

# Introduction to Laravel

Nature of the course: Theory + Practical

Total hours per day: 2 hours

Course duration: 4 weeks

## Course Summary

Laravel is a popular PHP framework, and this course will show students how to set it up, manage it, and use it to create powerful and dynamic web applications.

## Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

1. Has attended 90% of all classes held
2. Has received an average grade of 80% on all assignments
3. Has received an average of 60% in assessments
4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

## Required Text Books

1. Laravel: Up & Running
2. Laravel 5 Essentials
3. The Laravel Survival Guide
4. Mastering Laravel

## Course Details

### WEEK 1

#### **Installing and setting up Laravel**

- Introduction to Laravel
- Concept of Composer
- Install and use composer
- Installing Laravel using composer
- Install & Use of open source distributed version control system GIT
- Concept and use of GitHub
- Configuring Laravel
- Project Structure

#### **Routing**

- Basic Routing
- Named Routing
- Grouped Routing
- Routing Parameter
- Handling invalid routes
- Route Filtering with middleware

## WEEK 2

### Controllers

- Introduction
- Basic Controller
- Restful Resource Controller
- Controller Routing
- Controller Middleware

### Requests

- Handling request information
- Request Inputs
- Form Inputs
- Old Inputs
- Cookies
- Files

### Response

- Attach Headers and Cookies to response
- Response with View
- Response with JSON
- Response with file

## WEEK 3

### Database

- Introduction
- Migration
- Schema Building
- Migration Structure
- Running Migration
- Writing Migration
- Seeding
- Database Configuration
- Running Raw SQL queries

### Model

- Eloquent ORM
- Defining Model
- Retrieving Model
- Insert and Update Model
- Eloquent Relationships
- One to One

- One to Many
- Many to Many

## **View**

- Passing Data into View
- Sharing Datas to all view
- Blade Template Engine
- Introduction
- Template Inheritance 2
- Data Displaying
- Implement Control Structures

## WEEK 4

### **Laravel Forms and HTML Components**

- Introduction
- Basic Usage
- CSRF Protection

### **Laravel Services**

- Authentication to the Application
- Configuring Auth Library
- Moving from laravel 5 to 6 & 7
- Artisan Console
- Laravel Helpers
- Exception Handling and Error Logging
- Pagination
- Validations
- Validation Approaches
- Validation rules with associating messages
- Mail

### **Projects we will be doing throughout the course (including jQuery components in application)**

- Basic Laravel Website
- To-do List Application
- Business Listing
- Photo Gallery and many more.

## Learning Outcomes

- Learn how to make and use controllers, as well as what they are.
- Increased understanding on how to use Laravel to create applications
- Laravel setup and installation

- Creating a mechanism for your application's authentication
- Composer packages: how to make and use them
- Using encryption and decryption to properly implement security and sessions Adding third-party services to the application and integrating them.