

Course : Developing Web Application using PHP

**Duration**: 141 hrs

### Module 1:

## **Object Oriented Programming Concepts**

- Introduction to Object-Oriented Programming
- Object-oriented Design
- Classes and Methods
- Abstraction and Inheritance
- 5.Multiple Inheritance and Interfaces
- Polymorphism
- Overloading
- Overriding
- Polymorphic Variable
- Generics
- Frameworks and Reflection
- Patterns

### Module 2:

## **Working with Open Source Web Server**

- Introduction to Apache Web Server
- Installing Apache Web Server 2.2
- Configuring Apache Web Server
- Apache Web Server Administration
- Security
- Secure Sockets Layer
- Dynamic Pages
- Monitoring Apache Web Server
- Virtual Web Hosting
- Introducing New Features of Apache Web Server 2.4
- Adding New Modules in Apache Web Server 2.4
- Implementing Enhancements in Existing Modules
- Implementing SSL Enhancements



# Module 3: Querying with MySQL

- Introduction to MySQL as an Open Source Database
- Installing and Configuring MySQL
- Using MySQL
- Implementing SQL Queries Using MySQL I
- Implementing SQL Queries Using MySQL II
- Using Joins
- Using Basic Functions in MySQL I
- Using Basic Functions in MySQL II

### Module 4:

## **Web Application Development using PHP**

- Introduction to PHP
- Installing and Configuring PHP 7.0.4
- New features of PHP 7.0.4
- Form Handling in PHP
- Using Variables and Expressions in PHP
- Scalar Type Declarations
- PHP Operators
- Conditional Statements in PHP
- Flow Control in PHP
- Functions in PHP
- Working with Arrays
- Handling Databases with PHP
- Working with Cookies
- Session Management in PHP
- Securing Web Applications
- Handling E-mail with PHP
- OOP Concepts
- Generator Delegation and Throwable Interface



### Module 5:

## **Agile System Development Life Cycle for Software Projects**

- Software Characteristics
- Software Development Life Cycle
- Linear Process Models
- Iterative Process Models
- Specialized Process Models
- Agile Software Development I
- Agile Software Development II
- Extreme Programming
- Scrum
- Agile Process Models I
- Agile Process Models II
- Comparing Agile with Traditional Models
- Introduction to DevOps and Configuration Management
- Continuous Integration and Delivery in DevOps
- Continuous Deployment and Monitoring in DevOps
- DevOps Tools

### Module 6:

## **Securing Web Applications**

- Introduction to Web Application Security
- Malicious Software, Viruses, and their Solutions
- Service Attacks and Firewalls
- Web Application Vulnerabilities and Counter Measures
- Server Security
- Designing Principles, Measures, and Testing Tools
- Common Threats to Web Applications and Countermeasures
- Language-specific Security
- Web Services and Web Server Security



# Module 7: Laravel Fundamentals

- Laravel Structure Overview Routing
- Middleware
- Laravel Request Lifecycle

### Module 8:

### Model-View-Controller & Other

- Controllers
- Models
- Views
- Library
- Helper
- Artisan
- Encryption
- Session
- Service Container, Facades

### Module 9:

## **Laravel Blade templating engine**

- Master layout setup
- Some more blade features

### Module 10:

## **Database – Laravel Migrations**

- Environment configurations
- Migrating
- Creating migration and dropping them
- Adding columns to existing tables using migrations
- Some more migration commands



## Module 11: Query builder

- Inserting data Reading Data
- Updating Data Deleting Data
- Joining Query

### Module 12:

## Database - Eloquent / ORM:

- Reading Data
- Reading / Finding with Constraints More ways to retrieve data
- Inserting / Saving Data
- Eloquent Relationship