

Day - 1

- **Introduction - PHP**

- Introduction
- Intended Audience
- History of PHP
- What's Possible?
- Sample Programs
- Reserved Keywords

- **General/Data Type**

- What are the basic commands in Selenium?
- Intended Audience
- History of PHP
- What's Possible?
- Sample Programs
- Reserved Keywords

- **Functions**

- What Is a Function?
- Creating a Function
- Calling a Function
- Passing Parameters
- Default Parameters
- Returning Values
- Variable Functions
- Variable Scope
- Global Variables

- **String**

- Single Quoted Strings
- Double Quoted Strings
- Here Document
- print()
- Changing Case
- strlen()
- strpos()
- str_replace()
- substr()
- str_split()

- **Arrays**

- overview
- About Arrays
- Indexed Arrays
- Associative Arrays
- array_key_exists()
- in_array()
- array_push()
- array_pop()
- unset()
- Sorting Arrays
- count()
- Foreach Loop
- Multi-dimensional Array

- **Classes & Object**

- Creating a Simple Class
- Creating an Object
- Creating Properties
- Accessing Properties
- Creating Constants
- Accessing Constants
- Creating Methods
- \$this
- Accessing Methods
- Constructors
- Initial Parameter Passing
- Inheritance
- Protected Properties
- Private Properties
- Static Properties & Methods
- Scope Resolution Operator ::
- Include File
- Require File

- **Operators and Control Structures**

- Arithmetic Operators
- Incrementing/Decrementing Operators
- Assignment Operators
- String Operator
- Comparison Operators
- Spaceship Operator
- Logical Operators
- If Statement
- Else If
- Switch Statement
- Ternary Operator
- Null Coalesce Operator
- While Loop
- For Loop

- **Database**

- Possible Databases
- PDO vs. MySQLi
- Setting up MySQL on Windows
- Creating a Database and Table with phpMyAdmin
- Connecting to Database
- Close Database Connection
- Executing a Query - Delete, Update, Insert
- Grabbing Inserted Id
- Select Data From Database
- Prepared Statement Example
- PDO Example

Day - 2

- **Web Programming**

- Setup Web Site Location - Linux
- Setup Web Site Location - Windows
- Web Site Structure and Layout
- Shorten Syntax with HTML
- \$_GET
- \$_POST
- Form Validation
- session_start()
- \$_SESSION
- session_destroy()

- **PHP - TOAST**

- Setup Web Site Location - Linux
- Setup Web Site Location - Windows
- Web Site Structure and Layout
- Shorten Syntax with HTML
- \$_GET
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- **Building the LAMP Stack**

- Introduction
- Installation
- Alternatives
- Accessing Form Data with PHP
- HTML forms
- Demo: Creating a Form
- Accessing Form Data with PHP
- Validating User Input
- Demonstration -- Input Validation

- **The Lending Library's Database**

- Designing the Database
- Creating and Populating the Database
- Querying and Updating the Database
- Accessing a Database from PHP

- **Introducing PDO**

- Connecting to the Database
- Book Search Demonstration
- Quoting and Input Validation
- Mysqli

- **Doing More with the Database**

- Using Prepared Statements
- Non-queries and Summary Functions
- Creating and Using Stored Procedures and Functions

- **Maintaining State in Web Applications**

- The Problem of Maintaining State
- PHP Sessions
- Using Hidden Fields
- Using Cookies
- The Library: User Preferences and Shopping Carts

- **RESTfull Web Services With PHP and Laravel**

- Introduction
- Course Structure
- What are RESTful Services?
- Demo Overview
- Postman Setup & Demo
- Demo: Course Project
- Refresher on RESTful Services
- Refresher on Laravel & Setting Laravel Up
- Demo: Course Project Setup
- Cross-origin Resource Sharing (CORS)
- Wrap Up

Day - 3

- **Introduction - Laravel**

- What is Laravel?
- MVC vs Non-MVC
- MVC and the Structure of This Course
- Setting up a Laravel Project
- Understanding the Folder Structure
- A Quick Intro to the Artisan Command Line Interface

- **Views & Blade Templating Engine**

- Introduction
- Views and Templating Engines
- Why Use Templating Engines?
- Blade - Displaying Data and Using Layouts
- Demo:Using Layouts
- Demo:Displaying Data
- Blade - Partials
- Demo: Partials
- Blade - Control Structures
- Demo: Control Structures
- Blade - XSS Protection
- Demo: XSS Protection
- Facades

- **Working with Routes**

- Introduction
- Views and Templating Engines
- Why Use Templating Engines?
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- Demo:Using Layouts
- Demo:Displaying Data
- Blade - Partials
- Demo: Partials
- Blade - Control Structures
- Demo: Control Structures
- Blade - XSS Protection
- Demo: XSS Protection
- Facades

- **Handling Requests & Responses**

- Introduction
- Handling Requests and Sending Responses
- Demo: Extracting Data from a GET Request
- Demo: Sending Data to a View
- Handling POST Requests with Dependency Injection
- Dependency Injection vs Facades
- Demo:Using Dependency Injection
- Protecting Against CSRF Attacks
- Demo:CSRF Protection
- Using Sessions to Show Temporary Data
- A Case for User Input Validation
- Demo:Implementing Input Validation
- Demo:Showing Validation Errors
- Demo:Outsourcing Error Messages into Partials

- **Configuration & Environments**

- Configuration and Environments Overview
- Configuring the Database Connection

- **Using Controllers and Models**

- Introduction
- Controllers and Models - Overview
- Demo:Creating the Post Model
- Demo:Adding Methods to the Model
- Demo: Creating the Post Controller
- Connecting Controller Actions and Routes
- How laravel Finds the Controller
- Alternative Route Syntax
- Demo:Finishing the Post Model
- Demo:Finishing the Controller
- using Validation in Controller
- Finishing the Course Project

- **Databases - Introduction & Migration**

- Databases Bird's Eye Overview
- Migrations Overview
- Creating and Running Migrations

- **Databases - Eloquent ORM**

- Understanding Eloquent ORM Models
- Models- Creating and Updating, Introducing Tinker
- Models - Retrieving Single Model
- Models- Retrieving Multiple Models and Collections Overview
- Models- Using the Query Builder
- Practical - List of Blog Posts and Single Blog Post