some of PHP's main competitors are PERL, Microsoft ASP.NET, JavaServer Page
- Availability across multiple platforms
- Installing as a module for Apache Web Server

Hyper Text Markup Language (HTML)

- Introduction To HTML
- Structure of HTM
- Attributes & Values
- Comments , Header Tags
- Image Tag
- Link Tags (Text & Image)
- Marquee Tag
- List Tag (Ordered & Unordered)
- Table Tag
- Form Tags
- Audio , Video Tags
- About Iframe
- Embedding of Google Maps , You tube videos
- BlockLevel and Inline Elements
- DIV Tag

HTML5 New Tags

- Header , Footer , Nav
- Section , Article , Aside
- New Form Elements

Style Sheet (CSS)

- Types of style sheet
- About CSS Selectos
- About CSS Properties
- Background Properties
- Box Properties
- Border Properties
- Positioning Properties
- CSS Menu Design
- CSS Animation

Bootstrap (Responsive Design)

- Introduction to Responsive Design
- Introduction to Bootstrap
- Bootstrap Grid System
- Grid Classes
- Equal Columns , Unequal Columns
- Layout Creation

Creating a Web Layout using Div's , CSS & Bootstrap

PHP language building blocks

- Comparing PHP with other Web scripting languages or technology
- Installation of PHP
- PHP delimiters
- Variable initialization with PHP
- PHP Data types
- PHP Constants
- PHP Operators

» **Conditional Statements**

- If else
- If else if else
- Nested If
- Switch Case
- Jump Statements (Break , Continue , Exit)

» **Looping (Iteration)**

- For loop
- While loop
- Do while loop
- Nested Loop

» **Introducing ARRAY**

- How to use an important programming construct: arrays
- Numerically Indexed arrays
- Non-Numerically Indexed arrays (Associative Array)
- Multidimensional arrays
- Array sorting

» **Manipulation user input**

- Presenting the user with input options via different HTML form elements
- Retrieving form data with \$_POST,\$_GET and \$_REQUEST arrays
- Preserving Data in Form inputs

» **Reusing Code and Functions**

- Introducing Functions
- Defining functions
- Using parameters
- Understanding scope
- Returning values
- Call By Value & Call By reference
- Reusing Codes
- Implementing recursion
- Using Require() and include()
- Array , String , Math , Date functions
- Super Global Array Variables

» **Introducing with the file system and the Server**

- Saving data for later using file system
- Opening a file Creating and Writing to a file
- Creating and Writing to a file
- Closing a file
- Reading from file
- Deleting a file
- Using other useful file functions
- Create a directory
- Remove a directory

» **File Uploading & Downloading**

- File uploading Concepts
- Multiple File Upload
- Downloading file from server using header.

» **String Manipulation and Regular Expression**

- Formatting , Joining ,splitting , comparing strings
- Introducing Regular Expression
- REGEX Implementation.

» **State Management**

- Session, Cookie , Query String
- What Session Control is?
- Understanding Basic Session Functionality
- Starting a Session
- Registering Session variables
- Using Session Variables
- Destroying the variables and Session
- What is a Cookie?
- Setting Cookies with PHP
- Using Cookies with Sessions
- Deleting Cookies
- Implementing Query String

» **MySQL Database**

- Relational Database Concept and technology
- Web Database Design
- Web Database Architecture
- Creating a MySQL Database
- Creating Database Tables
- Column Data Types
- Implementing Insert/Delete/Update and select Query
- Aggregate Functions
- Having and Group By Clause
- Joining Table
- Implementing Primary key, Unique Key, Composite key, foreign key, default constraint etc.
- Joining Table
- Dropping Tables and Databases
- Introduction to Phpmyadmin

» **Database Connection**

- Mysqli connectivity
- Procedural Connectivity
- Object Oriented Connectivity
- PDO (Php Data Object) Connectivity

» **Object Oriented PHP**

- Object oriented concepts
- Classes, objects and operations
- Class attributes
- Access Modifier
- Constructor & Destructor
- Inheritance
- Static method
- Type Hinting
- Object Cloning
- Abstract class
- Final keyword
- Inheritance
- Implementing interface
- Understanding Advance and New Object Oriented functionality
- Magic functions with PHP

» **Advance PHP Techniques**

- Implementing Captcha
- PDF Generation
- Excel or CSV Generation
- Email with PHP
- Implementing Pagination
- SQL Injection
- Web Services with JSON

- Payment Gateway Integration
- Http Headers & Output Buffering
- Error tracking and debugging
- Exception Handling

› **Web Hosting**

- Manage Domain with name server
- Manage Web Hosting from FTP and CPANEL
- Managing Database, Email Accounts, Sub Domains etc.
- Live your project.

› **Developing a dynamic web application**

- Frontend Using Bootstrap & templates
- Backend Using Templates

LARAVEL

» **Introduction of Laravel PHP Framework**

- Introduction of LARAVEL
- Installing Laravel
- Introduction of MVC Pattern
- Laravel Directory Structure

» **Setting up a sample project ' Hello World '**

- Artisan command to generate a controller
- Basic routing
- Call a controller method from a route
- Passing variables from controllers to views

» **HTML to Laravel Blade Syntax**

- Display Images
- Make Anchor
- Displaying Variables
- Conditional Statements
- Loop in blade
- PHP function
- Build Your Master layout
- Extending the master layout
- nested views
- Include Views
- Adding assets

» **Using Forms and Gathering Input**

- Adding HTML 5 Package
- Creating A form using Blade Syntax
- Validating user input
- File Uploading
- Error message Handling
- Encrypting and decrypting data
- Preserving the data

» **Using Controllers and Routes for URLs**

- Introduction
- Creating a basic controller
- Creating a route using a closure
- Making the controller As a routing
- Using route groups
- Using route resource

» **Database Connectivity**

- Introduction Model
- Type of Database using
- Eloquent ORM Model
- Naming Convention
- Table name
- Primary key
- Timestamps
- Use model
- Display data from models in views
- Manage Mass Assignment
- CRUDS Operation (Create Read Update Delete Search Operations)
- Fluent
- Simple Query String
- CRUDS Operation (Create Read Update Delete Search Operations)
- Query Builder
- CRUDS Operation (Create Read Update Delete Search Operations)

» **Security & Session**

- Removing Public from URL
- Sessions Effective

Java Script

Js Basics

- keywords
- identifiers
- datatypes
- variables and constants
- tokens
- operators

Decision Making Statements

Conditions Statements Or Selection Statements

- if
- if else
- nested if else
- if else if ladder
- switch case

Iteration Statements Or Loops

- for
- while
- do while
- for in
- for of

Jump Statements

- continue
- break

Functions

- function declarations, definitions and calling
- types of functions
- anonymous functions
- flat arrow functions or arrow functions
- self invoked function (IIFE)
- storage classification or variable scope (var let const and without keywords)
- recursion

Strings Methods

array Methods

Global Execution Context and Function execution context

- scope chain rule and lexical scoping
- closure

Objects

- literal and keys
- object functions
- nested objects
- Object Prototypes
- setter and getter methods

Set and Map

WeakMap and WeakSet

Dates and Time

OOPS

- literal and keys
- object functions
- nested objects
- Object Prototypes
- setter and getter methods

DOM Manipulation

- DOM
- BOM
- event handling
- time based events

Advanced Js

How Javascript Works

- hoisting
- strict mode
- closure
- synchronous and asynchronous programming

Event propagation

- bubbling
- capturing

Event loop

function curring

ajax and json

calling api using ajax

callback hell

promise

async await

fetch

modules

version

» **Jquery with AJAX**

- jQuery introduction
- jQuery Selectors , events , DOM , animations
- jQuery accordions, carousel, tab
- jQuery conflict
- Ajax Implementation
- CRUD Operation with AJAX

Typescript

- Why Typescript
- Basic Types
- Class and Interfaces
- Modules

React Js

INTRODUCTION TO REACT JS

- What is React JS?
- What is SPA?
- DOM vs Virtual DOM
- Advantages and Disadvantages
- Key Features

ENVIRONMENTAL SETUP

- Node | NPM
- Installation of CLI
- Setup Project
- Directory Structure
- Code Editors
- How React JS Application Boot

BASIC FEATURES OF REACT JS

- React Concepts
- JSX and TSX
- Render Elements
- Function and Class Components
- Props and State
- Handling Events
- Dynamic Data Rendering
- Property Binding

KEY FEATURES OF REACT JS

- Conditional Rendering
- List and Keys
- Forms Handling
- Forms Validations

COMPONENT LIFECYCLE HOOK

- Understanding component lifecycle
- All Lifecycle Hooks

EVENT HANDLING REACT

- Understanding React Event System
- Passing arguments to event Handlers

NETWORK CALL

- Fetch
- Axios

CUSTOM SERVICES

- Introduction to Services
- Building a Service

LOCAL DATA STORAGE

- Local Storage
- Session Storage
- Cookies

ROUTING WITH REACT ROUTER

- Setting up React Router
- Configuring route with Route Component
- Making routes dynamic with Route Params
- Working with nested routes
- Link and NavLink
- Redirect Routes

UI COMPONENTS

- Material Design
- PrimeNG

INTRODUCTION TO REDUX

- Why Redux
- Install and setup
- Store , Reducer , actions
- Dispatcher
- High order Components
- mapStateToProps and mapDispatchToProps usage

ADVANCE REDUX

- Async Actions
- Middleware
- Redux Thunk and Redux Saga

React Hooks

- Why We Need Hooks.
- Different Types Of Hooks
- Using State And Effect Hooks
- UseReducer , UseRef Etc.
- Custom Hooks
- Rules Of Hooks

Third Party Modules

- Social Login
- Pagination
- Search
- Filter
- JWT Token
- File Upload
- Many More

Rest Js Testing

- Jest with Enzyme

Develop a CRUD Application in React Js

React JS Application Deployment

- Build Application and Deployment